

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)	
PHILADELPHIA ELECTRIC COMPANY)	Docket Nos. 50-352
(Limerick Generating Station,)	50-353
Units 1 and 2))	

AFFIDAVIT OF FALK KANTOR, SECTION CHIEF, EMERGENCY
PREPAREDNESS BRANCH, DIVISION OF EMERGENCY PREPAREDNESS AND
ENGINEERING RESPONSE, ADDRESSING APPLICANT'S MOTION FOR AN
EXEMPTION FROM 10 C.F.R. PART 50 APPENDIX E, SECTION IV.F.1.

In a motion submitted to the Commission, dated June 24, 1985, the App requested an exemption from the requirement of 10 C.F.R. 50, Appendix E, Section IV.F.1, for the conduct of a full participation emergency preparedness exercise within one year before the issuance of a full power operating license. The applicable provision of Section IV.F provides that:

1. A full participation exercise which tests as much of the licensee, State and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located for which the first operating license for that site is issued after July 13, 1982. This exercise shall be conducted within 1 year before the issuance of the first operating license for full-power and prior to operation above 5% of rated power of the first reactor, and shall include participation by each State and local government within the plume exposure pathway EPZ and each State within the ingestion exposure pathway EPZ.

Consistent with other Commission emergency planning regulations (see 10 C.F.R. 50.47 and the Statement of Considerations, 47 FR 30232 dated July 13, 1982), the objective of Section IV.F is to assure that an adequate state of emergency preparedness is demonstrated through the conduct

of an emergency plan exercise within one year before a nuclear plant is authorized to exceed 5% of rated power.

A full participation exercise involving the testing of Applicant, State and local emergency plans for Limerick was conducted on July 25, 1984 in expectation that a full power operating license would be issued within one year.

The offsite portion of the July 25, 1984 exercise was observed and evaluated by the Federal Emergency Management Agency (FEMA) and representatives of the member agencies of the FEMA Region III Regional Assistance Committee. FEMA provided its report of the exercise on September 25, 1984. In this report FEMA identified five "Category A" deficiencies. Category A deficiencies are defined as deficiencies of the type that would cause a finding that offsite emergency preparedness was not adequate to provide reasonable assurance that appropriate protective measures can be taken to protect the health and safety of the public in the vicinity of the plant in the event of a radiological emergency.

Since the initial exercise, a supplemental and several remedial exercises have been conducted to demonstrate correction of the Category A deficiencies. A supplemental exercise was conducted on November 20, 1984 for those municipalities and one support county which did not participate in the July 25, 1984 exercise. In a report to the NRC dated January 10, 1985, FEMA found that all participants in the exercise demonstrated their capability to respond to a radiological emergency. The non-participation of one municipality, however, was identified by FEMA as a Category A deficiency.

A remedial exercise to demonstrate the capability to implement the Graterford prison emergency plan was conducted on March 7, 1985. FEMA informed the NRC in a memorandum dated March 27, 1985 that the exercise adequately demonstrated an understanding of the emergency response procedures and the ability to implement them, and that a portion of one of the Category A deficiencies identified in the July 25, 1984 exercise had thus been corrected.

On April 10, 1985, a remedial exercise was conducted to allow participation by the school districts and South Coventry Township, the one municipality which did not participate in the earlier exercise. A final remedial exercise was conducted on April 22, 1985 to demonstrate the adequacy of the alert and notification capabilities of the various jurisdictions in the area within approximately ten miles of Limerick.

In a memorandum dated May 21, 1985, FEMA transmitted the exercise evaluation reports for the April 10 and 22, 1985 remedial exercises and provided its final interim finding on offsite planning and preparedness. FEMA stated that as result of the July 25, 1984 full participation exercise, the November 20, 1984 supplemental exercise, the March 7, April 10 and April 22, 1985 remedial exercises, all Category A preparedness deficiencies have been corrected. FEMA concluded that offsite radiological emergency planning and preparedness is now adequate to provide reasonable assurance that protective measures can be implemented to protect the public health and safety in the event of a radiological emergency at the Limerick Generating Station. "Category B" deficiencies (i.e., deficiencies of a lesser significance) identified by FEMA during the July 25, 1984 exercise are being addressed by the Commonwealth and local planning agencies.

Based on a review of the FEMA findings and determinations on the adequacy of state and local emergency plans and preparedness, and on the NRC assessment of the adequacy of the licensee's onsite emergency plans and preparedness, the NRC staff has concluded that the overall state of onsite and offsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the Limerick Generating Station.

Since the July 1984 full participation exercise, the Commonwealth of Pennsylvania has participated in a full participation exercise at the Susquehanna facility on May 1, 1985 and is scheduled for another full participation exercise at the Three Mile Island facility in November 1985. In addition, the Commonwealth participated on a partial basis at the Peach Bottom exercise on October 17, 1984 and is scheduled to participate on a partial basis at the Beaver Valley exercise in September 1985. The Commonwealth is then scheduled to participate in the next full participation exercise for the Limerick facility in April 1986. FEMA has advised the Staff that revising the exercise schedule to accommodate a full participation exercise at Limerick would be extremely difficult due to the Commonwealth's established schedule (which has been coordinated with FEMA, the utilities, other States and the NRC) and the large number of local response organizations involved. NRC Region I has also confirmed the difficulty of rescheduling an exercise for Limerick.

The capability of local response organizations has been satisfactorily demonstrated through participation in the July 25, 1984 exercise and the subsequent supplemental and remedial exercises conducted between November 20, 1984 and April 22, 1985, as indicated above. The Applicant

also notes in its motion that Chester County, one of the three counties in the plume exposure Emergency Planning Zone (EPZ), participated in the October 1984 exercise for the Peach Bottom facility and that Berks County, another county within the EPZ, will participate in the Three Mile Island exercise.

The Applicant has assisted in the development and maintenance of local response capability, as indicated in the applicant's motion, by making available planning and traffic engineering consultants to assist offsite authorities in the development of emergency plans and evacuation time estimates. The Applicant has also provided an extensive amount of training for local emergency response personnel (approximately 8,500 persons in over 500 training sessions through June 21, 1985) including school administrators and staff, emergency workers such as police, fire and ambulance personnel, emergency operations center staff, and radiation monitoring personnel. The Applicant states that extensive physical resources requested by offsite authorities have also been provided in order to upgrade the preparedness of counties, municipalities and school districts within the plume exposure EPZ. In addition, the Applicant has provided monitoring, security and communications equipment and training assistance for the Graterford institution. The Applicant has also agreed to fund the procurement of 10,000 thermoluminescent dosimeters and 1,000 self-reading dosimeters for offsite emergency response personnel.

A second exercise of the Applicant's emergency plan was conducted on April 3, 1985. No significant deficiencies were identified by the NRC observation team in this exercise, which was an onsite exercise only (See Inspection Report No. 50-352/85-17 dated May 31, 1985). The Staff concluded

that, within the scope and limitations of the scenario, the Applicant's performance demonstrated that it could adequately implement its emergency plan and procedures.

The Applicant has provided information in its motion on its ongoing program to maintain and demonstrate emergency preparedness prior to the scheduled exercise for April 1986. This effort will include monthly communication drills with the State and local agencies; a plant environmental and radiological monitoring drill involving field monitoring and analysis activities; a health physics drill involving response to, and analysis of, simulated elevated airborne and liquid samples, and direct radiation measurements in the environment; and practice exercises for emergency organization personnel using the Limerick emergency response facilities.

Based on a review of the Applicant's exemption request, the Staff finds that the following factors support the granting of the requested exemption:

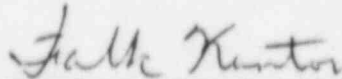
1. The conduct of a full participation emergency preparedness exercise on July 25, 1984 together with supplemental and remedial exercises through the period November 20, 1984 to April 22, 1985 leading to a favorable FEMA finding on offsite preparedness on May 21, 1985.
2. The participation of the Commonwealth of Pennsylvania in a full participation exercise at Susquehanna in May 1985 and the scheduled participation at Three Mile Island in November 1985. The Commonwealth also partially participated at the Peach Bottom exercise in October 1984 and is scheduled to

partially participate at the Beaver Valley exercise in September 1985.

3. The participation of local response organizations in the full participation exercise for Limerick and subsequent supplemental and remedial exercises plus the involvement of these organizations, with the assistance of the Applicant, in an ongoing training and development program.

4. The conduct of an onsite emergency preparedness exercise in April 1985 and the scheduling of various drills testing elements of the Limerick emergency plan, some of which involve offsite response agencies.

This assessment is based on the staff's expectation that the applicant will be authorized to operate at levels above 5% rated power prior to conducting another full participation exercise currently scheduled for April 1986. Therefore, the conclusions of this assessment are only valid until April 1986.


Falk Kantor

Subscribed and sworn to before
me this 10th day of July, 1985.


Notary Public

My commission expires: July 1, 1986

PROFESSIONAL QUALIFICATIONS OF
FALK KANTOR
EMERGENCY PREPAREDNESS BRANCH
DIVISION OF EMERGENCY PREPAREDNESS AND ENGINEERING RESPONSE
OFFICE OF INSPECTION AND ENFORCEMENT

I am employed as a Section Chief in the Emergency Preparedness Branch, Division of Emergency Preparedness and Engineering Response, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission. I am responsible for coordinating and providing technical supervision for the Section's efforts in reviewing and evaluating radiological emergency plans submitted by reactor applicants and licensees to assure proposed plans meet the regulatory requirements and guidance of the Commission. I also function as a team leader and team member on emergency preparedness teams engaged in the onsite inspections of the implementation phase of licensee emergency programs. I observe nuclear power plant emergency drills and exercises involving state and local government response agencies and participate in interagency critiques.

I received a BS degree in Industrial Engineering in 1958 from the Pennsylvania State University. Upon graduation I entered the U.S. Air Force where I attended the Basic Meteorology Program at St. Louis University in St. Louis, Missouri. Following the completion of this program in 1959, I served as a weather officer in the U.S. Air Force.

In 1963, I began employment with the Westinghouse Electric Corporation at the Bettis Atomic Power Laboratory in Pittsburgh, Pennsylvania. My duties included the design of radiation shielding for nuclear power reactors for both landbased and shipboard applicants. I participated in field tests at Federal reactor facilities to evaluate the effectiveness of shield design features on operating reactors.

I entered graduate school in 1967 at the University of Pittsburgh on a U.S. Public Health Service Fellowship and received a MS degree in 1968 in Radiation Health (Health Physics). Following graduation I was employed by the NUS Corporation in Rockville, Maryland, an engineering and environmental consulting organization.

I have been a member of the NRC (AEC) Staff since January 1973. From that time until June 1980 I held the position of Site Analyst in the Accident Analysis Branch. My duties included the review and evaluation of the radiological consequences of postulated design basis accidents, the effectiveness of proposed engineered safety features, the population density and growth characteristics in the site environs, and the possible adverse effects on plant safety of nearby industrial, transportation and military facilities. From September 1980 until March 1981 I was a member of the NRC's onsite technical support section at the Three Mile Island facility. I have participated in the detailed review of over thirty nuclear power plant sites with the primary objective being to ensure public health and safety through the application of Commission regulatory

requirements and guidance on reactor siting. I have presented testimony on siting and emergency preparedness issues at public hearings on licensing of nuclear facilities and appeared before the Advisory Committee on Reactor Safeguards.

In addition to my formal education, I have attended training courses sponsored by the NRC on reactor systems and operation and emergency preparedness. In May of 1979 I attended the course titled "Planning for Nuclear Emergencies" at Harvard University and in September 1980 I participated in the Radiological Emergency Response Operations Training course at the Nevada Test Site.

I am a professional member of the Health Physics Society and the American Meteorological Society. I am a member of the Air National Guard and hold a current certification from the U.S. Air Force as a weather forecaster.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)
)
PHILADELPHI. ELECTRIC COMPANY)
)
(Limerick Generating Station,)
Units 1 and 2))

Docket Nos. 50-352
50-353

DOCKETED
USNRC

*85 JUL 12 AM 1:52

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO APPLICANT'S MOTION FOR AN EXEMPTION FROM 10 C.F.R. PART 50, APPENDIX E, SECTION IV.F.1" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or as indicated by an asterisk through deposit in the Nuclear Regulatory Commission's internal mail system, this 11th day of July, 1985:

Samuel J. Chilk
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555*

Herzel H. E. Plaine, Esq.
General Counsel
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555*

Helen F. Hoyt, Chairperson (2)
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555*

Mr. Edward G. Bauer, Jr.
Vice President & General Counsel
Philadelphia Electric Company
2301 Market Street
Philadelphia, PA 19101

Dr. Richard F. Cole
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555*

Troy B. Conner, Jr., Esq.
Mark J. Wetterhahn, Esq.
Conner and Wetterhahn
1747 Pennsylvania Avenue, N.W.
Washington, D.C. 20006

Dr. Jerry Harbour
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555*

Mr. Marvin I. Lewis
6504 Bradford Terrace
Philadelphia, PA 19149

Mr. Frank R. Romano
Air and Water Pollution Patrol
61 Forest Avenue
Ambler, PA 19002

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

Ms. Phyllis Zitzer, President
Ms. Maureen Mulligan
Limerick Ecology Action
762 Queen Street
Pottstown, PA 19464

Kathryn S. Lewis, Esq.
1500 Municipal Services Bldg.
15th and JFK Blvd.
Philadelphia, PA 19107

Thomas Gerusky, Director
Bureau of Radiation Protection
Dept. of Environmental Resources
5th Floor, Fulton Bank Building
Third and Locust Streets
Harrisburg, PA 17120

Director
Pennsylvania Emergency Management
Agency
Basement, Transportation & Safety
Building
Harrisburg, PA 17120

Robert L. Anthony
Friends of the Earth of the
Delaware Valley
103 Vernon Lane, Box 186
Moylan, PA 19065

Angus R. Love, Esq.
Montgomery County Legal Aid
107 East Main Street
Norristown, PA 19401

Charles W. Elliott, Esq.
Brose & Poswistilo
325 N. 10 Street
Easton, PA 18042

David Wersan
Consumer Advocate
Office of Attorney General
1425 Strawberry Square
Harrisburg, PA 17120

Jay Gutierrez
Regional Counsel
USNRC, Region I
631 Park Avenue
King of Prussia, PA 19406

Steven P. Hershey, Esq.
Community Legal Services, Inc.
5219 Chestnut Street
Philadelphia, PA 19139

Zori G. Ferkin
Governor's Energy Council
P.O. Box 8010
1625 N. Front Street
Harrisburg, PA 17105

Spence W. Perry, Esq.
Associate General Counsel
Federal Emergency Management Agency
Room 840
500 C Street, S.W.
Washington, D.C. 20472

Robert J. Sugarman, Esq.
Sugarman, Denworth & Hellegers
16th Floor Center Plaza
101 North Broad Street
Philadelphia, PA 19107

James Wiggins
Senior Resident Inspector
U.S. Nuclear Regulatory Commission
P.O. Box 47
Sanatoga, PA 19464

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

Atomic Safety and Licensing Appeal
Board Panel (8)
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555*

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

Gregory Minor
MHB Technical Associates
1723 Hamilton Avenue
San Jose, CA 95125

Timothy R. S. Campbell, Director
Department of Emergency Services
14 East Biddle Street
West Chester, PA 19380

Stephen H. Lewis

Stephen H. Lewis
Deputy Assistant Chief
Hearing Counsel