

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

Lawrence Brenner, Chairman
Dr. Richard F. Cole
Dr. Peter A. Morris

DOCKETED
USNRC

'84 AGO 31 P12:05

OFFICE OF GENERAL INVESTIGATION
PHILADELPHIA DISTRICT

In the Matter of: :

PHILADELPHIA ELECTRIC COMPANY :
(Limerick Generating Station, :
Units 1 & 2) :

DOCKET NOS. 50-353-OL
50-352-OL

CITY OF PHILADELPHIA'S ANSWERS
TO APPLICANT'S FIRST SET OF
INTERROGATORIES AND REQUEST FOR
PRODUCTION OF DOCUMENTS

1. (a & b). The specific expert witnesses to be presented by the City have not yet been determined, and may include, but is not limited to, any or all of the persons furnishing Answers to the Specific Interrogatories hereinafter set forth, as well as others

c. The subject matter of the testimony will include, but is not limited to,

- (1). Description of City Water Supply and Water Supply System, and Usages;
- (2). Capability of Treatment Facilities;
- (3). Potential Contamination Levels;

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- (4). On-Line Reservoir Capability;
- (5). Alternative Sources of Water Supply;
- (6). Mitigation Treatment Techniques

Available to the City;

(7). Regulatory Environment Pertaining to the City Facilities Operations;

(8). Economic Responsibility to Accommodate, Plan for and Implement Emergency Planning Procedures;

(9). Such other testimony as is deemed appropriate.

(d & e). To be developed in the testimony.

2. (a). The specific fact witnesses to be presented by the City have not yet been determined, and may include, but is not limited to, the persons furnishing Answers to the Specific Interrogatories hereinafter set-forth, as well as others.

(b). See 1(c) above.

(c). To be developed in the testimony.

3. The legal bases for the City's Issues of Concern have been submitted to the Board, Applicant and all other parties in documents previously filed. There may be other such publications and documents to legally and factually support the City's Issues, but same have not yet been determined. Inasmuch as the direct testimony of other parties has not yet been received, it is impossible, at this time, to determine cross-examination plans of other witnesses whom may testify.

SPECIFIC INTERROGATORIES

1. a. Belmont Clear Water Basin
4300 Ford Road
Philadelphia, Pennsylvania 19131
- b. 0.5; 1.8, MG
- c. Belmont High Service - District #6 (See Attachment B)
- d. None
- e. Belmont Plant

Answer by: Charles Zitomer
Load Control
Water Department
29th & Cambria Street
Philadelphia, Pa. 19132

- a. Belmont Filtered Water Basin and Clear Water Basin
4300 Ford Road
Philadelphia, Pennsylvania 19131
- b. 19; 20, MG
- c. Belmont Gravity - District #5 (See Attachment B)
- d. 48" main over Girard Avenue Bridge from East Park
Booster Pump Station
- e. Belmont Plant

Answer by: Charles Zitomer
Load Control
Water Department
29th & Cambria Streets
Philadelphia, Pa. 19132

- a. Roxborough Standpipes
Harner and Sunset Streets
Philadelphia, Pennsylvania 19128
- b. 3.5, 11.0, MG
- c. District #9 (See Attachment B)
- d. Primarily supplied from Queen Lane Plant to Roxborough
High Service Pump Station. Baxter Plant water is also
interconnected through West Oak Lane Pump Station.

e. See Roxborough Standpipes - d above. Answer by: Charles Zitomer, Chief Load Control
29th & Cambria Streets
Philadelphia, Pa. 19132

2. a. Belmont Clear Water - Close 26 filter effluent valves
(5 minutes)
- b. Belmont Filtered Water Basin and Clear Water Basin
Close 26 filter effluent valves and electric valves
(15 minutes)
- c. Roxborough Standtanks - Manually close supply valve
(45 minutes)

Answer by: Charles Zitomer, Chief
Load Control
29th & Cambria Streets
Philadelphia, Pa. 19132

3. As of this date, the City believes that viable alternative sources of water supply in the event of contamination of the Schuylkill River include interconnections with a contiguous suburban water supply such as the Chester Water Authority or the Philadelphia Suburban Water Company, as well as, increasing present covered water reservoir owned by the City. These alternatives would have to be investigated and considered before they could be viewed as viable. In addition, the City believes that the use of bottled water and tank truck water supply, although helpful under special limited conditions, would not satisfy full demand under a contamination scenario.

Answer by: Bruce Aptowicz
Manager
Water Department
1170 Municipal Services Bldg.
Philadelphia, Pa. 19107

4. A meeting was held on May 14, 1984 in the Municipal Services Building at the request of Zori Ferkin of the Governor's Energy Council. Present were Ms . Ferkin, John McParran, representatives of Chester Water Authority, Philadelphia Suburban Water Company and the City of Philadelphia including Bruce Aptowicz. Philadelphia expressed an interest to the State and other adjacent water suppliers in having a study conducted to evaluate the potential for system interconnections. It is our recollection that although the State believed that the study should be conducted and considered contracting a consulting engineer for this effort, they ultimately decided to not perform the study, primarily due to lack of funds. It was the position of the adjacent water utilities that they would be happy to cooperate in the study. No further discussion occurred on this subject matter with government utility or consultant personnel.

To respondent's knowledge, no efforts have been made by the City to evaluate the practicality of obtaining water from substituted sources. The City has performed preliminary studies in the last few years to evaluate the practicality of supplying water to Philadelphia Suburban Water Company. In addition, a study was performed pertaining to supplying water to Bucks Co.

Answer by: Bruce Aptowicz
Manager, Water Operations
1170 M.S.B.
Philadelphia, Pa. 19107

5. See Answer to Specific Interrogatory No. 4 above.

Answer by: Bruce Aptowicz
Manager, Water Operations
1170 M.S.B.
Philadelphia, Pa. 19107

6. The scope of the City's authority to take action requiring water conservation and prohibition of "non-essential" uses is set-forth in the City of Philadelphia's Drought Water Emergency Plan (Attachment C). As of this date, the City has not investigated its legislative authority to ration water for such "essential purposes" as drinking, cooking, bathing and sanitation. No procedures are in place to effectuate water rationing for "essential uses" in the event of a radiological emergency other than those in the attached Drought Water Emergency Plan for "non-essential" uses. As of this date, the City has not investigated procedures which must be taken to effectuate water rationing in the event of a radiological emergency at Limerick.

Answer by: Dennis Blair
Manager
Planning & Research
1270 M.S.B.
Philadelphia, Pa. 19107

7. See Answer to Interrogatory No. 6 above. No other efforts have been made by the City.

Answer by: Dennis Blair
Manager
Planning & Research
1270 M.S.B.
Philadelphia, Pa. 19107

8. None, as of this date.

Answer by: Dennis Blair
Manager
Planning & Research
1270 M.S.B.
Philadelphia, Pa. 19107

9. None, as of this date.

Answer by: Dennis Blair
Manager
Planning & Research
1270 M.S.B.
Philadelphia, Pa. 19107

10. As of this date, the City has no knowledge of such plans, nor has the City undertaken to investigate other emergency plans, nor has it attempted to determine which cities have a similar geographical relationship to a large Nuclear Plant located upwind and upriver of its water supply.

Answer by: Bruce Aptowicz
Manager, Water Operations
1170 M.S.B.
Philadelphia, Pa. 19107

11. The City has listed below various alternatives of which it is aware, which have potential for decontamination of water sources. The City has not determined that this is a exhaustive list nor has it evaluated each of these specifically with regard to the unique requirements of the City's water supply and water supply systems. In addition to evaluating the existing treatment methods and procedures at the City's Water Treatment Plants for their efficiency in removing

contaminants in the event of a release from Limerick, the City believes that emergency planners should evaluate processes which can remove such contamination, including but not limited to the following processes:

- (a). reverse osmosis;
- (b). ion exchange;
- (c). post carbon contactors;
- (d). repetitive filtration;
- (e). increased pH precipitation;
- (f). alternative coagulants;
- (g). powdered activated carbon;
- (h). chemical filter aids, and
- (i). polymers.

Emergency planners would have to consider each of these alternative methods individually and evaluate their effectiveness at, applicability to, and implementability for, each of Philadelphia's Water Treatment Plants under the conditions which would exist in the event of contamination of the Schuylkill and the Delaware Rivers for an extended period of time. This evaluation should also include the effects on water quality, treatment plant operation, and maintenance, as well as consideration of costs from a Capital & Annual Operating Budget standpoints.

Answer by: Thomas Kulesza
Manager, Water Treatment Plant
29th & Cambria Streets
Philadelphia, Pa. 19132

12. See Answer to Specific Interrogatory No. 10 above

Answer by: Bruce Aptowicz
Manager
Water Department
1170 M.S.B.
Philadelphia, Pa. 19107

13. See Answer to Specific Interrogatory No. 4 above.

Answer by: Bruce Aptowicz
Manager
Water Department
1170 M.S.B.
Philadelphia, Pa. 19107

14. See Answer to Specific Interrogatory No. 4 above.

Answer by: Bruce Aptowicz
Manager
Water Department
1170 M.S.B.
Philadelphia, Pa. 19107

15. See Answer to Specific Interrogatory No. 4 above.

Answer by: Bruce Aptowicz
Manager
Water Department
1170 M.S.B.
Philadelphia, Pa. 19107

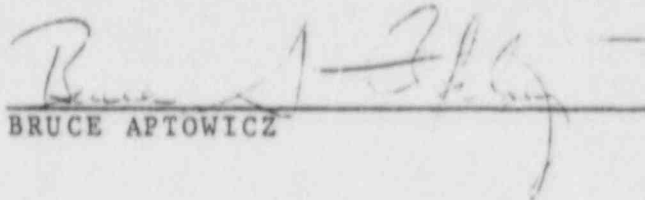
DOCUMENT REQUEST

Two documents have been attached in response to General Interrogatory No. 4 and Specific Interrogatory No. 6 (Attachments A and B, respectively.)

In addition, the City may rely upon other documents in presentation of its direct case or on cross-examination or which otherwise may relate to its concerns. The City's plans for presenting its direct case and testimony have not been finalized yet, nor has the City received the testimony of others on which it can make plans for cross-examination.

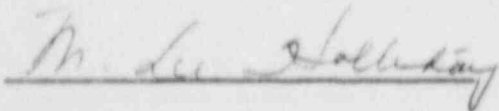
COMMONWEALTH OF PENNSYLVANIA :
COUNTY OF PHILADELPHIA : SS

BRUCE APTOWICZ, being duly sworn according to law, deposes and says that he is the Manager of Water Operations of the Water Department of the City of Philadelphia; that he is authorized to and does make this Affidavit on its behalf; and that the facts set forth in the foregoing Answers are true and correct partly upon personal knowledge and the remainder upon information and belief.



BRUCE APTOWICZ

Sworn to and subscribed
before me this *30th* day
of August, 1984



Mr. Lee Halliday

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

BEFORE THE ADMINISTRATIVE JUDGES

Lawrence Brenner, Chairman
Dr. Richard F. Cole
Dr. Peter A. Morris

DOCKETED
USNRC

'84 AGO 31 P12:06

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of: :

PHILADELPHIA ELECTRIC COMPANY :

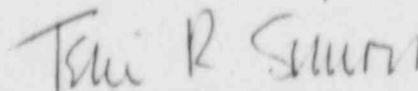
Docket Nos. 50-353-OL
50-352-OL

(Limerick Generating Station :
Units 1 and 2)

CERTIFICATE OF SERVICE

I hereby certify that the City of Philadelphia's Answers to Applicant's First Set of Interrogatories and Request for Production of Documents in the above-captioned matter have been served on the following persons named on the attached service list by hand delivery or by causing the same to be deposited in envelopes addressed to said persons, first class, postage prepaid, and deposited with the United States Postal Service at Philadelphia, Pennsylvania 19107

Respectfully submitted,



TERI R. SIMON,
Assistant City Solicitor

Dated: August 30, 1984

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