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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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Before the Atomic Safety and Licensing Board

In the Matter of

Philadelphia Electric Company

(Limerick Generating Station,
Units 1 and 2)

Docket Nos. 50-352

50-3530

APPLICANT'S TESTIMONY RELATING TO LEA'S DEFERRED OFFSITE EMERGENCY PLANNING CONTENTIONS

Panel - Robert Bradshaw and Robert Klimm

LEA-1

The Risk Counties, Municipalities, School Districts, and Institutions haven't promulgated or adopted final radiological emergency response plans, nor have they approved and adopted plans drawn up for them by Energy Consultants, Inc., a Harrisburg firm hired by Philadelphia Electric Company. There is no reasonable assurance that the present state of planning is predictive of final approval, or that the plans are capable of being implemented.

1. The draft, municipal, school district and institutional plans were developed with the assistance of Energy Consultants and have undergone numerous reviews by Commonwealth, county and municipal emergency personnel and officials of the respective school districts and health care facilities. No political jurisdiction or facility has stated that it will not adopt the draft plans which have been under development. (R. Bradshaw)

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2. There has never been any intent on the part of the emergency planners of the counties, municipalities or school districts to offer the draft plans for formal adoption until informal review of the plans had been completed by PEMA and FEMA and the plans had been tested in an exercise, which occurred on July 25, 1984. $\frac{1}{}$ As expected, the July 25 exercise resulted in revisions to some plans and these are reflected in the most recent drafts. A supplemental exercise for those municipalities and school districts which did not participate in the July 25 exercise was conducted on November 20, 1984. It is likewise anticipated that revisions to the plans resulting from the November 20 exercise will be incorporated in the plans. As amended, the plans therefore provide assurance that the necessary actions can be taken in the event of an actual emergency. Because the plans accurately reflect the current status of preparedness in each jurisdiction, the ability to implement the emergency plans for entities within the EPZ does not depend upon formal adoption of the plans by the various jurisdictions. (R. Bradshaw)

Nonetheless, the Downing own and Perkiomen Valley School Districts have already adopted their plans.

The unadopted RERP's fail to provide reasonable assurance that each principal response organization has sufficient staff to respond to and to augment its initial response on a 24 hour continual basis, or that the assigned staff can respond in a prompt manner in case of a radiological emergency at Limerick.

- 3. Previous to development of the plans, few municipal emergency management agencies had any staff other than a designated coordinator. As planning requirements were clarified, the recruitment process began. Significant and steady progress in this process has been made since the first drafts of the plans. Table 2-A summarizes the current municipal staffing status. All but one of the 43 municipalities have a complete first shift. Most have a complete second shift. The few remaining vacancies can be filled by the municipalities, but could, if need be, be passed on to the counties. (R. Bradshaw)
- 4. Attachment O of each municipal plan lists personnel requirements for such activities as route alerting, traffic control, ambulances and communications, i.e., RACES or ARES radio operators. Some unmet municipal needs for traffic control and radio operators have been passed on to the counties. All traffic control needs have been met, either by the Pennsylvania State Police or county resources. (R. Bradshaw)
- 5. Both Berks and Montgomery Counties have met municipal unmet needs for radio operators through Radio Amateur

Civil Emergency Service (RACES) volunteers. Chester County has passed a requirement for additional radio operators on to PEMA. Sufficient radio operators are known to be available in adjacent counties and their assignment to Chester County for an emergency will be coordinated by PEMA as for any other unmet county need. (R. Bradshaw)

Table 2-A
MUNICIPAL EOC STAFFING

	Number Required	Number Designated	Unmet Needs	
Berks County				
Amity	24	24	0	
Boyertown	16	15	1	
Colebrookdale	10	9	1	
Douglass	8	8	0	
Earl	10	10	0	
Union	10	2	8	
Washington	10	9	1	
Chester County				
Charlestown	9	9	0	
East Coventry	6	6	0	
East Nantmeal	9	8	1	
East Pikeland	12	12	0	
East Vincent	8	8	0	
North Coventry	10	10	0	
Phoenixville	23	22	1	
Schuylkill	8	8	0	
South Coventry	(data unavailable)			
Spring City	10	10	0	
Upper Uwchlan	6	6	0	

	Number	Number	Unmet
	Required	Designated	Needs
Uwchlan	8	8	0
Warwick	6	6	0
West Pikeland	6	6	0
West Vincent	10	10	0
Montgomery County			
Collegeville	8	7	1
Douglass	10	10	0
Green Lane/Marlborough	12	12	0
Limerick	8	8	0
Lower Frederick	6	6	0
Lower Pottsgrove	12	11	1
Lower Providence	14	14	0
Lower Salford	10	10	0
New Hanover	8	8	0
Perkiomen	8	7	1
Pottstown	12	12	0
Royersford	14	14	0
Schwenksville	10	7	3
Skippack	8	8	0
Trappe	8	8	0
Upper Frederick	6	5	1
Upper Pottsgrove	8	8	0
Upper Providence	14	14	0

	Number	Number	Unmet	
	Required	Designated	Needs	
Upper Salford	6	6	0	
West Pottsgrove	8	8	- 0	
	409	389	20	

The Montgomery County RERP fails to provide reasonable assurance that the public will be adequately protected in that the Bucks County Support Plan, which is essential to the workability of the MontCo RERP, may not be approved. The present Board of Commissioners [sic] have little knowledge of the contents and implications of the Bucks County Support Plan. There is no assurance that the County will assume the responsibilities assigned to it in the Support Plan, rather than use County resources to help Bucks County people first. The Montgomery County Plan relies on the Support Plan in at least these ways:

- facilities for relocation and mass care of evacuees
- augmentation of emergency workers, including use of county resources, on a continuous 24 hour basis
- 3. See attachment "Excerpts and comments on the Bucks County Draft Evacuation Plan" for additional areas of support and interface.

It is contended that without the approval of Bucks County Support Plan, the MontCo RERP is unworkable as it now stands.

6. Bucks County is providing a support role and participating in the planning process in accordance with Commonwealth law. Energy Consultants met with the Bucks County Emergency Management Agency on October 11, 1984 to review their current draft plan and obtain revisions for a final draft. The resulting revisions were transmitted to Bucks County for review on November 1, 1984. Bucks County

has stated that it intends to fulfill its role as a support county. (R. Bradshaw)

- 7. The Bucks County population is not at risk since the nearest portion of Bucks County is at least 13 miles from Limerick. Mass care centers in Bucks County are at least 20 miles from Limerick and are in consonance with State and federal guidance in this regard. Because planning assumptions conservatively arrange for the mass care of 50 percent of the evacuating population, adequate space would be available in the designated Bucks County mass care centers for any residents spontaneously evacuating from areas of the county closer than 20 miles. (R. Bradshaw)
- 8. Inasmuch as the designated mass care centers for Bucks County are located as close as 20 miles from Limerick, it is likely that any residents of Bucks County who choose to evacuate despite the lack of any realistic threat to their safety would relocate to areas more distant from Limerick than any portion of Bucks County. Planning arrangements for such individuals are well beyond the scope of planning requirements and constitute an unfounded hypothetical concern. (R. Bradshaw)
- 9. The same emergency services personnel designated in the existing Bucks County plan as capable of 24-hour response would be utilized to address the emergency requirements of any spontaneous evacuation of Bucks County residents to other areas of the county. This presents no additional burden on emergency services because the need for

mass care space has been conservatively estimated. (R. Bradshaw)

The Emergency Response Organization (including federal, state, and local governments and support organizations) have failed to fully document the existence of appropriate letters of agreement with support organizations and agencies. Thus, there is no reasonable assurance that the emergency plans can be implemented.

- 10. Agreements have been sought and obtained for such support functions as host schools, host health care facilities, bus providers, reception centers, Red Cross support, Emergency Broadcast System support and decontamination stations. Mass care agreements have been developed in each county in accordance with the particular arrangements in existence between the counties and their respective Red Cross Chapter. Those arrangements have been completed for each county. (R. Bradshaw)
- 11. RACES and ARES agreements are unnecessary since the sole purpose of these organizations is to assist in emergency situations. They are considered extensions of the county emergency management agencies and have a close working relationship with those agencies. Furthermore, the ARES and RACES organizations demonstrated their commitment to assist in a radiological emergency response by their participation in the July 25 and November 20, 1984 exercises, including necessary staffing of municipal EOC's as prescribed by the municipal and county plans. (R. Bradshaw)
- 12. Agreements for road clearance services are not required and unnecessary. The county emergency management

agencies routinely dispatch tow trucks. Extensive resources are available and are on file in the county EOC's. Further, additional road clearance resources are available from the National Guard and PennDOT as discussed in response to LEA-28. (R. Bradshaw)

13. Table 5-A compiles the current status of all agreements for the county, municipal, school and health care facility plans. The overwhelming majority of these agreements are complete. (R. Bradshaw)

Table 5-A

AGREEMENT STATUS

Organization/Purpose	Total No. Agreements	No. Completed	Verbal Agreements With Written Agreement Drafted & Awaiting Signature	Agreement Remaining To Be Developed
Schools				
Host Schools	19	17	2	0
Health Care Facilities				
Host Facilities	21	19	2	0
Support Counties				
Mass Care/Red Cross	12	12	0	0
Reception Center	2	2	0	0
Montgomery County				
Transportation	33	21	122/	0
Red Cross	1	1	0	0
EBS	5	5	0	0
Relocation Pts./ Decon. Stations	3	2	1	0
Reception Center	2	2	0	0
Central Resource Pt.	1	1	0	0
Transportation Staging Area	3	3	0	0
Hamebound Host	2	2	0	0
Alternate ECC	1	1	0	0

^{2/} Two agreements provide for the use of reserve buses only. Accordingly, those agreements will remain verbal.

Organization/Purpose	Total No. Agreements	No. Complete	Verbal Agreements With Written Agreement Drafted & Awaiting Signature	Agreement Remaining To Be Developed
Berks County				
Transportation	5	5	0	0
Mass Care	11	11	0	0
Reception Center	3	3	0	0
Radio Operators	3	3	0	0
Red Cross	1	1	0	0
Relocation Pt.	2	1	1	0
Transportation Staging Area	2	1	1	0
EBS	3	3	0	0
Medical Support	1	1	0	0
Decontamination Stations	2	1	1	0
Chester County				
Red Cross	1	1	0	0
EBS	2	0	2	0
Transportation		-		
Reception Center	4	2	2	0
Transportation Staging Area	1	0	1	0
Decontamination Stations	3	0	2	1
Municipalities				
Snow Removal	1	1	0	0
Transportation Staging Area	2	1	1	0
ECC	2	0	2	0

Organization/Purpose	Total No.	No. Completed	Verbal Agreements With Written Agreement Drafted & Awaiting Signature	Agreements Remaining To Be Developed
Fire Company Support	2	0	1	1
Township Support	1	0	1	0
Roadway Clearance	2	0	0	2
Total	159	123	32	4

The draft county plans are deficient because they do not contain reliable evacuation time estimates.

- 14. Up to one hour is estimated for positioning of buses at schools for evacuation. This estimate is based upon discussions with county emergency management personnel who have experience in such matters and who have arranged for the assignment of buses for schools in their respective counties. Therefore, one hour is a realistic estimate. Further, school and county plans call for prepositioning of buses at the general emergency stage in advance of any decision to evacuate. This will further reduce mobilization times. See Section V.D.1.c of the school district plans; Section VI.D.2 of the Berks and Montgomery County Plans; and Section V.D.2 of the Chester County Plan. (R. Bradshaw and R. Klimm)
- 15. As stated at page 5-5 of the ETE, it was assumed, based upon discussions with County emergency preparedness officials, that up to one hour following notification may be required to assemble school buses, transport vehicles to schools, and load students onto buses. The ETE assumes that it will take 15 minutes from the time a decision to evacuate is made to the completion of notification to schools. Vehicles stationed at the facilities at the time of the ordered evacuation could be loaded in as little as 15 minutes following notification. Accordingly, for preparation of the ETE, school buses were loaded onto the

evacuation network for the period from 30 to 90 minutes following the decision to evacuate. As a practical matter, an assumed loading period of even two hours for schools would not significantly affect the evacuation time estimates because these estimated times are less sensitive to assumptions on preparation and mobilization than they are to total vehicle demands and area roadway characteristics. (R. Bradshaw and R. Klimm)

- 16. The special needs (medical, transportation, notification) of the resident population within the Limerick Generating Station plume exposure pathway emergency planning zone were determined by means of a public survey. The survey was conducted by the three risk counties through the respective emergency management agencies and utilized a two-part form. A cover letter was provided to explain the survey and a pre-addressed/pre-posted envelope was enclosed for a response. Individuals were instructed to return the form if they or any member of their household had a special need. Individuals with questions were advised to contact the county office of emergency management. (R. Bradshaw)
- 17. Survey materials were distributed by mail to addresses in the EPZ. County social services agencies and municipal offices also made the survey available. The news media provided information about the survey. Responses were then compiled and needs were listed for each municipality. Names, addresses, telephone numbers and the indicated special needs were catalogued. The lists were filed in the

respective municipal emergency operations centers for use at the time of any emergency. Many of the municipalities reviewed their lists and verified their accuracy during the July 25 and November 20, 1984 Limerick exercises. (R. Bradshaw)

- 18. Original estimates for transit dependent population were obtained from the 1980 Census of Population and Housing, Work and Travel to Work Characteristics. Estimates for mobility-impaired individuals were obtained through a United States Department of Health and Human Services document, entitled Prevalence of Selected Impairments U.S. 1977. (R. Bradshaw)
- 19. Previous estimates for mobility-impaired individuals, based upon the federal estimates, closely approximate actual survey results, supporting the comprehensiveness of the survey. The difference between transportation statistics in the U.S. Census and the transportation needs determined by the county surveys is explained by the fact that the U.S. Census lists households without personal transportation, while the survey asks if the household has private transportation "available" on a 24-hour basis. Many residents did not request assistance even if they had no "personal" transportation because other private transportation was available to them through friends, neighbors, or relatives. The survey data supports this interpretation of the difference between the Census and actual survey data on available transportation in that the largest differences

were in urban areas where more friends, neighbors or relatives would live in close proximity. In less populated areas, the survey results and Census estimates are comparable. (R. Bradshaw)

20. The needs survey data conducted by the counties provides more appropriate data for planning purposes than data from the U.S. Bureau of Census. Empirical data from past evacuations indicate that many households without access to vehicles will obtain rides with friends or neighbors and will not rely upon public transportation assistance. In any event, utilizing the vehicle demand data associated with this population from the 1980 Census would not affect the evacuation time estimates. (R. Bradshaw and R. Klimm)

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In the Matter of)	
Philadelphia Electric Company) Docket Nos.	
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CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicant's Testimony Relating to LEA's Deferred Offsite Emergency Planning Contentions," dated November 23, 1984 in the captioned matter have been served upon the following by deposit in the United States mail this 23rd day of November, 1984:*

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Copies were also hand served upon the members of the Licensing Board and the parties present at the hearing on November 26, 1984.

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

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