

DOCKETED
USNRCUNITED STATES OF AMERICA '84 APR 11 A10:55
NUCLEAR REGULATORY COMMISSIONBefore the Atomic Safety and Licensing Board

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

APPLICANT'S FIRST SET OF INTERROGATORIES AND
REQUEST FOR PRODUCTION OF DOCUMENTS TO
LIMERICK ECOLOGY ACTION ON SEVERE ACCIDENT CONTENTIONS

Pursuant to the Rules of Practice of the Nuclear Regulatory Commission ("NRC"), 10 C.F.R. §2.740(b), and the Atomic Safety and Licensing Board's Memorandum and Order as contained in the transcript of the proceeding (Tr. 8792-93), Philadelphia Electric Company ("Applicant") hereby propounds the following interrogatories to Limerick Ecology Action ("LEA") to be answered fully in writing, under oath, in accordance with the definitions and instructions below.

Additionally, pursuant to 10 C.F.R. §2.741, Applicant requests that LEA produce for inspection and copying (or provide copies of) those documents designated by it in its respective answers below.

Definitions and Instructions

1. For each interrogatory, please state the full name, work address, and title or position of each person providing information for the answer to the interrogatory.

2. The following definitions shall apply:

a. "LEA" shall refer to Limerick Ecology Action or any official, officer, member, employee or consultant thereof.

b. "Document" shall mean any written, printed, typed or other graphic matter of any kind or nature, computer tapes or other electronically stored or generated material and all mechanical and electronic sound recordings or transcripts thereof, in the possession, custody, or control of LEA, or its officials, employees, or agents; it shall also mean all copies or drafts of documents by whatsoever means made.

c. "Date" shall mean the exact day, month and year, if ascertainable, or, if not ascertainable, the best approximation (including the event's relationship to other events in the relevant context of the interrogatory).

d. "NRC" or "Commission" shall mean either the Atomic Energy Commission or the Nuclear Regulatory Commission, as appropriate, including its regulatory staff and adjudicatory boards, as indicated by the context of the interrogatory.

e. "Specify", when referring to a proceeding before the Nuclear Regulatory Commission, means that the answer shall set forth the proceeding, applicant, docket number, relevant date, and any

other descriptive information appropriate to the request.

f. "Specify" or "identify", when referring to an individual, corporation, or other entity, means that the answer shall set forth the name, present or last known work address, and, if a corporation or other entity, its principal place of business or, if an individual, his or her title or titles and employer. Once an individual corporation or other entity has been thus identified in answer to an interrogatory, it shall be sufficient thereafter when identifying that individual, corporation or other entity to state merely his, her or its name.

3. These interrogatories request all knowledge and information in LEA's possession and/or knowledge and information in the possession of city officials, officers, agents, representatives, consultants, and unless privileged, attorneys.

4. In each instance in which an interrogatory requests a statement of LEA's assertion, contention, view or opinion, the answer shall also contain a full discussion of the factual basis for the assertion or opinion.

Interrogatories

1. State whether LEA intends to present any expert witnesses on the subject matter at issue in the contentions and issues sponsored by Limerick Ecology Action and the City

admitted by the Licensing Board on March 20, 1984 (Tr. 8772-89) related to the treatment of severe accidents pursuant to the National Environmental Policy Act ("severe accident contentions"). If so, identify each expert witness and state (a) his professional qualifications; (b) the contention and subject matter on which the expert is expected to testify; (c) the substance of the facts and opinions to which the expert is expected to testify; (d) the grounds for each opinion. Identify by court, agency or other body, each proceeding in which such individual rendered testimony on this subject.

2. State whether LEA intends to present any factual witnesses on the subject matter at issue in the severe accident. If so, identify each such factual witness and further state (a) his professional qualifications; (b) the contention and subject matter on which the witness is expected to testify; (c) the substance of the facts to which the witness is expected to testify. Identify by court, agency, or other body, each proceeding in which such individual rendered testimony on this subject(s).

3. Identify by title, author, publisher and date of issuance or publication, all documents that LEA relies upon as a basis for contentions or that LEA intends to use (by way of reference or evidentiary proffer) in presenting its direct case in cross-examining other witnesses on the severe accident contention and all documents to which LEA intends

to refer in conducting cross-examination of other witnesses who may testify in connection with any such contention.

4. To the extent that your answer to any interrogatory is based upon one or more documents, (a) identify each such document on which your answer is based; (b) identify the specific information in such document upon which you rely; (c) explain how the information provides a basis for your answer.

5. To the extent that your answer is based upon any study, calculation, research or analysis, (a) describe the nature of the study, calculation, research or analysis and identify any documents which discuss or describe the study, calculation, research or analysis; (b) identify the person(s) or entity(ies) who performed the study, calculation, research or analysis; (c) describe in detail the information which was the subject of the study, calculation, research or analysis; (d) describe the results of such study, calculation, research or analysis; (e) explain how such study, calculation, research or analysis provides a basis for your answer.

6. To the extent that your answer is based upon conversations, consultations or correspondence or other communications with one or more individuals or entities, please identify each such individual or entity; (b) state the educational and professional background of each such individual, including occupation and institutional affiliations; (c) describe the nature of each communication,

including time and context, and describe the information received from each such individual or entity; (e) explain how such information provides a basis for your answer.

7. To the extent that LEA possesses information or documents expressing facts or opinions which are relevant to the specific interrogatories below, but which do not support intervenor's position or which have not otherwise been fully provided in the answers thereto, please provide such information and documents.

With regard to Contention DES-1:

8. State the LEA's understanding and basis thereof as of the criteria used by Applicant and Staff as to how individuals located beyond the 10-mile plume exposure EPZ were to be relocated for each case analyzed and state LEA's agreement or disagreement with such criteria and the basis therefore.

9. State the LEA's understanding of the largest number of individuals for each sector which could be relocated in the time periods utilized by Applicant and Staff for each case analyzed.

10. State the LEA's understanding and basis therefore as to the effect on the doses to individuals, risk and ultimate conclusions for each case analyzed if sheltering in basements for 24 hours was assumed instead of the relocation option used.

11. State the LEA's understanding and basis therefore as to the effects to individuals on the doses, risk and

ultimate conclusions for each case analyzed if a 48 hour delay in relocation with "normal activity" for those individuals within the City of Philadelphia were utilized.

12. State the LEA's agreement or disagreement and basis therefore with the response and the table attached which comprise Applicant's Answer to City of Philadelphia's Request No. 12 (Supplemental) (March 21, 1984), including any known disagreements with the assumptions and methodology in the evaluation.

13. State any plans which have been made, are being made, or are planned for relocation of individuals residing within 50 miles of the Station (outside the plume exposure EPZ) for any situation other than a nuclear emergency arising out of the operation of Limerick.

With regard to Contention DES-2:

14. Describe any studies or analyses which demonstrate that the assumed two-hour evacuation delay time used by the Staff and the delay times used by Applicant fail to take into account actual data and experience.

15. Describe the effect on the individual doses, risk and ultimate conclusions if a mean evacuation delay time of three hours were utilized in the Staff's or Applicant's calculations.

16. Describe any studies conducted by or in the possession of LEA showing the sensitivity of delay time to individual dose, risk and the ultimate conclusions.

With regard to Contention DES-3:

17. State the basis for the assertion that Hans and Sell estimate that 50% of the population will not evacuate.

18. Describe the effect on individual dose, risk and the ultimate results if it is assumed that 6, 10, 20, 30, 40, and 50% of the population fails to evacuate despite instructions to do so.

19. State the LEA's agreement or disagreement with the assumptions, methodology, results and conclusions of the study described in Applicant's Answer to City of Philadelphia's Request No. 12 (Supplemental) (March 21, 1984).

With regard to Contention DES-4:

20. Identify and describe any DES, FES, probabilistic risk assessment issued by the NRC which describes the specific impacts alleged by the contention.

21. For each admitted subpart, describe the LEA's estimate or results of calculations showing the impact and describe the effect of the ultimate conclusions.

22. Describe and discuss what quantifiable impacts are being treated in a non-quantifiable manner and describe how this obscures the total impact of severe accidents.

With regard to City 13:

23. Provide the results of any dose-distance curves generated, stating the assumptions, methodology and input used.

24. Provide the basis for the assertion that Protection Action Guides levels are an unacceptable level of societal risk.

25. State the measure of "unacceptable level of societal risk" which is being proposed as a measure by Staff or Applicant.

26. State the basis of agreement or disagreement with the table contained in Applicant's Answer to City of Philadelphia's Request No. 12 (Supplemental) (March 21, 1984), including any disagreements with the assumptions and methodology, as showing dose distance relationship.

With regard to City 14:

27. State the average evacuation speed and the basis therefore which LEA asserts should be utilized in the Staff's and Applicant's analysis.

28. Provide any evaluation or analysis that has been prepared as to the effect of varying evacuation speed on individual dose and risk.

29. Provide the basis for the statement that as evacuees would approach the City their speeds would reduce and state the effect of this phenomenon on individual dose and risk and your basis, therefore.

30. Provide the estimate of the frequency of each class of "bad weather" which you assert should be considered and describe the weather situation as far as type, duration and location.

With regard to City 15:

31. For the raw and finished water associated with the Baxter, Queen Lane and Belmont water treatment facilities, provide the following data on a monthly basis for total and soluble and insoluble fractions for the years 1950 through 1983:

- a. Concentrations of Strontium-90
- b. Concentrations of Cesium-134
- c. Concentrations of Cesium-137
- d. Gross alpha activity concentrations
- e. Gross beta activity concentration
- f. Gross gamma activity concentration

32. State, for the last 10 years, each instance that the City has interdicted a portion or all of its raw or finished water supply stating the date, reservoir, treatment facility or other portion of the water supply involved, point of interdiction, reason for interdiction, length of interdiction, portion of total city water use affected and provide any report or written document which discusses such events.

33. State the seismic design basis for each of the City's water supply facilities and distribution network.

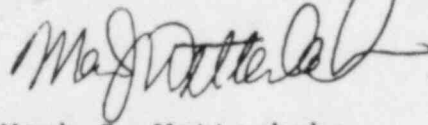
Request for Production of Documents

Please attach to your answers to the interrogatories listed above a copy of all documents applicable to such answer or upon which you otherwise intend to rely in the presentation of your direct case or in the cross-examination of other witnesses, whether or not they support your

contentions. Alternatively, please state that all such documents will be produced at a reasonable time and place to be agreed upon by the Applicant for inspection and copying.

Respectfully submitted,

CONNER & WETTERHAHN, P.C.

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

Mark J. Wetterhahn
Counsel for Philadelphia
Electric Company

April 9, 1984

DOCKETED
USNRC

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

'84 APR 11 A10:55

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

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

CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicant's First Set of Interrogatories and Request for Production of Documents to City of Philadelphia on Severe Accident Contentions" and "Applicant's First Set of Interrogatories and Request for Production of Documents to Limerick Ecology Action on Severe Accident Contentions" both dated April 9, 1984 in the captioned matter have been served upon the following by deposit in the United States mail this 9th day of April, 1984:

- | | |
|---|---|
| * Lawrence Brenner, Esq. (2)
Atomic Safety and Licensing
Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555 | Atomic Safety and Licensing
Appeal Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555 |
| * Dr. Richard F. Cole
Atomic Safety and
Licensing Board
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 |
| * Dr. Peter A. Morris
Atomic Safety and
Licensing Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555 | * Ann P. Hodgdon, Esq.
Counsel for NRC Staff Office
of the Executive
Legal Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555 |

* Hand Delivery

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

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

Mr. Frank R. Romano
61 Forest Avenue
Ambler, Pennsylvania 19002

Mr. Robert L. Anthony
Friends of the Earth of
the Delaware Valley
106 Vernon Lane, Box 186
Moylan, Pennsylvania 19065

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

Phyllis Zitzer, Esq.
Limerick Ecology Action
P.O. Box 761
762 Queen Street
Pottstown, PA 19464

** Charles W. Elliott, Esq.
Brose and Postwistilo
1101 Building 11th &
Northampton Streets
Easton, PA 18042

Zori G. Ferkin, Esq.
Assistant Counsel
Commonwealth of Pennsylvania
Governor's Energy Council
1625 N. Front Street
Harrisburg, PA 17102

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

Angus Love, Esq.
107 East Main Street
Norristown, PA 19401

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

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

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

Martha W. Bush, Esq.
Kathryn S. Lewis, Esq.
City of Philadelphia
Municipal Services Bldg.
15th and JFK Blvd.
Philadelphia, PA 19107

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


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

** Federal Express

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

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

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



Robert M. Rader