

limerick ecology action

BOX 761

POTTSTOWN, PA. 19464

(215) 326-9122

DOCKETED
USING7/16/84
84 JUL 23 AM 10:10MOTION TO COMPEL PECO TO
ANSWER LEA's SECOND SET OF INTERROGATORIES ON "OFF-SITE"
EMERGENCY PLANNING CONTENTIONS

Docket # 50-352, 50-353 OL

LEA has received Alllicant's Objections to LEA's Second set of Interrogatories. Applicant's objections are dated July 10, 1984. In discussing some confusion about the use of the phrase "other volunteers" in part of LEA's first set of Interrogatories, (as the phrase applied to school staff and bus drivers), Applicant's Counsel informed LEA that PECO had no intention of answering LEA's Second Set of Interrogatories because they believed that LEA mailed them after the July 25 deadline. Applicant's written Objections, served upon all parties to this case states that a copy of LEA's envelope with a later postmark is attached to their objections. However, this information was not included in the copy of the objections mailed to LEA.

LEA did mail the Interrogatories on July 25th. as indicated by the certificate of service. LEA also believes that it is in the best interests of all parties involved for the Applicant to provide LEA with the requested information. Applicant may be in the possession of information which will resolve many of LEA's concerns. LEA does not intend to pursue needless litigation, and as all parties to this case are well aware, LEA has been very reasonable about dropping contentions that have been satisfied. Furthermore, now that discovery has been completed, LEA anticipates having further discussions and negotiations with Applicant's counsel to determine whether or not LEA's concerns have been satisfied. These interrogatories represent the major pieces of information which is necessary for LEA to obtain to make such a determination. LEA believes that it is in the Applicant's best interest to supply this information to LEA now, on a timely basis, as requested.

For the above reasons, LEA has attempted to discuss its need for this information with the Applicant, and thus far, counsel has refused to cooperate with LEA. Therefore, LEA asks the Atomic Safety and Licensing Board to Compel Philadelphia Electric Company to answer LEA's Second Set of Interrogatories.

NOTE: Enclosed in this filing are LEA's Responses to PECO's Interrogatories to LEA on "Off-site" Emergency Planning

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General Interrogatories

1. State whether you intend to present any expert witnesses on the subject matter at issue in intervenor's contentions. If so, identify each such expert witness and further state (a) the expert's business and residential addresses; (b) his professional qualifications; (c) the subject matter on which the expert is expected to testify; (d) the substance of the facts and opinions to which the expert is expected to testify; and (e) the grounds for each opinion. Identify by court, agency or other body, each proceeding in which such individual rendered testimony on this (these) subject(s).

ANSWER: LEA has not yet determined which contentions will be litigated. This would depend greatly on the progress made in radiological emergency response planning and the time of hearings.

2. State whether you intend to present any fact witnesses on the subject matter at issue in intervenor's contentions. If so, identify each such fact witness and further state (a) his business and residential addresses; (b) the subject matter on which the witness is expected to testify; (c) the substance of the factual testimony which the witness is expected to offer.

ANSWER: Same as #1

3. Identify by title, author, publisher and date of issuance or publication all documents that intervenor relies upon as a basis for its contentions, that it intends to use (by way of reference or evidentiary proffer) in presenting its direct case on its contentions, or that it intends to refer to in conducting cross-examination of other witnesses who may testify in connection with any such contentions.

Answer: LEA has relied upon RERP related documents and correspondence it has received from the applicant. Additional documents have been attached as requested. See Attachments #1 to #8.

Specific Interrogatories

1. As to each School District for which LEA contends that there are insufficient school buses to evacuate students within that District, state: (a) the specific School District(s) for which there are insufficient buses; (b) the specific school(s) for which there are insufficient buses; (c) the number of students, as to each school, for whom there is insufficient bus transportation; (d) the number and capacity of buses necessary to fulfill the unmet transportation needs of such students; (e) the number of buses and capacity of each which LEA asserts to be available during normal operating conditions; (f) the source of the information (e.g., _____ School District, Radiological Emergency Response Plan, Draft _____, p.____). If the source is other than the RERP's provided to LEA by Applicant, please identify the source of the information, the date it was obtained and the substance of all information obtained from that source related to this contention; (g) the reasons LEA asserts that the plans and/or implementing procedures are deficient in ensuring that unmet transportation needs of students cannot be fulfilled.

ANSWER: LEA has not received any new draft RERP's for any of the school districts in the Limerick Plume EPZ since these contentions were filed on Jan. 31, 1984. (Draft #3 is the most current RERP _____ LEA has received for all of the school districts, except for Owen J. Roberts School District, which is up to draft #7) The latest revision of the County RERP's has been reviewed by LEA and we make the following comments:

(see next page)

Montgomery County Draft #6 RERP, dated April 1984

- 1) Plan contains no additional information as to assignment of buses or the status of any "unmet needs".

Annex I lists bus companies and the number of vehicles operated. The copy of the plan given to LEA has the sections of the table marked "units available for mobilization" and "Limerick assignments" blacked out. There is no way for us to determine from this table if this represents anything more than a listing of resources as opposed to an indication of resources available and assignments made. (pages I-2-5 to I-2-14)

- 2) Appendix I-3 lists transportation requirements by municipality, health care facility, special facility, and school district. Here again, this is a list of the total needs, without any indication of whether or not assignments and formal agreements have been completed. The section supposed to indicate assignment is "blacked out".
- 3) Appendix N-4, page N-4-1, is titled "Resources Required for Evacuation". This page states that the information can be found in Draft #3 of each Montgomery County School District and private school RERP. This refers back to the same information which was cited by LEA as the basis for filing this contention. No information that has been given to LEA indicates any change in this status since the time that this contention was filed.

Similarly, the Chester County Draft #7 RERP, dated Dec. 1983 states the following:

- 1) Annex I, titled Transportation resources and Requirements Summary is not filled in and is marked "TO BE DEVELOPED" (page I-3-1).
- 2) Appendix 3, Annex N is titled School Bus Resource Information. This table is marked with a footnote that states:
(page N-3-1)
These are preliminary estimates subject to further school RERP development.

The unmet needs indicated in this table are as follow:*

Owen J. Roberts Sr. H.S.	7 buses needed	Source: TBD
Owen J. Roberts Jr. H.S.	5 buses needed	Source: TBD
(Phoenixville Area School District)		
Barkley Elementary	5 buses needed	Source: TBD
Second Avenue School	3 buses needed	Source: TBD
Schuylkill Elementary	9 buses needed	Source: TBD

Continuing on page N-3-2, the Private/Parochial Schools assigned to the Phoenixville Area School District that still have unmet transportation needs are as follows:

Kimberton Farms	5 buses needed	Source: TBD
Valley Forge Christian Academy	9 buses needed	Source: TBD
Holy Trinity	1 bus needed	Source: TBD
St. Ann's	6 buses needed	Source: TBD
St. Basil	3 buses needed	Source: TBD
St. Mary	4 buses needed	Source: TBD
Valley Forge Christian -College	9 buses needed	Source: TBD
Children's House of Northern Chester Co.	1 bus needed	source: TBD

LEA believes that the following information is responsive to Interrogatories 1(a) and (b). The answers to 1(c) and 1(d) are contained in the draft (#3) School District RERP's prepared by Energy Consultants, Inc. under sections marked "School District Profile Form" (number of students), Attachment 1. The number of buses needed would vary depending on the size of bus used. Attachment 3, titled Resources for Evacuation contains the information sought by (d), based on planning done to date reflected in the draft #3 RERP's.

In response to 1(e), LEA has assumed that all available buses normally used by a school district have been included in the draft RERP's for planning purposes, taking into account potential overlapping responsibilities, needs and assignments in the event of a radiological emergency. 1(f) is answered by the above.

1(g) is answered by the fact that such little progress has been made in the time that has lapsed since these draft #3 RERP's have been prepared and by the following telephone interviews conducted by LEA in an attempt to update its information and to answer these interrogatories as thoroughly as possible:

Question asked: Does the School District have enough buses to carry out its radiological emergency response plan for Limerick? (including both public and private schools) Have all Letters of Agreement been finalized?

(see next page for results)

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Second Avenue School	3 buses needed	Source: TBD
Schuylkill Elementary	9 buses needed	Source: TBD

MONTGOMERY COUNTY

Pottstown School District "We have 10 buses and need 37 or 38 more."

call made by LEA volunteer Brenda Honig, 7/13/84 to Mr. James Bush, Business Administrator (RERP Transportation Coordinator for Pottstown School District)

Pottsgrove School District "We still have 5 schools that don't have buses. We expect Energy Consultants, Inc., the county or the state to make the arrangements."

call made by Brenda Honig, LEA volunteer 7/16/84 to Dr. Alvin F. Coleman, Assistant Superintendent, Pottsgrove School District

Perkiomen Valley School District "The High School still needs 1 bus and we need 4 busus for private schools. We feel the County is responsible for any shortages."

call made by LEA volunteer Sandy Welsh on 7/13/84 to Dr. Wescott, Superintendent of Perkiomen Valley School District

Spring-Ford School District "We don't have all our buses yet. Written agreements have not been completed."

call made by Karen Kreider, LEA volunteer 7/13/84 to Joe Kinder, Business Manager for Spring-Ford School District (RERP Transportation Coordinator)

Note: RERP Draft #3 lists these needs as follows:

p. A-25	High School 5 buses needed	Source: TBD
District Summary	Oaks Elementary 3 buses "	Source: TBD
Resources Required for	Chapel Christian	
Evacuation	Academy (buses TBD)	Source TBD
	Sacred Heart School " TBD	" TBD
	West Mont Vo-Tech " TBD	" TBD
	Collegeville	
	Montessori " TBD	" TBD
	St. Joseph's	
	Kindergarten " TBD	" TBD

Methacton School District Minutes from meetings of Methacton Emergency Evaluation Committee attached to this filing indicate that the Methacton RERP is going to be changed to include planning for evacuation to a yet to be determined host school (as compared to plans for sheltering contained in Draft #3 RERP). As a result, transportation needs are not yet assessed. See minutes from meetings dated 5/31/84, 6/21/84, 7/5/84, and 7/10/84.

Note: Minutes were sent out by Jim Brown, Emergency Coordinator for Methacton School District. Notes from meetings of 7/5/84 and 7/10/84 have not yet been received; therefore this filing includes the notes from Committee member Nancy Catton.

att #3

Phoenixville Area School District

"We still need 31 buses. In all, we need 66 buses, and we presently have 35."

call made by LEA volunteer Lindsey Brinton to Dr. Robert B. Murray, Superintendent Phoenixville Area School District 7/13/84.

Owen J. Roberts School District

(6/7/84)

Unmet needs have been identified in letter to Governor Thornburgh from Dr. Roy C. Claypool, Superintendent, with attachments filed by Dr. Claypool in this proceeding.

Note: LEA has not attached this letter because it has previously been served upon parties to this proceeding. The letter states that 25 more (72) passenger buses are needed to evacuate the school district.

In further response to Interrogatory 1(g), LEA notes that there is no information available to determine the amount of response time involved before buses can be expected to arrive at their designated schools in the event of a radiological emergency. To further document the seriousness of this concern, LEA has attached an additional letter written by Dr. Roy C. Claypool, Superintendent of Owen J. Roberts School District, dated 6/12/84, which explains how long it took to notify buses and await their arrival for an early dismissal at the school on June 8, 1984.

ans. #1

Contention LEA-12

2. Discuss in detail any deficiency which LEA asserts to exist in the various plans, implementing procedures, or training provisions as regards the assignment of school teachers and staff to supervise students and remain with them during the various stages of a radiological emergency.

ANSWER:

LEA asked the same school officials listed above their opinion of the "adequacy" of the "training" their staffs had received. Their answers follow on the next page.

Question asked by LEA: "Have school personnel been "trained" for both sheltering and evacuation procedures in the event of a radiological emergency? Are you satisfied that the "training" has been "adequate"?"

MONTGOMERY COUNTY SCHOOL OFFICIALS CONCERNED ABOUT "TRAINING"

Pottstown School District (Mr. James Bush, 7/13/84)

"We have not had any "Training", but we did hold one in-service day".

Pottsgrove School District (Dr. Alvin Coleman, 7/16/84)

"Energy Consultants, Inc. offered us 'training' but it premature for us, so we refused it. We have 2800 children -- it is a horribly difficult problem."

Perkiomen Valley School District (Dr. Wescott, 7/13/84)

"We are planning to hold 'training' during the coming year. We have had some 'orientation'".

Spring-Ford School District (Joe Kinder, 7/13/84)

"As far as I know, nothing has been done on this plan yet. The School Board has not discussed it, the parents' committee has not met, and there are no immediate plans for anything to go on."

Methacton School District (See attached Minutes from meetings chaired by Jim Brown)

Upper Perkiomen School District (Mr. Tony Frey 7/13/84)

"We have had a 'verbal presentation'. We have not been "trained" and we are not satisfied:"

CHESTER COUNTY SCHOOL OFFICIALS RESPONSE CONCERNING "TRAINING"

Phoenixville Area School District (Dr. Murray 7/13/84)

" Our teachers have not been"trained." "We need a 'dry run' after our plan has been completed to test it.

Owen J. Roberts School District (letter from Citizens Task Force 6/5/84)

II.C. "We also recommend that no Emergency Response Plan be submitted for Board approval without complete and thorough drill and exercise. If the unmet resource needs are eventually identified, we would ask that at least one planned drill be scheduled during the school day with movement of all internal and external resources to determine if emergency procedures and resources will adequately provide for student safety and welfare. In addition, we believe that at least one unscheduled drill (should) be attempted to provide further assurance of the adequacy of the plan."

BERKS COUNTY SCHOOL OFFICIALS CONCERNS ABOUT "TRAINING"

Boyetown School District (Dr. Replogle told School Board Member Beverly Ritter over the phone on 7/13/84:)

"We are not totally satisfied that "training"has been adequate".

FURTHER COMMENT: After more "training" has been completed to the satisfaction of school officials, LEA will provide more specific comments in answer to Interrogatory #2.

3. State whether any school teacher or staff assigned to a school within the EPZ who would supervise students and remain with them during the various stages of a radiological emergency has indicated that he would be unwilling to perform this function because of any human response factor, a desire to evacuate himself or his family first, or for any other reason. As to any such person identified, state: (a) his name; (b) address; (c) school assignment; (d) the emergency function assigned to the person; (e) the emergency function which the person has stated he will not perform; (f) the substance of the statement; (g) the date and circumstances under which the statement was made.

ANSWER: Owen J. Roberts School District has surveyed its teachers and other school staff twice to determine their willingness to remain with students during a radiological emergency. The results are discussed in their letter of May 1, 1984 (page 3) from Dr. Roy C. Claypool, Superintendent, addressed to John McNamara, Chester County Dept. of Emergency Services.

At the present time, LEA does not have the kind of specific information sought in parts (a) to (g) of this question; but believes that the school Superintendent has knowledge of this.

Joe Kinder, Spring-Ford School District, has indicated that a teacher survey was conducted during June to determine the willingness of teachers to remain on duty in the event of a radiological emergency. During the phone call made by Karen Kreider on July 13, 1984, he stated, "Dr. Welliver was surprised to find out that so many school staff members said they would be unwilling to participate." LEA does not presently have any further details, but will attempt to obtain specific information from Dr. Welliver.

LEA believes that we must conduct a more thorough investigation into the basis for assumptions being made about the willingness of school staff to participate in implementation of radiological emergency response plans. We believe that there is insufficient information available to anyone regarding plans and requirements for 'sheltering'. Boyertown and Upper Perkiomen School Districts said they do intend to survey teachers to gather more specific information about their willingness to participate. (based on phone calls previously discussed)

NOTE: LEA will provide further information as it becomes available.

4. State whether any school teacher or staff assigned to a school within the EPZ to supervise and remain with students during the various stages of a radiological emergency has ever indicated by word or action an unwillingness to perform any similar supervisory function during non-radiological emergencies. If so, state: (a) his name, (b) address; (c) school assignment, (d) the emergency function assigned to the person; (e) the emergency function which the person has stated he will not perform, or did not perform; (f) the substance of the statement; and (g) the date and circumstances under which the statement was made or the actions occurred.

ANSWER: LEA has not conducted such a survey. It is our position that a radiological emergency is different from 'other' disaster or emergency conditions.

5. State whether any teacher or staff in any school in the United States has failed to perform his assignment to supervise and remain with students during any radiological or non-radiological emergency at any time, or has stated that he would not do so in the event of an emergency due to any human response factors or a desire to tend to the needs of his family first, or for any other reason. If so, please provide the information requested by Interrogatory 4(a)-(g), above.

ANSWER: LEA does not have the resources to conduct such a survey, and at the present time is not aware of the availability of such information.

6. State the level of nonperformance by teachers and staff required to supervise students and remain with them during the various stages of a radiological emergency which LEA alleges as likely to occur due to human response factors, a desire to evacuate oneself or one's family first, or for other reasons. Discuss in detail the basis for this projection, whether expressed numerically or as a percentage of available staff, for each school district in which LEA alleges that such nonperformance will occur.

ANSWER: LEA does not believe that emergency response planning for a radiological emergency has progressed to the point that this information is known by the school districts involved, with the possible exception of Owen J. Roberts School District. These concerns are discussed in Dr. Roy C. Claypool's letter to John MacNamara dated May 1, 1984. On page 3, under the section 'teacher needs evacuation'. Here Dr. Claypool refers to an assumed need of a total of 156 teachers, or a 25% reduction in the number of teachers needed to supervise students under normal school operation. LEA has not yet determined the basis for Dr. Claypool's use of the 25% figure. (This means he feels 75% of his normal supervisory staff is needed). An example of LEA's concerns about the difficulty of determining a school's staffing needs at the present time are as follow:

Pottstown School District does not have a basement or any underground areas that can be used to shelter. Mr. Bush said that no studies had yet been done to determine the effectiveness of school buildings for sheltering.

Many schools still do not have completed host school agreements. Among these are:

Dr. Claypool's

Owen J. Roberts School District (letters)
Methacton School District (see attached Minutes)
Pottsgrove School District (Dr. Coleman 7/1 /84)

LEA is not aware of any school that has conducted an evaluation of the adequacy of its own school buildings for sheltering.

7. As to each school within the EPZ, state the level of nonperformance by teachers and staff assigned to supervise students and remain with them during a radiological emergency which, if occurring, would render evacuation of school children incapable of implementation. Discuss in detail the basis for LEA's conclusions, including the underlying assumptions and methodology by which such conclusions were made.

ANSWER: See answer to #6. LEA will supplement this response as further planning is completed.

8. Unless otherwise fully stated above, discuss in detail the basis for LEA's allegation that teachers and staff assigned to supervise students and remain with them during a radiological emergency will abandon their assigned duties because of human response factors, a desire to evacuate oneself or one's family first, or any other reason.

ANSWER: LEA has not yet completed its analysis of any other technical or factual evidence from other NRC licensing cases. Any relevant material will be provided to applicant at a later date. LEA's present concerns are based on general conversations with teachers and other school staff that have been unaware of their role in emergency response planning for a radiological emergency. Furthermore, LEA refers back to its answer to Interrogatory #3.

9. State and discuss in detail each measure which LEA contends that the responsible emergency planners at any level should take, which has not already been taken (including but not limited to revisions of the Plans and/or implementing procedures), to provide reasonable assurance that school teachers and staff will remain with students to whom they are assigned in the event of a radiological emergency.

ANSWER: LEA believes that planning thus far has not progressed far enough for LEA to be able to provide a specific response to this question at this time. Generally, in the area of sheltering, LEA believes that the current RERP's are totally inadequate, and that all schools involved lack any specific information or studies about the adequacy of school buildings and air exchange rates for sheltering purposes during a radiological emergency.

LEA's major concerns at the present time include the following:

- traffic congestion making it impossible or difficult for buses to reach their destination (risk schools as well as host schools)
- communications capabilities in the event that commercial telephone lines are jammed. This would include communicating with bus companies and particularly bus drivers in the event they are called to the school unexpectedly.
(Answers to LEA's Interrogatories were not specific enough to indicate that this would not be a problem)
- chaos and traffic congestion caused by parents trying to pick up their children at school once an emergency had been declared or once it appeared imminent.
- the amount of response time and mobilization time necessary to conduct an evacuation in a safe and orderly fashion.
- lack of actual unannounced drill and exercises to test whether or not school personnel really understand their roles and responsibilities in the event of a radiological emergency.

Other concerns will be further specified as planning progresses.

Contention LEA-13

10. Specify each deficiency which LEA asserts to exist in the plans and implementing procedures with regard to the evacuation of day-care centers and preschools in the event of a radiological emergency. As to each such deficiency, identify the plan(s) and the exact provision(s) thereof and/or implementing procedures claimed to be deficient, the precise population at risk, and the basis for LEA's assertion that reasonable assurance does not exist that such population will be evacuated in the event of a radiological emergency.

Ans. #2
ANSWER: On March 13, 1984, LEA supplied applicant and parties to this case a listing compiled by LEA listing area daycare, preschool centers and summer camps. By letter of April 3, 1984, LEA became aware that Chester County had reached the conclusion that For-profit day care centers needed to be addressed in emergency response planning for a radiological emergency. (Letter is attached) Since that time, LEA had no further indication whether or not these needs would be addressed until it received responses on 7/13/84 to Interrogatories filed by LEA with answers provided by PEMA. This information contains a draft prototype RERP to be used for facilities licensed by the Pa. Dept. of Welfare and the Pa. Dept. of Education. PEMA's comments state that:

"Upon completion of its plan, a facility will make copies available to the municipality and county in which the facility is located. As these plans are developed, transportation needs will be identified together with resources to meet these needs."

LEA has recontacted most of the schools listed in its March 13 list (1984) this past week to determine whether or not they had been contacted yet by either the Risk Counties, Energy Consultants, Inc, or PEMA, and found that they had not been contacted. LEA called the County Emergency Management Directors to discuss the status of these arrangements and was told that PEMA/ DPW/ and DOE (Dept. of Education) would be taking care of this, but as yet these plans were not yet completed.

Telephone conversation with Mr. Bigelow by Maureen Mulligan
(7/16/84)

Telephone conversation with Timothy Campbell made by Dave Stone
(7/16/84)

LEA will provide further comments as additional information becomes available.

11. Discuss in detail each change in the plans and/or implementing procedures which LEA asserts that planners must make in order to provide reasonable assurance that children from day-care centers and preschools will be evacuated in the event of a radiological emergency.

ANSWER: See answer to question #10. When it becomes clear how these facilities will be included in municipal or county plans, and their has been an opportunity to review these provisions, as well as any individual plans that are deveopled for any state licensed facilities, LEA will provide further comments.

12. Discuss in detail each instance, whether involving a radiological or non-radiological emergency, in which LEA contends that any day-care center or preschool children became insecure, frightened and totally unmanageable and traumatized during an evacuation of their school or center.

ANSWER: LEA is conducting a review of technical evidence, and testimony presented in other NRC licensing cases, which is not yet completed. Testimony from the Indian Point proceedings is presently under review by myself. I am unable to provide further details at the present time, but will be able to do so in the near future. (The testimony referred to from the Indian Point hearings is listed below:) DOCKET NOS. 50-247 SP
" " 50-286 SP
Arthur B. Zelman, M.D. Medical Director, Center for Preventative
Psychiatry, White Plains, N.Y. dated 6/2/82

Jerome Kagan, PhD., Professor of Human Development, Tufts
University, dated 6/15/82

Albert J. Solnit, M.D., Director Yale University, Child Study
Center, dated 6/3/82

related testimony of the following teachers of pre-school children:

Phyllis Mendelsohn, teacher-director, Croton Community
Nursery School
Abby Perl, nursery school teacher, Croton
Judith Glass, teacher, Croton Cimmunity Nursery School,
dated 6/1/82
Paula Meyers, kindergarten teacher, Carrie E. Thompson
School, Croton-on-Hudson

also testimony of Dr. Kai T. Ericson, Professor of Sociology and
Editor, Yale Review, Yale University

LEA is also reviewing information relative to the accident at Three Mile
Island, as well as other types of emergencies.

13. Discuss in detail the basis for LEA's assertion that a single lift will be insufficient to evacuate school children. Specify each school within the EPZ for which LEA contends that two lifts will be necessary to evacuate school children. As to each school, discuss in detail LEA's basis for contending that two lifts will be necessary, and specify the number of buses and capacity, and the drivers or other resources necessary to assure that a single lift will be sufficient to evacuate all children from that school.

ANSWER: LEA's comment was that the plans would have to be revised to indicate that sufficient buses were available in order to provide reasonable assurance that evacuation could be done in one lift, as is called for in the Concept of Operations of the School District RERP's. When additional information is available, LEA will provide further comments with regard to this question. Presently, it is not possible to determine if an evacuation can be completed in one lift because of the number of transportation arrangements still marked "TBD" or as yet to be arranged.

14. Specify each dosimetric device (by manufacturer, model number or other designation) and the amount of KI supplies which LEA asserts to be necessary for school bus drivers, teachers, or other school staff who may be expected to make multiple trips into or remain within the EPZ because of shortages of equipment and personnel during an evacuation.

ANSWER: LEA was referring to any dosimetric devices that would normally be used by emergency workers or those who might unexpectedly be designated as emergency workers in the event that evacuation could not be accomplished as rapidly as necessary due to such conditions such as traffic congestion, adverse weather conditions, unanticipated shortages of vehicles, buses and/or drivers, or any other unexpected occurrences that might result in exposure during a radiological emergency. It is conceivable that a school could shelter and later decide to evacuate during a radiological emergency, resulting in exposure to the Plume. LEA believes that it makes sense to include provision of standard dosimetric devices in the planning process.

15. Specify each change in the plans and/or implementing procedures which LEA asserts to be necessary in order to ensure that school bus drivers, teachers or other school staff who may be expected to make multiple trips into or remain within the EPZ receive adequate dosimetry and KI supplies.

ANSWER: LEA believes that schools and bus personnel should have reasonable access to dosimetry in the event of an unexpected radiological emergency. Pre-distribution, such as will occur at the county and municipal level should be included in the planning process. Not all bus drivers will have time to stop by their offices for such supplies in the event of an emergency. It is difficult to be more specific at the present time, because present plans (RERP's) do not address this issue. We would think that the planners and school officials would have sufficient knowledge of the most efficient method for distribution depending on the logistics involved in transportation dispatch and the individual situations involved at their respective schools.

16. Specify all elements of training which LEA asserts that planners should provide to school bus drivers, teachers and other school staff who may be expected to make multiple trips into or remain within the EPZ in the event of a radiological emergency. As to each element of training, specify the level and detail appropriate for such personnel in comparison to the training provided emergency workers under the plans.

ANSWER: Training has not progressed to the point that LEA can answer this question in any further detail than those concerns expressed in the comments made by school officials referred to in LEA's answer to Interrogatory #2.

17. Specify each change in the plans and/or implementing procedures and training provisions which LEA asserts to be necessary in order to ensure that school bus drivers, teachers or other school staff who may be expected to make multiple trips into or remain within the EPZ receive adequate training.

ANSWER: Same as #16.

Contention LEA-15

18. Discuss in detail any deficiency which LEA asserts to exist in the various plans, implementing procedures, or training provisions as regards the assignment of school bus drivers to transport students to their respective schools and/or out of the EPZ during a radiological emergency.

ANSWER: When LEA has been informed which buses have been assigned to which schools, this question will be answered. Refer back to answer #1.

19. State whether any school bus driver who would be assigned to transport students to their respective schools and/or out of the EPZ has indicated that he would be unwilling to perform this function because of any human response factor during radiological emergencies, a desire to evacuate himself or his family first, or for any other reason. As to

any such person identified, state: (a) his name; (b) address; (c) school assignment; (d) the emergency function assigned to the person; (e) the emergency function which the person has stated he will not perform; (f) the substance of the statement made; (g) the date and circumstances under which statement was made.

ANSWER: LEA will conduct a more formal survey to determine if the schools have surveyed their drivers to determine that they are willing to participate in the event of a radiological emergency. Owen J. Roberts survey did indicate a need for 37 additional drivers. Many of those surveyed indicated that their first concern would be the safety of their own families. LEA has been told that Methacton is planning to do a similar survey of their drivers to determine who many understand the commitment they are being asked to make. LEA will gladly supplement this response as additional information becomes available.

20. State whether any school bus driver assigned to transport students to their respective schools and/or out of the EPZ during the various stages of a radiological emergency has ever, by word or action, indicated an unwillingness to perform his duties during non-radiological emergencies. If so, state: (a) his name; (b) address; (c) school assignment; (d) the emergency function assigned to the person; (e) the emergency function which the person has stated he will not perform, or did not perform; (f) the substance of the statement, and (g) the date and circumstances under which the statement was made or the actions occurred.

ANSWER: SAME as for #19

21. State whether any school bus driver in any school district in the United States has failed to perform his assignment to transport students to their respective schools and/or out of the school district during any emergency at any time, or has stated that he would not do so in the event of an emergency due to any human response factors, a desire to tend to the needs of his family first, or for any other reason. If so, please provide the information requested by Interrogatory 20, above.

ANSWER: LEA has not conducted such a survey. We will provide any additional information as we become aware of it.

22. State the level of nonperformance by school bus drivers required to transport students to their respective schools and/or out of the EPZ during the various stages of a radiological emergency which LEA alleges as likely to occur due to human response factors, a desire to evacuate oneself or one's family first or for other reasons. Describe in detail the basis for this projection, whether expressed numerically or as a percentage of available staff, for each school district in which LEA alleges that such nonperformance will occur.

ANSWER: LEA will provide an answer to this question once the additional unmet needs indicated in the present RERP's have been assigned and arrangements have been completed, and when additional surveys of bus drivers have been completed to determine ~~their~~ willingness to carry out their responsibilities in the event of a radiological emergency.

23. As to each school in the EPZ, state the level of nonperformance by school bus drivers assigned to transport students to their respective schools and/or out of the EPZ during a radiological emergency which, if occurring, would render the evacuation of school children incapable of implementation. Discuss in detail the basis for LEA's conclusions, including the underlying assumptions and methodology by which such conclusions were made.

ANSWER: LEA has not conducted any such survey at the present time. We refer back to answer #6 where we reference Dr. Claypool's letter of 5/1/84 (page 3) and his comment that if Owen J. Roberts School District were to reduce their supervisor ratio by 25%, they would still need 91 additional adult volunteers. Based on this discussion, it appears that he is hoping for 75% of the normal supervisory personnel to be able to implement the radiological emergency response plan. With regard to bus drivers, LEA maintains that each vehicle needs a licensed driver. Additional comments will be made by LEA as additional information becomes available.

24. Unless otherwise fully stated above, discuss in detail the basis for LEA's allegation that school bus drivers assigned to transport students to their respective schools and/or out of the EPZ during a radiological emergency will abandon their assigned duties because of human response factors, a desire to evacuate oneself or one's family first, or any other reason.

ANSWER: LEA intends to conduct interviews with bus drivers and also expects that individual schools will survey their drivers as part of the 'on-going' training program that is just getting underway. Applicant's response to LEA's first set of interrogatories indicated that Boyertown, Perkiomen Valley and Owen J. Roberts School Districts are the only ones that have conducted any 'training' sessions for bus drivers. LEA will provide further comments when additional information becomes available.

25. State and discuss in detail each measure which the responsible emergency planners at any level should take, which has not already been taken (including, but not limited to revisions of the plans and procedures), to provide reasonable assurance that school bus drivers will perform their assigned duties in the event of a radiological emergency.

ANSWER: One of LEA's major concerns is the ability to communicate with bus drivers no matter where they might be during any part of a 24 hour time cycle in the event that they need to be contacted and mobilized in the event of a radiological emergency. There is insufficient information available to LEA to determine whether or not any other mechanism for communication other than the commercial telephone is available.

LEA is concerned that assumptions about the willingness of bus drivers to participate during a radiological emergency have little or no basis unless those involved are fully informed about the risks involved and the degree upon which they are being relied upon in the event of a radiological emergency. LEA does not believe that the fact that teachers and bus drivers have signed a contract necessarily means that they can be counted on during a radiological emergency; or that this is a reliable planning standard. Furthermore, LEA does not believe that traffic congestion problems have been adequately taken into consideration in the planning process.

LEA will make further recommendations as soon as additional information becomes available.

Contention LEA-22

26. Specify each provision of the plans and/or implementing procedures which LEA asserts to be deficient in failing to provide adequate training to read dosimetry and administer KI for farmers who reenter or remain within the EPZ during a radiological emergency.

ANSWER: LEA has not yet completed its review of the recently released revised Risk County RERP's (Chester, Berks, and Montgomery) and will provide further comments in the near future.

27. Explain the basis for each change in the provisions of the plans and/or implementing procedures which LEA asserts to be necessary in order to assure that farmers are adequately trained to read dosimetry and administer KI in the event they reenter or remain within the EPZ during a radiological emergency.

ANSWER: Same as #26.

Contention LEA-24

28. With respect to LEA's and FOE's assertions that traffic congestion connected with the Marsh Creek State Park, Valley Forge National Historic Park, King of Prussia area and Exton Mall would impede evacuation of the EPZ, specify: (a) the exact contours of each of these areas, as defined by natural boundaries, highways or other parameters; (b) the total number of vehicles exiting from these areas upon public notification to evacuate the EPZ; (c) vehicle distribution verses time from public notification (e.g., 30% within the first 15 minutes, 75% within the first half hour, etc.); (c) the number of vehicles which would enter on to an evacuation route from the EPZ (specify number in each direction); (d) the point along each such route at which congestion attributable to the four designated areas would occur. Discuss in detail all analyses, assumptions and bases for these answers.

ANSWER: Neither LEA nor FOE has completed any investigation into the above matters. Both LEA and FOE will provide the requested

information at a later date.

29. With respect to the "Evacuation Time Estimates for the Limerick Generating Station Plume Exposure Emergency Planning Zone" (May 1984), prepared by HMM Associates, Inc. ("HMM Associates study"), state whether intervenor agrees or disagrees with the analysis of vehicle queuing in Appendix 11 for evacuation routes which intervenor asserts would be affected by traffic congestion from the Marsh Creek State Park, Valley Forge National Historic Park, the King of Prussia Area and Exton Mall. Discuss in detail all analyses, assumptions or other bases for this answer.

ANSWER: Neither LEA nor FOE has yet completed its review of the HMM Associates "Evacuation Time Estimate Study. These questions will be answered when our review is completed.

30. With respect to the HMM Associates study, state whether intervenor asserts that access control points in addition to those designated in Table 7.1 are necessary to alleviate traffic congestion which intervenor asserts would be connected with the Marsh Creek State Park, Valley Forge National Historic Park, the King of Prussia area and Exton Mall. Specify any additional access control points by intersection and discuss in detail the basis for intervenor's assertion that they would be necessary.

ANSWER: Same as #29. This information will be provided by LEA and FOE in the near future.

31. With respect to the HMM Associates study, state whether intervenor asserts that traffic control points in addition to those designated in Table 7.2 are necessary to alleviate traffic congestion which intervenor asserts would be connected with the Marsh Creek State Park, Valley Forge National Historic Park, King of Prussia area and Exton Mall. Specify any additional traffic control points by intersection and discuss in detail the basis for intervenor's assertion that they would be necessary.

ANSWER: SAME as #29. Further, LHA is still awaiting the receipt of additional information from FDOT regarding the FDOT traffic analysis.

32. State whether intervenor agrees or disagrees with the data, analyses or conclusions with regard to evacuation time estimates for any route which intervenor asserts would be affected by traffic congestion connected with the Marsh Creek State Park, Valley Forge National Historic Park, King of Prussia area, and Exton Mall. Discuss in detail all analyses, assumptions or other basis for the disagreement. State intervenor's time estimates for evacuation with regard to any affected areas and discuss in detail the basis for such conclusions, including how they would result in any impediment to plans for evacuation which are capable of implementation or how such conclusions would demonstrate the failure to meet any regulatory requirement.

ANSWER: Same as #31

33. Specify any change in the plans and/or implementing procedures or any other measures which intervenor asserts that the responsible planners must undertake in order to assure that evacuation of the EPZ would not be impeded by traffic congestion connected with the Marsh Creek State Park, Valley Forge National Historic Park, the King of Prussia area, and the Exton mall.

ANSWER: Same as #31

Contention LEA-26

34. Specify each provision of the plans and/or implementing procedures which LEA asserts to be deficient in demonstrating that there are enough personnel and vehicles for prompt route-alerting. Discuss in detail why these provisions are inadequate.

ANSWER: LEA believes that the likelihood that route alerting may be relied upon as the primary source of notification to the public has been underestimated and under emphasized in the planning process. In support of its position, LEA submits the following:

Attachment # 4, Memorandum prepared by LEA consultant Steven S. Sholly, 3/18/84, that discusses the emergency planning implications of the Limerick Probabilistic Risk Assessments (LGS-PRA and LGS-SARA), which discusses the potential for loss of off-site AC electrical power.

Attachment #5, Letter from Skippack Twp. Solicitor to FEMA, 6/22/84 which explains some of the concerns of the Board of Supervisors, primarily item #1, which states that the Skippack Fire Co. does not intend to participate in radiological emergency response planning for a site emergency or a general emergency.

Attachment #6, Recommendations made to the East Pikeland Twp. Planning Commission to be forwarded to the Twp. Board of Supervisors, stating the concerns that this Committee (created by the Planning Commission), has about deficiencies in the RERP; dated 7/6/84.

Attachment #7 Results from a questionnaire mailed out by LEA on Jan. 20, 1984 to Fire Companies listed in the 3 Risk County RERP's. The lists mailed to are:

Chester Co. (Appendix #1, Annex E listing, page E-1-1, Draft #6, RERP)
Montgomery Co. (Appendix E-4 listing, page E-4-1, Draft #5, RERP)
Berks County (Appendix E-2, page E-2-1, Draft #5, RERP)

The responses from Fire Companies located within the Plume Exposure EPZ (10 mile radius) which would be involved in "route alerting" are attached. LEA also received telephone inquiries as a result of this questionnaire. Most of the responses were received in Feb. 1984, and were used to help LEA ascertain the extent of the Firemen's involvement in the development of the RERP's, as well as their familiarity with the fact that they were listed in the RERP's.

35. Specify as to each municipality any further personnel or vehicles necessary for prompt route-alerting which must be acquired in order to assure that route-alerting provides an adequate means of public notification in the event of a radiological emergency.

ANSWER: LEA contacted the Municipal Emergency Management Directors for each of the risk municipalities to determine their assessment of their personnel and equipment needs. The calls were made by LEA volunteers (whose names are listed in parentheses) after the name, title of the person contacted, and the date of conversation are listed. Not all Emergency Coordinators were able to be reached by phone.

Collegeville Boro. "I am unsure how many Firemen would be needed. I guess they would come from the Collegeville Fire Co."

Mayor David Cornish, 7/13/84 (Sandy Welsh)

Douglass Twp. "I am unsure how many firemen will actually show up."

Kirk Zern, Fire Chief (Barry Friedman), 7/13/84

Green Lane Boro. "I am unsure of the involvement of local firefighters."

Mrs. Gerhard Martin, Boro Council member 7/13/84 (Dave Stone)

Limerick Twp. "I don't know anything about route alerting. We haven't really gotten this far with our plan yet."

Edward Doman, Twp. Emergency Coordinator, 7/16/84 (Bill Miller)

Lower Providence Twp. "We are unsure of our needs and who will participate."

"We have just appointed a new Twp. Manager (Emergency Coordinator)"

Richard Brown, Chairman, Board of Supervisors, 7/13/84 (Bill Adam)

Lower Salford Twp. "I guess we would use Harleysville Fire Co. I have

no idea how many men would be available." Terry Scholl, Twp.

Emergency Coordinator 7/13/84 (Debbie Brown)

Marlborough Twp. "I don't know how many firemen will participate.

I am unsure about any needs for equipment." Marvin Reiman,

Twp. Supervisor, 7/13/84 (Dave Stone)

New Hanover Twp. "I am unsure how many firemen would be needed. I hope

to use the drill to determine these figures." Dennis Pogany,

Twp. Emergency Coordinator 7/13/84 (Barry Friedman)

Perkiomen Twp. "I have no idea about who will do route alerting, and I have no volunteers yet. The Twp. would be divided into 3 sectors.

We will need bullhorns and P.A. systems for 3 vehicles."

Ed McMahon, Twp. Emergency Coordinator 7/13/84 (Dorothy Owad)

Royersford Boro. "We never understood route alerting to be more than

a back-up notification procedure. We have not polled the

firemen to determine that they would participate. We don't

have enough P.A. systems presently." Robert DeAngelo, Emergency

Coordinator, 7/13/84 (Maureen Mulligan)

Schwenksville Boro. "I would estimate that we would need 25 fireman from Schwenksville. I don't know how many would do it. We don't have enough bullhorns." Ron Clossin, Emergency Coordinator, 7/13/84 (Barry Friedman)

Skippack Twp. "We consider the purpose of route alerting to be to provide assistance to the handicapped and invalid persons. No Fireman will participate, and we don't know how many would be needed. We have 34 miles of roadway, not including state roads. No equipment is available." Caesar Gorski, Chairman, Skippack Supervisors, 7/13/84 (Sandy Welsh)

Upper Frederick Twp. "We are expecting PECO to buy us more equipment." Roland Hobson, Twp. Supervisor, 7/13/84 (Barry Friedman)

Upper Providence Twp. "I would expect Firemen from Oaks and Mont Clare to do it unless there is a radiation release involved. We have divided the Twp. into 9 sectors; each would need 2 people for route alerting. Our first practice during the July 11 mini-drill showed that it would take about an hour for us to do route alerting. We hope to practice so that we can get it down to $\frac{1}{2}$ hour. We believe that PECO will provide any equipment we need." Jack Shutes, Emergency Coordinator, 7/14/84 (Margaret Hoos)

West Pottsgrove Twp. "No fireman have agreed to do route alerting yet. They are waiting to receive equipment from PECO first. We will need 2 way radios." Richard Bacchi, member, Board of Commissioners, 7/16/84 (Brenda Honig)

Similar responses were received from other municipalities. LEA believes that these needs can be much better determined after the July 25 test drill.

36. Specify each provision of the plans and/or implementing procedures which LEA asserts to state that notification of emergency response organizations will be made by sequential telephone calls. Discuss in detail the basis for LEA's assertion or inference as to each such provision.

ANSWER: LEA believes that this needs to be assessed after the July 25 test drill.

37. Specify by reference to the County plans and/or implementing procedures each Emergency Broadcast System which uses a radio station which does not operate 24 hours a day. State and discuss in detail any basis for LEA's assertion, if so, that such station could not operate in the off-hours in the event of a radiological emergency.

ANSWER: It is well known that WCOJ, the EBS currently designated in the Chester County RERP, is not a 24 hour station. LEA still does not know if this is going to be changed, and will make further comments when this has been decided.

Contention LEA-27

38. Specify each deficiency which LEA asserts to exist in the plans and/or implementing procedures with regard to the evacuation of the Spring Mountain House, the Camp Hill Village School and the Camp Hill Special School in the event of a radiological emergency. As to each such deficiency, identify the exact provision(s) of the plans and/or implementing procedures claim to be deficient, the precise population at risk, and the basis for LEA's assertion that reasonable assurance does not exist that such population will be evacuated in the event of a radiological emergency.

ANSWER: LEA contacted the Camp Hill Village Schools to discuss this matter further. Attachment #8 reflects the concerns of Camp Hill Special Schools, Inc. in East Nantmeal Twp.

Camp Hill Village School in West Vincent Twp. has still not received confirmation of any planning details in writing, but is expecting to have its transportation needs included in the West Vincent Twp. RERP. Once those details have been finalized, LEA will make further comments on Applicant's questions above. (Conversation with Helen Zipperlin, Director of Camp Hill Village School, 7/16/84)

Spring Mountain House is now a private hotel and no longer has any residents requiring special ambulance transportation assistance. About 40 people live there. After being contacted by LEA, they became aware that they should get in touch with their local Emergency Coordinator and local Fire Chief to discuss including them in the Upper Salford Twp. Plan. LEA will make further comments once these details have been arranged.

39. Discuss in detail each change in the plans and/or implementing procedures which LEA asserts that planners must make in order to provide reasonable assurance that persons from the Spring Mountain House, the Camp Hill Village School and the Camp Hill Special School will be evacuated in the event of a radiological emergency.

ANSWER: Same as #38

Contention LEA-27

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ANSWER: Same as #38

Contention LEA-28

40. Discuss in detail the basis for LEA's assertion that the National Guard could not be promptly mobilized in heavy traffic or bad weather to perform its assigned task in the event of a radiological emergency. Specify the particular Guard function to be performed, the point(s) at which the Guard will mobilize, the point(s) to which the Guard must travel to perform the assigned function, and the time which LEA asserts that the Guard would require to reach its duty station in the event of heavy traffic or bad weather.

ANSWER: LEA has not yet fully completed its review of the roles assigned to the National Guard in the recently revised County (Risk) RERP's. When any possible changes that have been made since the last RERP (which was the basis for filing the contention) LEA will provide answers to the above questions.

41. Specify any changes in the plans and/or implementing procedures which LEA asserts that the planners should make in order to shorten the time it would take the Guard to mobilize and respond in heavy traffic or bad weather. Discuss in detail why and by what length of time the Guard's response time would be shortened.

ANSWER: Same as #40

42. Specify by Municipality and access control point or other appropriate designation each location as to which LEA contends there is no assurance of sufficient resources to provide towing, gasoline and snow removal on non-state roads in the event of a radiological emergency.

ANSWER: Although the recently revised Risk County RERP's provide additional information that wasn't included in the earlier RERP's, LEA has not yet completed a municipality by municipality review of these resources. LEA has filed interrogatories with the applicant to determine if additional planning has taken place that might address LEA's concerns. Applicant has refused to answer LEA's interrogatories. LEA will have to conduct its own survey of these resources and whether or not all needed letters of agreement have been completed in order to be able to answer this question. LEA will conduct such a survey in the near future.

43. Specify any change in the plans and/or implementing procedures which LEA asserts that the planners must make in order to provide assurance that there will be adequate towing, gasoline and snow removal resources on non-state roads in the event of a radiological emergency.

ANSWER: Same as #42.

DOCUMENT REQUEST: Attachments #1 through #8 are responsive to Applicant's request.

OWEN J. ROBERTS SCHOOL DISTRICT
R.D. 1, POTTSTOWN, PA 19464

DOCKETED
USNR

TO: Members of the Board of School Directors, Administrators, and
Members of the Emergency Planning Task Force
FROM: Dr. Roy C. Claypool, District Superintendent
SUBJ: • Testing of Existing Parent Call Chain in the Event of an
Unexpected Emergency
• Communications to Elected Officials, Regulatory Agencies, and others
Subject: Incomplete Inadequate Nuclear Evacuation Plan
DATE: June 12, 1984

84 JUL 23 11:10
R. Claypool

As most of you are aware by now on Friday, without warning, I announced an early dismissal on the criteria of expected heat within classrooms to exceed 95 to 97 degrees.

The standard operating procedures were used in notifying each principal, radio stations, bus contractor, and parents.

The following is my evaluation of that activity for the purpose of demonstrating the problems we would face in the event of an alert related to nuclear or a chemical spill in our local area.

In order to ensure that the buses would be here by 11 a.m. it was necessary for me to notify the bus coordinator by 8:30 a.m. If I had not, according to the coordinator, it may take hours before we could round up the bus drivers.

The radio stations had little difficulty in receiving my communications because of the codes used for an emergency.

The parent chain calling system failed to operate adequately because many of the parents have allegedly thrown away their call systems lists because inclement weather is now over.

Conclusions:

Unless we notify bus drivers while they are physically in their buses [via two-way radio], we may face at least two (2) hours delay before having adequate number of buses available for an early dismissal.

It is quite apparent from the experience we had on Friday that the call system not only is inadequate, but that many parents do not recognize the need to maintain this call system other than for a major inclement weather situation. It is interesting to note that in a number of cases, unless these people were alerted to an emergency situation via the TV the night before, many have been unable to find their lists for the next morning.

(OVER PLEASE)

June 12, 1984

Page 2 .

Recommendations:

1. The bus transportation department must upgrade our communication contacts with bus drivers in order to decrease the time needed to notify bus drivers when they are not behind the wheel.
2. Our building principals and especially PTA/PTO's must structure chain call systems that can be implemented at any time during a twenty-four (24) hour period.
3. It is recommended that one of the first projects to be addressed by local PTA/PTO's in September would be the structuring and implementation of an emergency planning notification system.

Enclosed please find a communication sent to a number of elected officials, regulatory agencies and others on the subject of, "The Incomplete Inadequate Nuclear Evacuation Plan For The Owen J. Roberts School District Within The Limerick Nuclear Planning Area."

Enc.

cc: B. Kersch
K. Rice

COUNTY OF CHESTER

COMMISSIONERS

Earl M. Baker, Chairman

Robert J. Thompson

Patricia Moran Baldwin

DEPARTMENT OF EMERGENCY SERVICES

14 East Biddle Street, West Chester, PA 19380 (215) 431-6160

Timothy R. S. Campbell
Director

DOCKETED
USNRG
'84 JUL 23 A11:10
244 #2

April 3, 1984

DOCKETED
BRANCH

Mr. Joel Grottenthaler
Energy Consultants
Riverside Office Center #3
2101 North Front Street
Harrisburg, PA 17110

Dear Joel:

After reviewing the matter with my staff and discussing it with you and others, I have come to the opinion that we need to address the issue of the For-Profit Private Day Care Centers. As you know, the Pennsylvania Emergency Management Agency does not consider these centers as special populations requiring either independent plans or special consideration within the municipal plans.

After looking at the number of such groups within the Limerick EPZ in Chester County, the size of the student bodies and the apparent lack of transportation available during the normal period of the day that children are in these day care centers, I find myself disagreeing. The private for-profit day care centers are no different in my mind than non-profit day care centers and have similar populations with similar emergency needs.

I would appreciate it if Energy Consultants would either include for-profit day care centers in the municipal plans or if this is not acceptable, develop a separate annex to the Chester County Plan to cover this rather large group of residents of the Limerick EPZ.

Sincerely,

Timothy R. S. Campbell

Timothy R. S. Campbell
Director

TRSC:ce



Founded 1682



Minutes - Meeting #1
att. #3

METHACTON SCHOOL DISTRICT
EMERGENCY EVALUATION COMMITTEE
MEETING #1 MAY 31, 1984
ARROWHEAD SCHOOL
(7:00-9:00 pm)

DOCKETED
USING

'84 JUL 23 11:10

COMMITTEE MEMBERS PRESENT:

Nancy Koehler, Jackie Crahalla, Richard Oesterling, Nancy
Catton, John Rafferty, Jim Brown

Tyrone Johnson
Waine Graham

COMMITTEE MEMBERS ABSENT:

Lee Seitz, Tyrone Johnson, Carl Daddona, Frank Panaia

The meeting began with introductions and each committee member sharing his/her background and personal interest in serving on this committee.

Jim Brown established a time-line (based on parameters provided by Dr. Warner) and guidelines for the committee's work. It was stressed that the task at hand was to provide a forum for public input relative to the district's emergency response plan - not to debate about the Limerick Power Plant.

Mr. John Cunningham, from Energy Management Consultants in Harrisburg, who has worked with the district in the plan to this point, gave a detailed verbal report. He shared several basic principles of school district emergency evacuation plans. Among these were differentiations between plans for schools within and outside of the EPZ (Emergency Planning Zone - 10 mi. radius), sheltering, schools in/out of session, and the fact that there were no "early dismissal" options in such emergency situations. He also noted that a Host School, located beyond the EPZ, needed to be identified for each school district's plan. County-level authorities would be responsible for notifying schools outside of the EPZ. He also stated that after 8:00 pm, Methacton School District students would be transported from the Host School (Methacton Jr/Sr High complex, which is located 1/2 mile beyond the EPZ) to a Feeding Center at Plymouth-Whitemarsh High School.

Mr. Cunningham said that there are four levels/classifications of emergencies:

- 1) Unusual event (no notification necessary)
- 2) Alert (preparatory-cancel special events)
- 3) Site emergency
- 4) General emergency

Mr. Lin Bigelow, who serves as the Director of the Montgomery County office of Emergency Planning(Eagleville),told the committee about his office's role in an emergency evacuation situation. He stated that his office would, at a later time, provide our committee with maps indicating emergency evacuation routes. He also noted that his office would arrange for transportation of students if district school buses were not available in sufficient numbers.

Several questions were directed to our two guests. As a result, Jim Brown identified several specific issues to be discussed by the committee at future meetings which seemed to be significant concerns, namely:

- 1) Methacton Jr/Sr High complex as the Host School vs evacuation to another location further removed from the EPZ.
- 2) Private/Parochial schools evacuation - who is responsible?
- 3) Bus Drivers/Teachers' availability and responsibilities
- 4) Examination of Emergency Evacuation route maps
- 5) Sheltering concerns

Richard Oesterling, who is a nuclear engineer, shared information about levels of contamination with the other members of the committee. John Rafferty, who is a school director, suggested polling the bus drivers to assess their availability in an emergency evacuation situation.

Jim Brown scheduled two further meetings of the committee:

Thursday, June 21 - 7:00 pm

Thursday, July 5 - 7:00 pm

Both subsequent meetings will be held in the Arrowhead School library, which is located at 232 Level Road in Collegeville. Dr. Warner has requested that a revised revision of Draft #3 of the plan be submitted to him by mid-July, so that the School Board may act on the plan at their August meeting. Mr. Brown stated that copies of the 90-page Draft #3 would be sent to committee members, along with meeting notes. He also mentioned that the focus of the June 21 meeting would be to go through Draft #3 and discuss specific areas of concern.

cc: Dr. Warner, MSD Superintendent
Mr. Derr, MSD Assistant Superintendent
Mr. Cunningham
Mr. Bigelow

METHACTON SCHOOL DISTRICT
EMERGENCY EVACUATION COMMITTEE
MEETING #2 JUNE 21, 1984
ARROWHEAD SCHOOL
(7:00-9:30 pm)

COMMITTEE MEMBERS PRESENT:

Tyrone Johnson, Nancy Koehler, Jackie Crahalla, Nancy Catton,
Elaine Graham, John Rafferty, Les Carlton, Jim Brown

COMMITTEE MEMBERS ABSENT:

Lee Seitz, Richard Oesterling, Carl Daddona, Frank Panaia

Jim Brown started the meeting by introducing Elaine Graham and Tyrone Johnson, neither of whom were able to attend the first meeting on May 31. Mr. Brown openly apologized for the fact that most committee members did not receive their packet of information from the last meeting until very recently. He noted that he had completed this information five days previously, but for some reason the mail must have been slow. Jim asked if there were any questions on the notes of the last meeting and also did a brief review of the several significant concerns which were raised at the last meeting. He also noted that he had recently communicated with Dr. Warner and that he had extended the time frame for the work of the committee indefinitely. Dr. Warner is also supportive of the idea of surveying bus drivers, but is not supportive of surveying the professional staff at this time. Jim also shared that he had spoken with both Dr. Roy Claypool, the superintendent and Mr. Joe Clark, chairperson of the Emergency Evacuation Task Force of the Owen J. Roberts school district. A packet of information was provided to each committee member which contained several items from Owen J. Roberts' work on their emergency evacuation plan. This included a cover letter to the teachers, along with copies of both a teacher survey and bus driver survey, as well as specific results from the teacher survey. Most of these sheets were individually discussed by the committee. Jim also shared a number of items that he felt would be of interest to the committee that had been gleaned from a 2 1/2 hour discussion with Joe Clark. Suggestions offered to us by Mr. Clark included the need to survey and assess staff for availability. Unmet resource needs were the most significant problem, specifically the seeming lack of cooperation from the Chester County Department of Emergency Services. It was noted that school officials cannot deny parents access to their children. The Owen J. Roberts school district is not providing for private and parochial school students in their plan. They have written letters to each of these buildings informing them that they do not want to presume authority over them. All of the private and parochial schools have been pleased with this arrangement in the Owen J. Roberts district. Mr. Clark suggested that the highlight of working on an emergency evacuation plan should be overplanning. It was shared that the teachers reacted very negatively to the first survey which had been formulated by their task force. The teachers association was involved in the formulation of a second survey which was administered to all teachers, following a half-day training session that was provided by Energy Consultants in Harrisburg. The cost to their district and teacher salaries was estimated to be \$2000 for this program. Mr. Clark shared that documentation of the facts and putting together of this plan, as well as careful tabulation of local data was very significant.

Highlights of a recent report, compiled by the citizens task force, were shared with the committee. Recommendations of this report were that their committee could not, at this time, submit the current draft (#7) of their Radiological Emergency Response plan for approval to the school board. Due to a seeming lack of cooperation from the Chester County office of Emergency Preparedness, this school district will be contacting the Federal Emergency Planning Agency to inform them of the detailed review of the unmet resource needs and the lack of response by Chester County. It has also been recommended that no emergency response plan be submitted to their board for approval without complete and thorough drill and exercise. Specifically, it was recommended that one planned drill be scheduled during the school day and one unscheduled drill be attempted to provide further assurance of adequacy of the emergency plan. Their final recommendation was that their citizens task force should continue to function until all emergency planning issues are resolved and the Emergency Response plan is determined to be adequate to provide for the protection of the students of the Owen J. Roberts School District. Mr. Clark also shared with Mr. Brown that a host school location (Twin Valley High School) has been selected for his district, but this responsibility has not yet been accepted by the host school. Mr. Clark anticipated numerous traffic problems in their plan and felt that his committee had a long way to go, even though they have been working on their plan for almost two years. The plan itself was provided to Mr. Brown and he noted that he would look over the plan and compare it with our particular plan and highlight specific areas that were alike as well as those that were different for our next meeting.

Mr. Brown noted that he had been in contact with Mr. Bigelow regarding the issue of checking on the possibility of a host school being designated for Methacton other than our own junior and senior highs. Mr. Bigelow did not have a response to this and suggested contacting Mr. Cunningham. This has been done and Mr. Brown is waiting to hear from Mr. Cunningham on this issue. It was noted that neither Mr. Cunningham or Mr. Bigelow were available to attend tonight's meeting.

Many questions and concerns were raised by members of the committee. It was suggested that all staff members be surveyed in one way or another. This would include bus drivers, teachers, food service, and custodial and maintenance staff. A major concern was the idea of whether there would be a safe air exchange system in the host school site. It was emphasized that a radiation free environment needs to be present for the safety of our students. It was suggested that the Nuclear Regulatory Commission or some other agency be contacted to do a test in this realm, once a specific host school had been determined.

Several committee members raised the issue of emergency evacuation drills to be initiated by the district in the fall. It was emphasized that students and staff need to be prepared for a full-scale evacuation situation. Both planned and unscheduled drills were suggested. It was suggested that a representative of the Methacton Education Association be invited to a committee meeting at a later date if specific issues relative to the teaching staff in general were to be discussed. Mrs. Nancy Koehler stated that in the interim, she felt comfortable stating views and opinions of teachers and the association, since she herself is a member. There was a consensus of members of the committee that there were serious concerns about the idea of having Methacton Junior/Senior High School as the host school. Most of this concern was predicated on the fact that the Junior/Senior High complex is located

only one-half-mile removed from the EPZ. Questions were raised about the psychological impact on very young students in terms of the whole issue of nuclear power. It was shared by one committee member that many young students seemed to have a very biased view of nuclear power and might, in fact, equate nuclear energy with atomic weaponry. The issue of whether the junior and senior high schools should also be evacuated if a second host school is determined was discussed. Another concern was the area of students who drive to school. Another concern shared was what the legal constraints on our committee were in terms of a time frame for approval. It was noted that the committee would need to have some recommendation by the time the plant was ready to operate. Jackie Crahalla noted that she would be happy to provide the committee with copies of the Lower Providence Township evacuation plan at our next meeting. It was the consensus of the committee that we should not assume responsibility for private or parochial schools. However, it was also suggested that at the proper time, letters be written to each school informing them of this decision. A question was raised about our responsibility to nursery school students. It was shared that Methacton did not have responsibility of pre-schools.

Since considerable information from the Owen J. Roberts School district was shared at this meeting and a number of new areas were discussed in detail, there was not sufficient time to begin looking at Draft 3B of the Methacton plan. It was determined that this would be the focal point at the next meeting. The next meeting will be held on Thursday, July 5, at 7:00 pm, Arrowhead School library. Another meeting was also scheduled (#4) for the committee for Tuesday, July 10. Subsequent meetings beyond July 10 will need to be scheduled later in the summer.

The meeting was adjourned by Mr. Brown at 9:30 pm.

METHACTON EVACUATION PLANS - MEETING #3 - Nancy Catton's notes
July 5, 1984

COMMITTEE MEMBERS PRESENT: Same as last time except for Nancy Koehler, the school nurse.

The next two meetings were set for Tues., July 10, and Thursday, August 23. At the latter meeting we will have a speaker from the NRC, who will be able to answer many questions and explain how evacuation went at TMI. (This, courtesy of Tyrone Johnson, whose wife is with the NRC and who felt such a speaker would help us.)

Alternate host schools were discussed - possibly Norristown High School or Montgomery County Community College.

Jim Brown said that he still hasn't received the updated evac. maps he requested from Mr. Bigelow, but hopes to have them by July 10.

Jim Brown said that although Methacton will not be participating in the drill on July 25 it will be monitoring the drill.

He told the task force about the comparison he's made between Methacton's plans and those of OJR. The plans are virtually the same, he said. OJR has a waiver of responsibility for kids who drive; an alternative administration office; plans for drinks and snacks; a listing of buildings at risk; extra district relief designates; a list of unmet resource needs; a list of a host school for each individual school (7 - check on this); two sample letters. However, OJR has no maps, as Methacton does; no organizational chart; no calendar.

Jim Brown confirmed that Audubon and Worcester are closed and can be eliminated from the plans. Audubon is to be used for teacher in-service.

Lower Providence residents will be going to Neshaminy Mall. There will be animal shelters around the area. Methacton is supposedly to be used as a decontamination station and mass care center. (This information is from Jackie Crahalla, whose husband is with the state police. I think I have it right in my notes.)

In going over the evac. plan draft page by page (we got only as far as p. 18), we picked up the following points of particular concern:

- p. 7, II.B.7. Question of what school will be host school. Supposedly, if kids were kept at their own schools, and no host school were designated, the school board would be liable. A host school is necessary if the state is to be liable. It was suggested by John Rafferty that we check this out, looking up previous court cases.
- p. 7, II.B.15. Problems with who will pick up each child, and how, and how records will be kept.
- p. 8, II.E.2. Tellabs 294 eliminated; sirens now used.
- p. 9, II.E.5. Much discussion of notification procedure for parents, including problems with telephone chains.
- p. 11, II.G.3. Check on "e." Also, earlier feeding might be desirable ("g.") Last line somewhat vague.

July 5, 1984

- p. 12, II,H,1. Is the Administrative Building a good location for a "command center" for the school district, or should there be an alternative?
- p. 13, II,H,4. Jim Brown recommends more than two alternates to function in the Superintendent's and Principals' absence. He also pointed out the necessity (and difficulty) of updating rosters.
- p. 14, II,K. Expense records are to be kept; who will be paying for drills, etc? This was discussed at length, and it was brought out that if PECO is paying for anything it should be by written agreement. There was concern over costs to be borne by the school district.
- Jim Brown noted that drills, etc., for teachers and staff would be the district's responsibility and should not be initiated by PECO.
- p. 17, V,A.
(What happened to "IV"?) It was pointed out that an unusual event meant a happening at the plant which is not related to the function of the plant directly (ex., a worker stubbing his toe); therefore, the school would not be notified.
- V,B. OJR will put its plan into effect upon notification an "alert," because of closeness to Limerick. ^{on} _{of} Methacton is still awaiting maps.
- p. 18, V,B. The question arose about evacuation of North Montco Vo-Tech students if it should be decided that the Jr./Sr. High are to be evacuated because of proximity to 10-mi. zone. The bus driver on the task force (head of the drivers, I think) - Tyrone Johnson - said that there are three busloads of vo-tech students each year. They leave from the Senior High area.
- A note was made that the school should check with the NRC about the safety-security of the entrances, exits, and windows.
- Discussion about making sure that emergency lines are not tied up by incoming calls from parents, Methacton may have a separate line set up, although presently there are extensions unknown to the parents.

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(Nancy Catton's notes)

COMMITTEE MEMBERS PRESENT: James Brown, Tyrone Johnson, Nancy Koehler, Jackie Crahalla, Richard Gesterling, Frank Panaia, Elaine Graham, Les Carlton, Nancy Catton

ABSENT: John Rafferty; LeRoy Seitz (couldn't be reached); Carl Daddona (interested, but has been unable to attend; has had experience with evacuation in the military)

Jim Brown said that he informed Mr. Cunningham, energy management consultant for PE, that we are considering having an alternate host school. Mr. Cunningham contacted the superintendent of Norristown School District (one of our possible choices), without definitive results, and will be contacting Montgomery County Community College, another possible choice.

Mr. Cunningham said that the 8 P.M. time for mass care and feeding was arrived at by compromise, and that another time would have to be re-coordinated with other school districts and with the Red Cross.

Jim said that maps are still not available from Mr. Bigelow.

Regarding the drill set for July 25, Jim said that Methacton will not be participating or monitoring, but that Dr. Warner's office would be contacted. (What each superintendent does after being contacted is up to him. He might request that the principals in his district report back to him on how many children are in school, where they are, etc.).

It was noted that Lower Providence Township also will not be participating in this drill, since it lacks necessary equipment, etc. The warning sirens are to be sounded, and there may be some traffic flow checks.

It was recommended that Mr. Bigelow be informed that Methacton does not intend to participate, but is automatically regard Methacton as having successfully participated.

Jim Brown said that a hot line from the superintendent's office might be set up for emergencies, and that there might be partial (gradual, because expensive) installation of two-way radios in the school buses.

Corrections were made by Jim of my notes from meeting #3: Mr. McMenamin, rather than Tyrone Johnson, is head of the Methacton bus drivers; training for school district personnel "would not" (rather than "should not") be initiated by PE; and Owen J. Roberts would put their plan into effect partially, not fully, upon an alert. Also, OJR has two draft letters in its plan, not one.

Tyrone Johnson told the group that Mr. Joyner (?) at the NRC told Mrs. Johnson that the NRC is not able to send out a speaker (now against policy), and that we may put our questions in writing to the NRC. Also, we may put a request for a speaker in writing; Mrs. Johnson is kindly doing this for us.

Jackie Crahalla said that Ted Brooks, a reporter with the Times Herald, asked if he might attend one of our meetings. No decision was made on this; concern was expressed about whether his presence might be inhibiting.

The question of liability again arose. Jim said that it is Methacton's responsibility to come up with an evac. plan; otherwise, PE will devise one for us. Also, all expenses so far incurred by school districts have been borne by the districts, the exception being for training given to the OJR staff. However, the cost for teachers' salaries for that one day of training was estimated to be \$8000, which was not assumed by PE. Jim said that he did not plan to try to set up a meeting of representatives of the schools to discuss such matters: He is not sure if they would be interested in such a discussion; some may be accepting the plans as they are; and arranging such a meeting would be very difficult because of time constraints, logistics, etc.

Jim intends to set up a telephone chain within the Methacton task force, he said.

Dick Oesterling brought up the meaning of an "Alert." He said an alert probably has little significance for the schools, and that with the exception of 3-5 situations, an alert need not trigger any action on the part of Methacton. However, it seemed to be the consensus of the task force that "better safe than sorry" should be our guide.

Dick also said that sheltering is usually thought necessary if (1) there are atmospheric conditions in which a plume is passing over but not touching the ground, and (2) the plume does touch the ground (the more likely scenario) but radiation levels are not particularly high, and evacuation is not recommended. The criteria for the decision to shelter, then, are projected dose levels and atmospheric conditions. He said that in a sheltering situation there is no movement of persons within the affected area, and that this might have consequences if there is a need for medical attention for students being sheltered. He told the group that damp cloths might have some small effect against iodine contamination, especially if they were soapy cloths (p. 23, 3.c.).

(Note: Dick Oesterling is a nuclear engineer who has been involved in nuclear energy for at least 20 years.)

Once again the question arose as to whether the school buildings (and what portions of the buildings) would actually be safe for sheltering. Dick said that the Atomic Industrial Forum has commissioned a study, due out in December, on whether sheltering is a viable option.

There was much discussion about the disposition of students who are bused outside of the school district. For example, Tyrone told the group, Methacton carries two busloads of students each day to Bishop Kendrick, and ~~that~~ out of 50 buses, 15-20 may be outside of the district. Dick suggested that in an "alert" phase, provisions should be made for pick-up of students who were bused outside the school district, and he asked how parents

would know where their children were. It was recommended that responsibility for disposition of students bused outside of the district be clearly established. (Is it Methacton's, or that of another school district?)

The question arose as to just what "standby" for buses in an alert would entail (p. 22). There was discussion about the directive to use King of Prussia (or another site to be determined - "TED") as a staging area, and it was suggested that there should be multiple staging areas.

The task force acknowledged that there might be many problems with parents picking up their children from school, and there were questions about transport of children to mass care centers, and about who could be counted on to accompany them.

Tyrone Johnson said that as far as counting on bus drivers goes, salary would be a strong motivating factor. It was suggested that bus drivers ought to know what is to be expected of them, by whom, and who will pay. Apparently some of the driving would be for the school district and some for the county. Tyrone also said that drivers are generally conscientious about making their whereabouts known during the day.

It was noted that the state police permit three passengers in each bus seat. However, Tyrone said that this was a very undesirable situation, especially in bad weather, because crowding in the bus could dangerously limit visibility.

Adequacy of medical care for students during sheltering was discussed. Nancy Koehler said that there are two nurses to serve three elementary schools, and that several nursing assistants will be working in the fall. (The exact schedule for nurses needs to be ascertained.) Dosimetry, maintenance of medical supplies and records, administering of medicines, and possible tagging of students with medical problems, such as penicillin allergies, were touched upon.

Jim Brown said that it was not certain that Methacton would be used as a decontamination center, as rumored.

In further discussion of the 8 P.M. feeding time, it was noted that if children were kept in the school district, as in sheltering, there would be no need to observe the 8 P.M. schedule, which might be hard on the youngsters.

It was recommended that there be a firm and clear chain of notification and command in an emergency situation. Dick Oesterling asked if there has been any kind of code set up (a concept he said is twenty years old). Jim said he would look into this possibility.

Jim told the group that it would be up to the OEP to inform the Red Cross about mass care needs. (p. 21, h.3.)

The next task force meeting was set for 7:30 P.M., Thursday, August 23. I will be sending postcards out about a week before the meeting to remind the task force members.

Nancy Cation

RELATED CORRESPONDENCE


Att. #4

DOCKETED
JUL 23 1984

'84 JUL 23 11:10

M E M O R A N D U M

TO: Phyllis Zitzer

FROM: Steven C. Sholly 

DATE: 18 March 1984

SUBJ: Emergency Planning Implications of the Limerick Probabilistic Risk Assessments (i.e., LGS-SARA and LGS-PRA)

1.0 Introduction

The probabilistic risk analyses of the Limerick Generating Station ["Probabilistic Risk Assessment, Limerick Generating Station", Revision 5, September 1982 ("LGS-PRA"); "Severe Accident Risk Assessment, Limerick Generating Station", NUS Report No. 4161, April 1983 ("LGS-SARA")] contain useful information for offsite emergency planning purposes. A key feature of the emergency plans for Limerick is the reliance on an AC-electric powered siren alerting system for the purposes of alerting the public to the need to tune to an Emergency Broadcast System (ERS) station for emergency instructions. In this memorandum, I will document an analysis of the LGS-SARA and LGS-PRA for sequences in which offsite AC electrical power is lost and, therefore, during which the siren alerting system will not be available.

2.0 NRC Requirements for Prompt Public Notification System

NRC's regulations at 10 CFR Part 50, Appendix E, Section IV, Part D, Paragraph 3, contain the following requirement:

By February 1, 1982, each nuclear power reactor licensee shall demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway EPZ . . . The design objective of the prompt public notification system shall be to have the capability to essentially complete the initial notification of the public within the plume exposure pathway EPZ within about 15 minutes.

3.0 Analysis of LGS-PRA and LGS-SARA for Loss of Power Power Contribution to Core Melt Frequency

3.1 LGS-PRA Analysis of Non-Seismic Loss of Offsite Power

LGS-PRA calculated a mean core melt frequency of 1.5×10^{-5} per reactor year for "internal events" [LGS-PRA, page 3-112]. The term "internal events" is something of a misnomer in this case because the LGS-PRA analysis of "internal events" includes plant transients initiated by a loss of offsite power. Such initiating events are designated T_E sequences.

Of the total core melt frequency of 1.5×10^{-5} per reactor year, LGS-PRA estimates that 44% arises from two accident sequences initiated by a loss of offsite power. These accident sequences are designated T_{EUV} (loss of offsite power followed by failure of high-pressure and low-pressure injection; estimated core-melt frequency contribution of 5.9×10^{-6} per reactor year) and T_{EUX} (loss of offsite power followed by failure of high-pressure injection and failure to timely initiate the Automatic Depressurization System; estimated core melt frequency contribution of 6.9×10^{-7} per reactor year) [LGS-PRA, pages 3-35 and 3-108].

3.2 LGS-SARA Analysis of Seismic Loss of Offsite Power

LGS-SARA apparently treated the LGS-PRA mean core melt frequency estimates as "point estimates" (see, for example, Table 12-1, page 12-22, LGS-SARA). LGS-SARA extended the LGS-PRA risk estimates by including an

analysis of external events, including seismic events.

According to the LGS-SARA analysis, offsite power is lost at a median ground acceleration of $0.20g$ [LGS-SARA, Table 3-1, page 3-16]. This is consistent with the Zion, Indian Point, and Seabrook PRAs performed by Pickard, Lowe & Garrick (these studies, as well as LGS-SARA, utilized the seismic risk analysis services of Structural Mechanics Associates).

LGS-SARA estimated an overall frequency of core melt due to all causes of 4.4×10^{-5} per reactor year [LGS-SARA, page 12-4]. Of this total, 6.6×10^{-6} comes from the LGS-PRA analysis of "internal events" (see above). This represents a contribution of 15% of total core melt frequency from non-seismic loss of offsite power.

LGS-SARA identified a number of seismic accident sequences. Sequence T_{SEUX} (seismic loss of offsite power followed by failure of high-pressure injection and failure to timely initiate the Automatic Depressurization System) is estimated to contribute 3.2×10^{-6} to total core melt frequency [LGS-SARA, Table 12-3, pages 12-23 through 12-25]. Sequence T_{SECC_2} (seismic loss of offsite power followed by failure of the control rods to insert and failure of the boron injection system) is estimated to contribute 5.4×10^{-7} to total core melt frequency [LGS-SARA, Table 12-3, pages 12-23 through 12-25].

In addition, LGS-SARA identifies sequence T_{SRPV} (seismic failure of the reactor vessel upper lateral support) as contributing 9.6×10^{-7} per reactor year to total core melt frequency [LGS-SARA, Table 12-3, pages 12-23 through 12-25]. Although not explicitly listing T_S (seismic loss of offsite power) in this sequence, it is clear from Table 3-1 that offsite power would be lost since T_{SRPV} occurs at a median ground acceleration of $1.25g$, while offsite power is lost at $0.20g$ [LGS-SARA, Table 3-1, page 3-16]. Thus, sequence T_{SRPV} also contributes to the frequency of accidents in which a seismic loss of offsite power occurs.

Summing the seismic loss of offsite power sequences, one obtains a total contribution to core melt frequency of 4.7×10^{-6} per reactor year. This represents a contribution of 10% of the total core melt frequency from seismic loss of offsite power. Examining listing of dominant core melt sequences in Table 12-3 [LGS-SARA, pages 12-23 through 12-25], 3 of the top 6, 4 of the top 9, and 6 of the 17 dominant sequences are caused by or accompanied by loss of offsite power.

4.0 Summary and Perspective

Based on the analyses presented in LGS-PRA and LGS-SARA, accidents caused by or accompanied by a loss of offsite power contribute a total of 1.1×10^{-5} per reactor year to the total core melt frequency of 4.4×10^{-5} per reactor year, a contribution of 25% from loss of offsite power sequences. In addition, three of the top six dominant accident sequences (and four of the top nine and six of the top seventeen) are loss of offsite power sequences.

Moreover, Table 12-9 demonstrates that seismic initiating events contribute about 84% of mean early fatality risk; it can be deduced that T_E loss of offsite power sequences contribute another 3%. Thus, accident sequences involving loss of offsite power, while responsible for 25% of core melt frequency, are responsible for about 87% of mean early fatality risk. Moreover, if emergency response parameters (such as delay time and effective evacuation speed) more appropriate to seismic and loss of power conditions were modeled in the CRAC2 consequence calculations, these contribution would increase.

These conclusions rest upon the validity of the LGS-PRA and LGS-SARA analyses. To the extent that these analyses are valid, the interpretation given them in this memo argues for a re-examination of the prompt public alerting system proposed by PECO for Limerick. The system proposed is estimated to fail in 25% of all core melt accidents (and for those accidents which contribute 87% of mean early fatality risk).

A possible replacement would be a tone-activated radio system in which emergency messages are broadcast over the NOAA weather radio system. Radio Shack supplies a "Weather-Radio" for roughly \$30 which operates on normal AC power (backed up by a DC battery) and which is activated automatically by a tone broadcast by NOAA. When the tone is broadcast by NOAA, a loud, shrill "beep" is heard to alert the public to listen for an emergency message. As a side benefit, the public would also receive notifications broadcast by NOAA for hurricanes, tornadoes, winter storms, and floods. This could be a "PR" plus in PECO's eyes.

BOROFF, HARRIS & HELLER
PROFESSIONAL CORPORATION

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'84 JUL 23 A11:11

June 22, 1984

OFFICE OF THE
COUNTY CLERK
BRANCH

Pennsylvania Emergency Management Agency
P. O. Box 3321
Harrisburg PA 17105

Re: Skippack Township, Montgomery County - Proposed Radiological Emergency
Response Plan for Incidents at the Limerick Generating Station

Dear Sir:

This letter is being written to the Pennsylvania Emergency Management Agency at the request of the Board of Supervisors of Skippack Township.

The undersigned is solicitor for the Skippack Township Board of Supervisors.

The Board of Supervisors has made a preliminary study of the proposed radiological emergency response plan submitted to Skippack Township by Energy Consultants, of Harrisburg, Pennsylvania, consultants to the Philadelphia Electric Company.

Skippack Township has not adopted the proposed radiological emergency response plan in view of the significant concerns of the Board of Supervisors concerning the provisions of the proposed plan, being Draft No. 5 dated April, 1984.

Among the significant concerns of the Board of Supervisors of Skippack Township are the following:

1. Lack of adequate personnel available to Skippack Township to provide a 24 hour emergency response. Skippack Township does not have a police force. The Skippack Fire Co., a volunteer group, has indicated their unwillingness to participate in a radiological emergency response plan in the event of a site emergency or a general emergency.
2. Inability of the Township to provide adequate means to provide notice and transportation to transit dependent individuals.

3. The proposed plan is incomplete with reference to evacuation routes through Skippack Township and its relationship to other municipalities which would evacuate through Skippack Township as well as evacuation of the State Correctional Institution - Graterford located in Skippack Township. The Skippack Township Board of Supervisors are concerned with the coordination of Skippack and adjoining municipalities and the State Correctional Institution with reference to potential evacuation.
4. Skippack Township does not believe it has the means necessary to obtain the equipment and dosimetry called for under the proposed plan, even taking into account the proposed equipment funding offer made by Philadelphia Electric Co.
5. The need for coordination among the various municipalities as well as the county and state officials with reference to evacuation and other matters, which would include proposed evacuation routes and their capacity.
6. The need for an ongoing training program. Township participants in the radiological emergency response plan should be able to receive ongoing training through either a county or area organization as each individual township is unable to provide this.

The Board of Supervisors believe it appropriate it to submit these concerns to you, at this time. They will continue with their evaluation of the proposed radiological emergency response plan and will conduct public hearings thereon in the near future.

Very truly yours,

Alan E. Boroff

AEB/bjk

cc: George Hugenin, Skippack Township Emergency Management Coordinator

Edward L. Jordan, Director, Division of Emergency Preparedness and Emergency Response, Office of Inspection and Enforcement, United Nuclear Regulatory Commission, Washington, D.C.

Federal Emergency Management Agency, Washington, D.C. 20472

Montgomery County Emergency Management Office

Mrs. Mary Wills, Skippack Township Secretary

July 6, 1984

To the East Pikeland Township Planning Commission:

DOCKETED
USARC

JUL 23

A11:11

The undersigned, representing a committee investigating the Evacuation Plan for East Pikeland, recommend that Draft #5 of the Radiological Emergency Response Plan (RERP) not be approved as it exists and not be submitted for review by the Chester County Department of Emergency Services (CCDES), the Pennsylvania Emergency Management Agency (PEMA), the Federal Emergency Management Agency (FEMA), and the Nuclear Regulatory Commission (NRC) until the following areas of concern be resolved.

This recommendation arises from the identification of a large number of serious deficiencies and uncertainties in our study of the RERP (Drafts #4 and #5) for East Pikeland, associated materials, and discussion with various parties.

Foremost among these concerns are:

- 1) TIME FRAMEWORK FOR PUBLIC RESPONSE TO A RANGE OF POSSIBLE EVACUATION EVENTS: the plan does not precisely relate effective times for evacuation to the imaginable range of radiological events.
- 2) INADEQUATE ROAD SYSTEM: need to realistically review the NRC required evacuation time study recently released by PECO and prepared by HMM Associates of Concord, MA. This computer based study indicates a total evacuation time of 6 hours and 15 minutes for the 74,498 residents of Chester County during the worst of possible conditions, ie., "a snowy winter weekday" (The Mercury, Pottstown, 6/22/84). Township records indicate a total of 8-12 hours to plow out East Pikeland.
- 3) CO-ORDINATION WITH NEIGHBOURING MUNICIPALITIES: determine the relationship and impact of the plans (particularly the evacuation routes, joint use of services - ambulances, fire company, buses, tow trucks, etc.) of surrounding municipalities and school district on the East Pikeland Evacuation Plan. This is one of the objectives cited in Draft #5, "Ensure that planned actions are current and in consonance with those of surrounding jurisdictions, as well as with the Chester County RERP".
- 4) INADEQUATE EVACUATION MANAGEMENT AND CONTROL MECHANISMS: need for verified availability of equipment and services (ambulances, tow trucks, snow plows, etc.), realistic assessment of available volunteers, realistic assessment of amount of volunteers needed in time to fill one job, training program for volunteers and public, information availability and maintenance, etc.
- 5) COST: undefined liability of costs to the Township and public for implementation and perpetual maintenance of Plan.

3. The proposed plan is incomplete with reference to evacuation routes through Skippack Township and its relationship to other municipalities which would evacuate through Skippack Township as well as evacuation of the State Correctional Institution - Graterford located in Skippack Township. The Skippack Township Board of Supervisors are concerned with the coordination of Skippack and adjoining municipalities and the State Correctional Institution with reference to potential evacuation.
4. Skippack Township does not believe it has the means necessary to obtain the equipment and dosimetry called for under the proposed plan, even taking into account the proposed equipment funding offer made by Philadelphia Electric Co.
5. The need for coordination among the various municipalities as well as the county and state officials with reference to evacuation and other matters, which would include proposed evacuation routes and their capacity.
6. The need for an ongoing training program. Township participants in the radiological emergency response plan should be able to receive ongoing training through either a county or area organization as each individual township is unable to provide this.

The Board of Supervisors believe it appropriate it to submit these concerns to you, at this time. They will continue with their evaluation of the proposed radiological emergency response plan and will conduct public hearings thereon in the near future.

Very truly yours,

Alan E. Boroff

AEJ/bjk

cc: George Hugenin, Skippack Township Emergency Management Coordinator

Edward L. Jordan, Director, Division of Emergency Preparedness and Emergency Response, Office of Inspection and Enforcement, United Nuclear Regulatory Commission, Washington, D.C.

Federal Emergency Management Agency, Washington, D.C. 20472

Montgomery County Emergency Management Office

Mrs. Mary Wills, Skippack Township Secretary

- 6) LIABILITY: undefined liabilities of Township, County, State, Federal Government, Philadelphia Electric and individuals, such as volunteers, against damage to person and property in the Township. Energy Consultants, Inc(the consulting firm hired by PECO to prepare the RERP) suggested that we ask our solicitor to look at Pamphlet Law #1332, "Emergency Services Code".
- 7) SHELTERING: when will we be asked to shelter, is it safe, for how long, and how is it accomplished?
- 8) DRILL TEST: the superficiality of the proposed test of the RERP planned for July 25, 1984, as a measure of Plan feasibility. FEMA will be holding hearings on the Drill two days following the test. (July 27 in Pottstown)

These points are proposed as sufficient to support the recommendation. . Many other concerns and deficiencies can be elaborated. It is suggested that full resolution of the listed points be demanded by the Township before the committee should undertake study of the plan in more detail.

The committee is, of course, ready to extend or deepen it's study as available information may permit.

The committee has chosen not to express opinion of the overall feasibility or practicality of the idea of an Evacuation Plan for a Limerick Radiological Emergency. It should not be interpreted, moreover, that in recommending resolution of the listed concerns the committee is endorsing the concept of the Plan.

Sincerely,

J. Edward Matthews

David K. Adams

Lindsay Brinton

David Churbock

Ann Raymond

AM. #7

Please fill out and return to: Limerick Ecology Action
P.O. Box 761
Pottstown, Pa. 19464

DOCKETED
USARL

Name of Fire Company: EARL TWP VOL FIRE CO #1

Contact person for evacuation planning: GREG BOLLINGER ^{84 JUL 23} _{11:11}
S.P. COORDINATOR

Mailing address: EARLVILLE PA.

Phone number: 689-5011

How many active fire fighters are in your company? 25

How many active fire police are in your company? 3

What Townships constitute your first run territory? EARL

How many vehicles of all types are in your company? 3

BRUSH TRUCK PUMPER TANK TRUCK

Are you staffed to operate all of your equipment during daytime hours without prior notice?

NO

Has your fire company ever been contacted by anyone from the County or local municipality about radiological emergency response planning for Limerick?

YES

If yes, what has been your response or involvement in helping to develop these plans?

UNDER CONSIDERATION

Have you ever been shown the draft plans for your township or first run district?

YES

Comments: _____

In the event of an incident at Limerick, do your personnel understand that they will be asked to respond into or remain in an area where they may be exposed to radiation?

NOT ALL

Does your insurance for volunteers cover radiological injuries?

UNKNOWN

Do you realize that the draft plans call for all of your firefighters to wear SCBA when responding to, during, and when returning to a radiation area?

YES

Do you feel that this is a practical requirement?

YES

Can you operate your equipment on the highway and on the fire-ground while wearing SCBA?

NO

If it was possible, does your company have the air supply necessary for this type of prolonged operation?

NO

How many of your active fire police and fire fighters are willing to remain on traffic duty if their wives, children, and families have to be evacuated?

UNKNOWN

Do you plan to question these very serious items, and others that may occur to you when you are asked to participate in Limerick evacuation planning?

YES

IF YOU HAVE NOT SEEN A DRAFT PLAN FOR YOUR AREA, MAY WE SUGGEST THAT YOU REQUEST A COPY FROM YOUR TOWNSHIP EMERGENCY MANAGEMENT DIRECTOR.

Please fill out and return to:

Limerick Ecology Action
P.O. Box 761
Pottstown, Pa. 19464

Name of Fire Company: FRIENDSHIP Hook & Ladder Co. #1
10 WARWICK ST. BOYERTOWN, PA 19312

Contact person for evacuation planning: CHIEF HARTMAN

Mailing address: 10 WARWICK ST. BOYERTOWN, PA 19312

Phone number: 367-2300

How many active fire fighters are in your company? 25

How many active fire police are in your company? 4

What Townships constitute your first run territory? BOBO OF

BOYERTOWN, COLEBROOKDALE & DOUGLAS (BERKS) & EARL TWP.

How many vehicles of all types are in your company? 5

Are you staffed to operate all of your equipment during daytime hours without prior notice?

YES

Has your fire company ever been contacted by anyone from the County or local municipality about radiological emergency response planning for Limerick?

YES

If yes, what has been your response or involvement in helping to develop these plans?

ATTENDED SEVERAL MEETINGS

Have you ever been shown the draft plans for your township or first run district?

YES

Comments: NOT PRACTICAL

In the event of an incident at Limerick, do your personnel understand that they will be asked to respond into or remain in an area where they may be exposed to radiation?

YES

Does your insurance for volunteers cover radiological injuries?

NO

Do you realize that the draft plans call for all of your firefighters to wear SCBA when responding to, during, and when returning to a radiation area?

NO

Do you feel that this is a practical requirement?

NO

Can you operate your equipment on the highway and on the fire-ground while wearing SCBA?

NO

If it was possible, does your company have the air supply necessary for this type of prolonged operation?

YES

How many of your active fire police and fire fighters are willing to remain on traffic duty if their wives, children, and families have to be evacuated?

UNKNOWN

Do you plan to question these very serious items, and others that may occur to you when you are asked to participate in Limerick evacuation planning?

YES

IF YOU HAVE NOT SEEN A DRAFT PLAN FOR YOUR AREA, MAY WE SUGGEST THAT YOU REQUEST A COPY FROM YOUR TOWNSHIP EMERGENCY MANAGEMENT DIRECTOR.

Please fill out and return to:

Limerick Ecology Action
P.O. Box 761
Pottstown, Pa. 19464

Name of Fire Company: KEYSTONE STEAM FIRE ENGINE Co #1 BOYERTOWN
Contact person for evacuation planning: CHIEF ROBERT BARTMAN
Mailing address: 601 SOUTH READING AVENUE BOYERTOWN PA 19002
Phone number: 369-1194

How many active fire fighters are in your company? 21

How many active fire police are in your company? 2

What Townships constitute your first run territory? BOYERTOWN BORO,
PART OF COLEBROOKDALE TWP. PART OF DOUGLASS-BERKS TWP.

How many vehicles of all types are in your company? 2 - PUMPS
2 4WD. BRUSH

Are you staffed to operate all of your equipment during daytime hours without prior notice?

YES - WITH ASSISTANCE FROM INDUSTRY IN BOYERTOWN

Has your fire company ever been contacted by anyone from the County or local municipality about radiological emergency response planning for Limerick?

YES ENERGY CONSULTANTS FOR PE + BERKS COUNTY EMERGENCY MANAGEMENT

If yes, what has been your response or involvement in helping to develop these plans?

INFORMATION SUPPLIED AS REQUESTED.

Have you ever been shown the draft plans for your township or first run district?

YES

Comments: NO ONE HAS EVER FULLY EXPLAINED WHAT AND HOW

EVACUATION IS TO BE DONE. PLANS THAT I HAVE IN MY
POSSESSION ARE VERY VAGUE AND HAVE OPEN
PARAGRAPHS. NOT WRITTEN FOR AVERAGE
NON PROFESSIONAL TO UNDERSTAND. PLAN APPEARS TO
BE WRITTEN FOR UNDERSTANDING BY SOMEONE WHO
WOULD WORK ON SUCH THING FOR A LIVING.

In the event of an incident at Limerick, do your personnel understand that they will be asked to respond into or remain in an area where they may be exposed to radiation?

No.

Does your insurance for volunteers cover radiological injuries?

UNSURE

Do you realize that the draft plans call for all of your firefighters to wear SCBA when responding to, during, and when returning to a radiation area?

Yes

Do you feel that this is a practical requirement?

NO BECAUSE THERE IS NOT ENOUGH SCBA

Can you operate your equipment on the highway and on the fire-ground while wearing SCBA?

No

If it was possible, does your company have the air supply necessary for this type of prolonged operation?

YES

How many of your active fire police and fire fighters are willing to remain on traffic duty if their wives, children, and families have to be evacuated?

THIS QUESTION REMAINS TO BE ANSWERED.

Do you plan to question these very serious items, and others that may occur to you when you are asked to participate in Limerick evacuation planning?

IF YOU HAVE NOT SEEN A DRAFT PLAN FOR YOUR AREA, MAY WE SUGGEST THAT YOU REQUEST A COPY FROM YOUR TOWNSHIP EMERGENCY MANAGEMENT DIRECTOR.

Please fill out and return to:

Limerick Ecology Action
P.O. Box 761
Pottstown, Pa. 19464

Name of Fire Company: Liberty Fire Co. New Berlinville, Pa. 19545

Contact person for evacuation planning: Jonathan Smoyer

Mailing address: R.D. #4 Boyertown, Pa. 19512

Phone number: 215-267-8977

How many active fire fighters are in your company? Thirty

How many active fire police are in your company? Five

What Townships constitute your first run territory?

Colebrookdale

How many vehicles of all types are in your company? Four

Are you staffed to operate all of your equipment during daytime hours without prior notice?

Normally except deer season

Has your fire company ever been contacted by anyone from the County or local municipality about radiological emergency response planning for Limerick?

Yes, will have a three hour session on March 13, 1984

If yes, what has been your response or involvement in helping to develop these plans?

Have ten people who will attend

Have you ever been shown the draft plans for your township or first run district?

No

Comments: I am concerned about some of the mistakes that are

taking place, the error in computing the 10 mile radius is one

In the event of an incident at Limerick, do your personnel understand that they will be asked to respond into or remain in an area where they may be exposed to radiation?

No.

Does your insurance for volunteers cover radiological injuries?

UNSURE

Do you realize that the draft plans call for all of your firefighters to wear SCBA when responding to, during, and when returning to a radiation area?

Yes

Do you feel that this is a practical requirement?

No BECAUSE THERE IS NOT ENOUGH SCBA

Can you operate your equipment on the highway and on the fire-ground while wearing SCBA?

No.

If it was possible, does your company have the air supply necessary for this type of prolonged operation?

YES

How many of your active fire police and fire fighters are willing to remain on traffic duty if their wives, children, and families have to be evacuated?

THIS QUESTION REMAINS TO BE ANSWERED.

Do you plan to question these very serious items, and others that may occur to you when you are asked to participate in Limerick evacuation planning?

IF YOU HAVE NOT SEEN A DRAFT PLAN FOR YOUR AREA, MAY WE SUGGEST THAT YOU REQUEST A COPY FROM YOUR TOWNSHIP EMERGENCY MANAGEMENT DIRECTOR.

Please fill out and return to:

Limerick Ecology Action
P.O. Box 761
Pottstown, Pa. 19464

Name of Fire Company: Limerick Fire Company

Contact person for evacuation planning: Donald L. Andes, Fire Chief

Mailing address: 390 W. Ridge Pike, Limerick, PA 19468

Phone number: _____

How many active fire fighters are in your company? 40

How many active fire police are in your company? 7

What Townships constitute your first run territory? Limerick

How many vehicles of all types are in your company? 4

Are you staffed to operate all of your equipment during daytime hours without prior notice?

usually

Has your fire company ever been contacted by anyone from the County or local municipality about radiological emergency response planning for Limerick?

yes

If yes, what has been your response or involvement in helping to develop these plans?

attending meetings

Have you ever been shown the draft plans for your township or first run district?

yes

Comments: _____

In the event of an incident at Limerick, do your personnel understand that they will be asked to respond into or remain in an area where they may be exposed to radiation?

yes

Does your insurance for volunteers cover radiological injuries?

no

Do you realize that the draft plans call for all of your firefighters to wear SCBA when responding to, during, and when returning to a radiation area?

no

Do you feel that this is a practical requirement?

no

Can you operate your equipment on the highway and on the fire-ground while wearing SCBA?

highway no, fireground yes

If it was possible, does your company have the air supply necessary for this type of prolonged operation?

no

How many of your active fire police and fire fighters are willing to remain on traffic duty if their wives, children, and families have to be evacuated?

unknown

Do you plan to question these very serious items, and others that may occur to you when you are asked to participate in Limerick evacuation planning?

yes

IF YOU HAVE NOT SEEN A DRAFT PLAN FOR YOUR AREA, MAY WE SUGGEST THAT YOU REQUEST A COPY FROM YOUR TOWNSHIP EMERGENCY MANAGEMENT DIRECTOR.

THE CAMPHILL SPECIAL SCHOOLS, INC.

BEAVER RUN. R.D. 1. GLENMOORE. PA. 19343

Att #8

July 10, 1984

84 JUL 23 11:11

TO WHOM IT MAY CONCERN:

I. INTRODUCTION

A. Incorporation and Licensure

Camphill Special Schools, Inc., located in E. Nantmeal Township is a non-profit corporation which provides education and residential living for mentally retarded children. To do so it is licensed by the Pa. Dept. of Education as a school for the mentally retarded and by the Pa. Dept. of Public Welfare as a community residential facility for the mentally retarded. In school year 1983-84 the placements of 9 children were approved by the Pa. Dept. of Education and its Intermediate Units and school districts for public educational funding. The placements of 4 children were approved by MH/MR Boards and their Base Service Units for public welfare funding. For brevity, Camphill Special Schools, Inc., will be referred to as "the School" in the rest of this letter.

B. Population

The population of the School varies from year to year. The residential population usually lies within these parameters: 62-72 mentally retarded children; 55-65 staff members of which 30-35 are permanent and 20-25 are in training; and 20-30 staff children. Day-time population can also include 1-10 day students (mentally retarded), and 2-12 employees.

II. RESOLUTION OF THE BOARD

On June 23, 1984, the Board of Directors of the School passed a resolution concerning its position in regards to the proposed Limerick Nuclear Plant. The resolution stated that until such time as the Philadelphia Electric Company or its agents produces an adequate radiological emergency plan for the School, the Board is opposed to the licensing of the Limerick Nuclear Plant.

This position is taken because the Board is concerned for the safety and welfare of the School, and at this time no written plan at any stage of development exists for the School. Some specifics as to the planning process and the necessary provisions for an adequate plan follows.

In the event of an incident at Limerick, do your personnel understand that they will be asked to respond into or remain in an area where they may be exposed to radiation?

yes

Does your insurance for volunteers cover radiological injuries?

no

Do you realize that the draft plans call for all of your firefighters to wear SCBA when responding to, during, and when returning to a radiation area?

no

Do you feel that this is a practical requirement?

no

Can you operate your equipment on the highway and on the fire-ground while wearing SCBA?

highway no, fireground yes

If it was possible, does your company have the air supply necessary for this type of prolonged operation?

no

How many of your active fire police and fire fighters are willing to remain on traffic duty if their wives, children, and families have to be evacuated?

unknown

Do you plan to question these very serious items, and others that may occur to you when you are asked to participate in Limerick evacuation planning?

yes

IF YOU HAVE NOT SEEN A DRAFT PLAN FOR YOUR AREA, MAY WE SUGGEST THAT YOU REQUEST A COPY FROM YOUR TOWNSHIP EMERGENCY MANAGEMENT DIRECTOR.

Furthermore, it is the opinion of School staff that evacuation by ground transportation is not an adequate plan. It is believed that evacuation by air lift (helicopters) would be an adequate plan. No helicopters or trained crew have yet been assigned to the School.

C. Staff Coverage of Students

In an emergency situation, staff-student ratios would have to be 1:3, 1:2, and 1:1 depending on which students are to be covered. Groupings have not been worked out. Those supervising the students would have to have adequate experience and training with children of this kind. Certified special education teachers or mental health professionals would in most cases be needed. It has not yet been determined if any of the School staff are available to accompany the students during an evacuation. It must now be assumed that none are available. No alternative staff have been assigned to accompany the students.

Among the special needs of this student population are some problems that would necessitate ancillary personnel. Particularly, the conditions of those children with convulsive disorders and behavioral problems can be expected to be exasperated during an evacuation. Intervention by medical personnel will be necessary. Such personnel would have to accompany the evacuation and be available during the internment. No such ancillary personnel have been identified or assigned to the School.

D. Medical Supplies and Equipment

The special needs of the population of the School would necessitate an evaluation of actual and potential medical needs existing prior to and precipitated by an evacuation. The necessary supplies and equipment would have to be stored ready to go with the evacuation. Such supplies and equipment would have to be renewed and also updated periodically. No such inventory has been complied, nor has someone been assigned to this responsibility.

E. Telephone and Radio Communication

No assessment of the telephone and radio communications needed by the School during a radiological emergency has been made. No one is responsible for procuring such equipment. No one has been assigned to be trained and to man such equipment, during a radiological emergency. No arrangements have been made or personnel assigned even to ensure that the telephone will be answered.

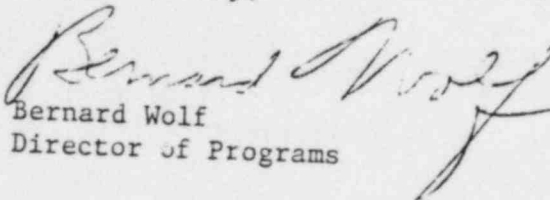
F. Host Facility

The School has recently been told over the telephone by Energy Consultants, Inc., and Chester Co. DES that the Devereux Foundation has agreed to host this School's population. No agreement has been seen in writing. Nothing of the details of the agreement has been

conveyed. Exact location, details of the facility, staff available, services available, other organizations which will be also hosted there, and so on are all unknown. The School is thereby unable to assess the appropriateness of the proposed host site.

Furthermore, it is the opinion of the staff of the School that a host site can only be considered appropriate if it is located beyond the Ingestion Zone of the plume.

Very Sincerely,


Bernard Wolf
Director of Programs

jad

BEFORE THE UNITED STATES
NUCLEAR REGULATORY COMMISSION

RELATED CORRESPONDENCE

In the Matter of)
Philadelphia Electric Company)
(Limerick Units #1 and 2))

Docket Nos. 50-352
50-353

DOCKET
USNRC

I, Maureen Mulligan, being duly sworn, hereby affirm:

'84 JUL 23 A11:11

that I am Vice President of Limerick Ecology Action, Inc., and that the foregoing answers to Interrogatories from the Philadelphia Electric Company on "Off-site" Emergency Planning contentions admitted in this proceeding are true and correct to the best of my knowledge, information, and belief.

I also affirm that I have prepared the foregoing Motion to Compell Philadelphia Electric Company to answer LEA's Second Set of Interrogatories, which were mailed on June 25, 1984.

Maureen Mulligan

Maureen Mulligan
Vice President
Limerick Ecology Action

Subscribed and sworn to
before me this

16th day of July 1984.

Margaret M. Horst
(Notary Public)

Certificate of Service

COPIES
JUL 23

'84 JUL 23 11:10

I, Maureen Mulligan, Vice President of Limerick Ecology Action, do hereby certify that I have served the following parties by first class mail, postage prepaid, with LEA's responses to Philadelphia Electric Company's Interrogatories on Off-site Emergency Planning Contentions and LEA's Motion to Compell Philadelphia Electric to answer LEA's Second Set of Interrogatories, mailed to PECO on June 25th. by LEA. The above mentioned filings were mailed July 16, 1984.

Lawrence Brenner, Chairman (2)
Administrative Judge
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Dr. Richard F. Cole
Administrative Judge
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Dr. Peter A. Morris
Administrative Judge
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Atomic Safety and
Licensing Board Panel
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Atomic Safety and
Licensing Appeal Panel
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Ann P. Hodgdon, Esq.
Office of the Executive Legal Director
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Benjamin Vogler, Esq.
Office of the Executive Legal Director
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Troy B. Conner, Jr., Esq.
Conner and Wetterhahn
1747 Pennsylvania Ave., NW
Washington, DC 20006

Philadelphia Electric Company
Attn: Edward G. Bauer, Jr.
VP and General Counsel
2301 Market St.
Phila., PA 19101

Thomas Gerusky, Director
Bureau of Radiation Protection, DER
5th fl, Fulton Bank Bldg.
Third and Locust Sts.
Harrisburg, PA 17120

Spence W. Perry, Esq.
Associate General Counsel
FEMA
Room 840
500 C St., SW
Washington, DC 20472

Zori Ferkin, Esq.
Governor's Energy Council
P.O. Box 8010
1625 Front St.
Harrisburg, PA 17105

Jay M. Gutierrez, Esq.
U.S. Nuclear Regulatory Commission
Region 1
631 Park Ave.
King of Prussia, PA 19406

Director, PEMA
Basement, Transportation
and Safety Building
Harrisburg, PA 17120

Angus Love, Esq. / Montg. Co. (Legal Aid)
107 East Main St.
Norristown, PA 19401

Robert Anthony
103 Vernon Lane
Moylan, PA 19065

Martha W. Bush, Esq.
Kathryn S. Lewis, Esq.
Solicitor's Office
City of Philadelphia
Municipal Services Building
Phila., PA 19107

Steven Hershey, Esq.
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5219 Chestnut St.
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Marvin I. Lewis
6504 Bradford Terrace
Phila., PA 19149

Frank Romano
61 Forest Ave.
Ambler, PA 19002

Joseph H. White, III
15 Ardmore Ave.
Ardmore, PA 19003

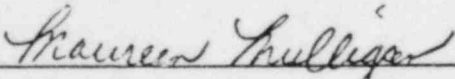
Robert Sugarman, Esq.
Sugarman and Denworth
101 Broad Street, 16th. Floor
Philadelphia, Pa. 19107

David Wersan, Esq.
Assistant Consumer Advocate
Office of the Consumer Advocate
1425 Strawberry Square
Harrisburg, PA 17120

Gregory C. Minor
MHB Technical Associates
1723 Hamilton Ave.
San Jose, CA. 95125

Timothy Campbell
Chester County Dept.
of Emergency Services
14 East Biddle Street
West Chester, Pa. 19380

July 16, 1984


Maureen Mulligan, LEA Vice President