

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DOCKETED  
USNRC

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

Docket Nos. 50-3520L  
50-3530L

\*85 MAY 29 P12:17

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

NRC STAFF RESPONSE TO ANTHONY/FOE PETITION TO REOPEN  
THE RECORD ON THE BASIS OF NEW INFORMATION IN APPLICANT'S  
SEMI-ANNUAL EFFLUENT RELEASE REPORT OF FEBRUARY, 1985

## I. INTRODUCTION

On May 7, 1985, Applicant filed an "Answer to Petition By Anthony/Friends of the Earth to Reopen the Record Based on Information Relating to Offsite Effluent Releases", to which was attached a document consisting of a single page, entitled "Petition by Anthony/FOE to Reopen the Record on the Basis of New Information in Phila. Elec. Co.'s Semi-Annual Effluent Release Report, Feb. 1985" dated April 30, 1985. On May 8, 1985, the Licensing Board issued an Order in which it stated that it had determined that the Board had not been served with Mr. Anthony/FOE's (hereafter "FOE") Petition and that it assumed that such service failure had resulted in other parties not receiving copies of the Petition. 1/ The Board therefore extended until May 22, 1985, the time for replying to the

1/ The Board's assumption is correct insofar as the Staff's copy is concerned; the Staff has not yet been served by FOE with a copy of the petition dated April 30, 1985.

DS07

Petition and directed that responding parties file their replies with the Board, in hand, by close of business on that day.

On May 17, 1985, FOE filed a "Response to the Board's Order of May 8, 1985 . . . and Response to Applicant's Answer To Our Petition," (Supplemental Petition). The Licensing Board extended the time for responding to the Petition until May 28, 1985, and directed that responses be filed with the Board, in hand, by close of business on that day. <sup>2/</sup> Order (Anthony/FOE Petition to Reopen Based on Applicant's Effluent Release Report), May 21, 1985. For the reasons discussed below, the Staff opposes both the Petition and the Supplemental Petition to reopen the record.

## II. DISCUSSION

In the Petition, FOE asserts that the Applicant's methods for calculating doses at the site boundaries are not in keeping with the Commission's regulations. Specifically, FOE alleges that the Applicant should have used the nearest approaches to the plant, i.e., the railroad right-of-way and the Schuylkill River, both of which traverse the site, rather

---

<sup>2/</sup> The Licensing Board's assertion of jurisdiction over the two Petitions is proper. As the Appeal Board stated in Perkins, "it is for the Licensing Board to consider ab initio whether it is empowered to grant relief which has been specifically sought of it. Every tribunal - whether judicial or administrative - possesses the inherent right (indeed, the duty) to determine in the first instance the bounds of its own jurisdiction. . . ."

Duke Power Company (Perkins Nuclear Station, Units 1, 2 and 3), ALAB-591, 11 NRC 741, 742 (1980). Moreover, the Licensing Board in this proceeding should find jurisdiction to rule on the Petitions in that the subject matter raised in them is not before the Appeal Board. See p. 7, n.5, infra.

than the site boundaries in calculating exposures to individuals. FOE also alleges that the Applicant should have used a same-day ingestion assumption rather than a one-day-delay ingestion assumption in making calculations regarding the fish-ingestion pathway. Further, FOE alleges that changes made in Revision 1 of the Offsite Dose Calculation Manual (ODCM) will result in substantial increases in radiation risk to the public.

A. FOE's Petitions do not meet the Commission's standards for reopening a record.

The Commission's standards for determining whether to reopen a closed record are well-established; the three-part test is:

- 1) Is the motion timely?
- 2) Does it address significant safety (or environmental) issues?
- 3) Might a different result have been reached had the newly proffered material been considered initially?

Louisiana Power and Light Company (Waterford Steam Electric Station, Unit 3), ALAB-753, 18 NRC 1321, 1324 (1983); Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), ALAB-738, 18 NRC 177, 180 (1983).

(1) Timeliness

FOE's Petitions are not timely. Even if FOE's allegations were based on information not available before the issuance of Applicant's Semi-Annual Effluent Releases Report of February 1985, which FOE states that it received on April 2, 1985, the Petition would be lacking in the requisite timeliness, as the Petition was filed almost a full month after the subject report was made available to FOE. However, the concerns that FOE expresses regarding distances used in dose calculations and the assumptions used in

fish consumption calculations are not related to changes in the Offsite Dose Calculation Manual (ODCM) dated February, 1985. These calculations are unchanged from the original ODCM submitted to the NRC on September 14, 1984, and approved by the NRC staff on October 3, 1984. <sup>3/</sup>

In addressing the standards for reopening, FOE states that "PECO's effluent report is new material which we could not have had earlier." FOE's concerns, however, do not relate to the effluent releases report but to the revised ODCM attached to that report. As discussed above, the Petition would be untimely even if the primary concern expressed were with the changes in the report. To the extent that FOE's concern centers not on the revised ODCM but on information in a document issued in September, 1984, the Petition is all the more untimely. <sup>4/</sup>

(2) Whether the Petitions raise a significant safety issue

FOE states that "our health and safety are in danger." However, FOE has not pointed to any safety regulation that in its opinion the Applicant might have violated in making the calculations complained of and in making the changes documented in the note from G. M. Leitch to R. A.

---

<sup>3/</sup> The Staff's records indicate that FOE received copies of both the Applicant's submission and the Staff document approving it.

<sup>4/</sup> The Staff agrees with the Applicant that the methodology to which FOE now objects is unchanged since the application was filed. See "Applicant's Answer . . .," May 7, 1985 at 4. The Staff also notes that FOE's concern might have been raised in reference to the DES/FES, which discusses these matters at length in Section 5.9 and in Appendix D. If FOE wished to challenge the Staff's conclusion that "there will be no measurable radiological impact on any member of the public from routine operation of the Limerick facility," (FES, 5-48) FOE should have come forward at the time the DES was issued.



Mulford, dated January 28, 1985 (Attachment D1 to the Semi-Annual Effluent Releases Report), which covers the revised ODCM. FOE asserts that the Applicant's statement in Attachment D1, that the modification of the containment purge isolation set point basis will "allow LGS flexibility . . . . in set point for isolation," "amounts to degrading the standards, with substantial increases in radiation risk to the public." FOE Petition. FOE states that "[it] petition[s] against this degrading, and also against the modifications of release point weighting factor, and the averaging of emissions from north and south stacks." In an Affidavit attached to this Response, Marie T. Miller, Radiation Specialist in Region I, states that, contrary to the allegations made by FOE,

The changes to the ODCM, transmitted by Philadelphia Electric Company to NRC Region I on February 28, 1985, in accordance with Limerick Technical Specification Section 6.14.2, are consistent with the Commission's regulations in 10 CFR 20 and the Licensee's Technical Specifications and do not increase the radiation risk to the public. . . . The new setpoint for the containment purge isolation cited in the ODCM agrees with the trip setpoint requirement in Technical Specification, Section T3.3.2 - 2C. In my review of the equations used in the revised method to determine alarm setpoints for the North and South vent monitors, I determined that the revised method represents a refinement of the previously approved calculation method. The revised method allows the setpoints to be determined more efficiently by the licensee. The revised method continues to demonstrate compliance with Technical Specifications and assures 10 CFR 20 limits will not be exceeded. In addition, the releases from the North and South Vents are calculated based on the fractional contribution from both vents. The above method does not average releases from the vents.

Accordingly, with regard to changes in the ODCM, FOE is factually incorrect in asserting that emissions have been averaged and has not pointed to any violation of NRC regulations or demonstrated how any significant safety issue is raised by the referenced changes.

FOE's allegations concerning error in the site boundaries used in calculating set points and assumptions concerning fish consumption are addressed in the attached affidavit of Dr. Edward F. Branagan, Jr. of the Radiological Assessment Branch. Dr. Branagan states that, contrary to FOE's allegations, the site boundaries listed in the ODCM, Rev. 1 are appropriate for limiting exposure to radioactive effluents (Paragraph 6 of the Affidavit). He states that the doses from eating fish are not underestimated either because of the assumption as to where fish are caught or because of the assumption of a one day delay before consumption (Paragraph 7 and 8 of the Affidavit). Further, Dr. Branagan states that, contrary to FOE's allegations, the assumptions on which the Applicant's calculations are based are consistent with the Staff's recommendations in Reg. Guide 1.109, Rev. 1 (Paragraph 8 of the Affidavit).

Based upon the Affidavits of Ms. Miller and Dr. Branagan, it is the Staff's conclusion that FOE's Petitions raise no significant safety issue and fail to point to any inconsistency with the Commission's regulations regarding offsite dose calculations.

(3) Whether a different result might have been reached

The third criterion that a petitioner for reopening must address is whether a different result might have been reached if the newly proffered material had been considered initially. FOE makes the bare assertion that "a totally different result, with lowered radiation isolation setpoints, will result from calculations based on the findings above." FOE has not set forth any basis for this assertion and, as demonstrated by the attached Affidavits, there is no basis for such an assertion. Therefore, FOE has

failed to demonstrate how the information in its Petitions would affect any finding made by the Licensing Board in this proceeding. <sup>5/</sup>

(4) Summary

In summary, FOE's petition is not timely; it does not raise any significant safety issue; and consideration of the matters raised would not change the results reached in the proceeding. Thus, the petition fails to satisfy the criteria for reopening and should be denied for that reason alone.

B. FOE has not satisfied the five criteria for admitting a late contention.

A party seeking to raise a new, previously uncontested issue through a motion to reopen the record must satisfy not only the standards for reopening but also the late-filed contention criteria set forth in 10 C.F.R.

§ 2.714(a)(1), <sup>6/</sup> Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power

---

<sup>5/</sup> Although no contentions regarding routine releases were litigated in this proceeding, the Licensing Board did make findings concerning the calculation and monitoring of routine releases offsite in its Second Partial Initial Decision, LBP-84-31, 20 NRC 446 at 540-42 (1984). See especially F.F. E-90 - E-93, where the Board made findings regarding routine releases in order to distinguish monitoring of such releases from that associated with accident conditions. These findings would not be affected by any information in FOE's Petitions.

<sup>6/</sup> Section 2.714(a)(1) provides that nontimely petitions to intervene or requests for hearing will not be entertained absent a determination by the Licensing Board that the petition or request should be granted based upon a balancing of the following factors:

- (i) good cause, if any, for failure to file on time;
- (ii) the availability of other means to protect petitioner's interest;

Plants, Units 1 and 2), CLI-82-39, 16 NRC 1712, 1714-15 (1982), including the Catawba Appeal Board's three part test for good cause. <sup>7/</sup> Although FOE did not address the five factors in the original petition, it has addressed them in its Supplemental Petition.

(1) Good Cause

FOE states that it could not have known of PECO's proposal to modify isolation set points until it was provided with PECO's Semi-Annual Effluent Releases Report. As discussed above, FOE's contention is not wholly dependent upon the content of Revision I to the ODCM, but depends primarily on material previously available, namely the ODCM as submitted in September, 1984. Additionally, aspects of the Petition could have been raised much earlier based on information in the Application documents

---

(FOOTNOTE CONTINUED FROM PREVIOUS PAGE)

- (iii) the extent to which petitioner's participation may reasonably be expected to assist in developing a sound record;
- (iv) the extent to which existing parties will represent the petitioner's interest; and
- (v) the extent to which petitioner's participation will broaden the issues or delay the proceeding.

<sup>7/</sup> The Catawba Appeal Board's three part test for good cause requires a finding that the late-filed contention: "(1) is wholly dependent upon the content of a particular document; (2) could not therefore be advanced with any degree of specificity (if at all) in advance of the public availability of that document; and (3) is tendered with the requisite degree of promptness once the document comes into existence and is accessible for public examination." Duke Power Company, et al. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 469 (1982); affirmed relevant part, 17 NRC 1041 at 1047 (1983).



and in the FES. The issues could, therefore, have been advanced earlier. Further, FOE delayed for almost a full month after receiving Revision I to the ODCM before filing its new contention. Therefore, FOE has not satisfied any part of the Catawba good cause test and this factor weighs against FOE.

(2) Availability of other means to protect petitioner's interest

The second factor required to be considered pursuant to 10 C.F.R. § 2.714(a) is availability of other means to protect petitioner's interest. FOE states in its Supplemental Petition that there is no other means to protect its interest. As the Staff discusses, infra, there is no sound basis for FOE's assertion that the matters raised in the Petitions affect its interest. However, the Staff concedes that there is no other means available to protect what FOE perceives to be its interest. From this perspective, this factor weighs in FOE's favor.

(3) Assistance in development of a sound record

FOE's Petition on its face demonstrates that party's lack of knowledge of the matter that it seeks to litigate. FOE states "our health and safety are in danger because the methods for calculating dosages at the site boundaries are not in keeping with the regulations. . . ." However, FOE fails to state what regulation it perceives to be violated and how the public's health and safety is threatened. FOE has offered nothing to show that its participation on the issue it seeks to raise would assist in the development of a sound record.

In its Supplemental Petition, FOE states that it has secured the services of an expert to testify on the health consequences of radiation exposure to the public at 900 feet from the plant. The witness is

identified as Dr. Bruce Molholt, a geneticist and microbiologist who is a Professor in the Department of Health Education at Temple University in Philadelphia. FOE indicates that Dr. Molholt will testify on the health effects of exposure to radiation from nuclear reactor effluents as related to levels, duration and distance from the release points.

A petitioner addressing the third criterion should "set out with as much particularity as possible the precise issues it plans to cover, identify its prospective witnesses and summarize its proposed testimony . . . . Vague assertions regarding petitioner's ability . . . are insufficient." Mississippi Power & Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-704, 16 NRC 1725, 1730 (1982). FOE's statements regarding the proposed testimony of Dr. Molholt are too vague to satisfy the requirements of 10 C.F.R. § 2.714(a)(1)(iii), as interpreted in Grand Gulf regarding assistance in development of a sound record. Particularly in light of the lack of safety significance of the matters FOE seeks to raise, its Supplemental Petition fails to identify the information Dr. Molholt would bring before this Board that would justify a reopening of the record. Thus, this factor weighs against FOE.

(4) Representation by existing parties

Although FOE has addressed this factor under "other means", the Staff understands FOE's statement that "we cannot rely on the NRC for this" to refer to FOE's feeling that the Staff will not represent FOE's interest as expressed in the Petitions. Assuming that some real interest is at stake, the Staff agrees that FOE's interest is not represented by existing parties and that this factor, therefore, weighs in FOE's favor.

(5) Delay and broadening of the issues

FOE asserts that "this petition will [not] add significant delay since the license for the plant is currently held up by emergency planning, water supply and safety evaluation." The fifth standard, however, relates to delay in the proceeding and only one of the issues identified by FOE, emergency planning, is still pending before this Licensing Board. Specifically, except for the limited remand concerning emergency planning for the Graterford Prisoners, all issues before the Licensing Board have been decided. The Staff concludes, therefore, that there is a distinct possibility that reopening to hear the issues asserted in FOE's Petitions would delay the proceeding. A reopening would clearly broaden the issues in the proceeding. Thus, this factor weighs against FOE.

(6) Balancing the five factors

On balance, a consideration of the factors for admission of late-filed contentions weighs heavily against the granting of FOE's Petitions.

C. FOE fails to state a contention with the requisite basis and specificity.

The Commission's regulations in 10 C.F.R. § 2.714(b) require that a petitioner set forth the basis for each proposed contention with reasonable specificity. FOE has not explicitly stated a contention, much less set forth a basis with specificity. As discussed above, with respect to safety significance, FOE has failed to set forth a basis for its assertion that "our health and safety are in danger." Thus, FOE has failed to provide a basis for a contention based on the matters raised in its Petitions.

III. CONCLUSION

As discussed above, FOE has failed to make the showing required of a party seeking to reopen the record. FOE has also failed to satisfy the five factors for admission of a late-filed contention and the basis and specificity requirements for the admission of a contention. Accordingly, FOE's Petition, as supplemented, should be denied.

Respectfully submitted,

*Ann P. Hodgdon*

Ann P. Hodgdon  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 28th day of May, 1985



BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Docket Nos. 50-352  
50-353

2. The purpose of this affidavit is to address the allegations concerning the dose calculation methodology used in the licensee's Off-site Dose Calculation Manual. These allegations were raised in the "Petition by Anthony/FOE To Reopen the Record on the Basis of New Information in Phila. Elec. Co.'s Semi-Annual Effluent Release Report, February 1985", dated April 30, 1985 (hereinafter FOE Petition).

3. Specifically, this affidavit addresses FOE's allegations that: (1) "the site boundaries on which they [the] set points used to control radioactive effluents] are based . . . are in error"; (2) doses from eating fish are underestimated because fish could be caught at the liquid effluent outlet; and (3) doses from eating fish are underestimated because the licensee has assumed a "one day delay," whereas fish could be eaten on the same day.

4. In a letter from W. M. Alden, Philadelphia Electric Company to T. E. Murley, USNRC, Region I, dated February 28, 1985, the licensee provided the staff with Revision 1 to the "Offsite Dose Calculation Manual for the Limerick Generating Station, Units 1 and 2," dated February 25, 1985 (hereinafter ODCM, Rev. 1). The ODCM, Rev. 1 replaced an NRC staff reviewed document dated September 14, 1984 (hereinafter ODCM, Rev. 0).

5. The ODCM contains the methodology and parameters used to estimate doses from exposure to radioactive effluents from routine releases from nuclear power plants. The dose calculation methods that are acceptable to the NRC staff are described in a report entitled "Preparation of Radiological Effluent Technical Specifications for Nuclear Power Plants" NUREG-0133 (1978). NUREG-0133 in turn refers to USNRC Regulatory Guide 1.109, "Calculation of Annual Doses from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 C.F.R. Part 50, Appendix I," Rev. 1, 1977.

6. FOE states that the site boundaries of 790m and 762m are in error because individuals can approach closer to the site via the railroad right-of-way and the Schuylkill River. These site boundaries are used in the calculation of doses from routine radioactive gaseous releases to

determine permissible release levels. FOE refers to pp. 5-10 of the ODCM, Rev. 1 for the site boundary distances; however, the same distances are given on pp. 7-13 of the ODCM, Rev. 0. The Staff is aware that individuals may be exposed at these closer locations; however, in the Final Environmental Statement related to operation of the Limerick Generating Station, Units 1 and 2 (NUREG-0974), April 1984, and in reviewing the Applicant's ODCM, Rev. 0, the Staff considered that it was unlikely that these locations would be more limiting in dose calculations than the site boundary for the following reasons. The dose for an individual is equal to the product of the concentration of the radionuclide in the medium of interest (e.g., air, meat, or milk) and the occupancy time (or in the case of meat and milk the quantity of food ingested), as well as many other factors. Although it is possible that the concentration of the radionuclide in air may be slightly greater at the locations identified by FOE, the occupancy times for these locations would typically be only a small fraction of a year as compared with the much higher occupancy time assumed for the individual at the site boundary. (FES, Appendix D, p. D-2.) In addition, there are no permanent residences, gardens, milk animals or meat animals at the closer locations suggested by FOE. Exposure to direct radiation from radioactive liquid effluents was also evaluated in the FES (see Table D-6, p. D-9) and found to be negligible. In summary, the site boundaries listed in the ODCM, Rev. 1 are appropriate for limiting exposure to radioactive effluents.

7. FOE states that doses from eating fish are underestimated because fish could be caught at the effluent outlet, and refers to Figure VI.A.1 on p. 19 of the ODCM, Rev. 1. The methodology used to estimate doses

from ingesting fish is described in § II.B, pp. 2-4, and § VII, p. 34 of the ODCM, Rev. 1. Contrary to FOE's assertion that the dose from ingesting fish was based on catching fish 1.9 miles from the plant, a review of these pages indicates that the dose from ingesting fish is based on catching fish at the plant discharge point (i.e., effluent outlet).

8. FOE states that doses from eating fish are underestimated because the licensee has assumed a "one day delay," whereas fish could be eaten on the same day. The "one day delay" is described as follows in a footnote to Table II.A.1, p. 4, of the ODCM, Rev. 1: "These factors are decayed for one day to account for the time between effluent release and ingestion of fish by the maximum exposed individual, an adult." The "one day delay" factor is not new information. The preceding quotation appears as a footnote to Table II.A.1, p. 6, of the ODCM, Rev. 0. The Staff has recommended a 24 hour delay period to take into account the radionuclide decay during food preparation (See Regulatory Guide 1.109, Rev. 1, 1977, pp. 2, 12 and 69). While it is possible that an individual would eat fish that had been caught on the same day, it is unlikely that the entire quantity of fish assumed to be ingested (21 Kg/yr) would be eaten on the same day that it is caught. The Staff, therefore, considers the Licensee's assumption to be appropriate. Notwithstanding, a shorter delay (e.g., 4 hours) would result in less than a 10% increase in dose via this pathway.

9. In conclusion, the information provided on which FOE's petition is based concerning the location of the site boundary, the catching of fish in the vicinity of the plant discharge point, and the "one day delay" prior to eating fish is not new information. The values for these parameters



as provided in the ODCM, Rev. 1 are appropriate for limiting exposures to radioactive effluents.

I hereby certify that the foregoing is true and correct to the best of my knowledge.

Edward F. Branagan, Jr.  
Edward F. Branagan, Jr.

Subscribed and sworn to before  
me this 22 day of May, 1985

Maxine H. Laifsky  
Notary Public

My commission expires: 2/1/86



EDWARD F. BRANAGAN, JR.  
OFFICE OF NUCLEAR REACTOR REGULATION

PROFESSIONAL QUALIFICATIONS

From April 1979 to the present, I have been employed in the Radiological Assessment Branch in the Office of Nuclear Reactor Regulation of the U.S. Nuclear Regulatory Commission (NRC). As a Section Leader in the Radiological Assessment Branch, I am responsible for evaluating the environmental radiological impacts resulting from the operation of nuclear power reactors. In particular, I am responsible for evaluating radioecological models and health effect models for use in reactor licensing.

In addition to my duties involving the evaluation of radiological impacts from nuclear reactors, my duties in the Radiological Assessment Branch have included the following: (1) I managed and was the principal author of a report entitled "Staff Review of 'Radioecological Assessment of the Wyhl Nuclear Power Plant'" (NUREG-0668); (2) I served as a technical contact on an NRC contract with Argonne National Laboratory involving development of a computer program to calculate health effects from radiation; (3) I served as the project manager on an NRC contract with Idaho National Engineering Laboratory involving estimated and measured concentrations of radionuclides in the environment; (4) I served as the project manager on an NRC contract with Lawrence Livermore Laboratory concerning a literature review of values for parameters in terrestrial radionuclide transport models; and (5) I served as the project manager on an NRC contract with Oak Ridge National Laboratory concerning a statistical analysis of dose estimates via food pathways.

From 1976 to April 1979, I was employed by the NRC's Office of Nuclear Material Safety and Safeguards, where I was involved in project management and technical work. I served as the project manager for the NRC in connection with the NRC's estimation of radiation doses from radon-222 and radium-226 releases from uranium mills, in coordination with Oak Ridge National Laboratory which served as the NRC contractor. As part of my work on NRC's Generic Environmental Impact Statement on Uranium Milling (GEIS), I estimated health effects from uranium mill tailings. Upon publication of the GEIS, I presented a paper entitled "Health Effects of Uranium Mining and Milling for Commercial Nuclear Power" at a Conference on Health Implications of New Energy Technologies.

I received a B.A. in Physics from Catholic University in 1969, an M.A. in Science Teaching from Catholic University in 1970, and a Ph.D. in Radiation Biophysics from Kansas University in 1976. While completing my course work for my Ph.D., I was an instructor of Radiation Technology at Haskell Junior College in Lawrence, Kansas. My doctoral research work was in the area of DNA base damage, and was supported by a U.S. Public Health Service traineeship; my doctoral dissertation was entitled "Nuclear Magnetic Resonance Spectroscopy of Gamma-Irradiated DNA Bases."

I am a member of the Health Physics Society.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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  
} 50-353  
}

AFFIDAVIT OF MARIE T. MILLER

I, Marie T. Miller, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Radiation Specialist in the BWR Radiation Safety Section, Emergency Preparedness and Radiological Protection Branch, Division of Radiation Safety and Safeguards, Region I. I have been employed by the NRC for four and a half years and am responsible for inspecting nuclear power facility licensees' emergency preparedness and radiological control programs. I have a Master of Science degree in Radiation Science and a Bachelor of Arts in Chemistry from Rutgers University in New Brunswick, New Jersey and Camden, New Jersey, respectively.

2. The purpose of this affidavit is to address the technical significance of the February 1985 Revision 1 to the Limerick Offsite Dose Calculation Manual (ODCM). The changes to the ODCM that were submitted by Philadelphia Electric Company (the licensee) to NRC Region I on February 28, 1985, in accordance with Limerick Technical Specification Section 6.14.2, are consistent with the Commission's regulations in 10 CFR 20.

- 2 -

and the licensee's Technical Specifications and do not increase the radiation risk to the public. The bases for this finding are set forth below.

3.1 The new setpoint for the containment-purge isolation cited in the ODCM agrees with the trip setpoint requirement in Technical Specification, Section T3.3.2 - 2C. In my review of the equations used in the revised method to determine alarm setpoints for the North and South vent monitors, I determined that the revised method represents a refinement of the previously approved calculation method. The revised method allows the setpoints to be determined more efficiently by the licensee. The revised method continues to demonstrate compliance with Technical Specifications and assures 10 CFR 20 limits will not be exceeded. In addition, the releases from the North and South Vents are calculated based on the fractional contribution from both vents. The above method does not average releases from the vents.

4. I hereby certify that the foregoing is true and correct to the best of my knowledge.

Marie T. Miller  
Marie T. Miller

Subscribed and sworn to before  
me this 28th day of May, 1985

Michael A. Berkman  
Notary Public

My commission expires: March 20, 1989





UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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  
50-353

DOCKETED  
USNRC

'85 MAY 29 P12:17

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO ANTHONY/FOE PETITION TO REOPEN THE RECORD ON THE BASIS OF NEW INFORMATION IN APPLICANT'S SEMI-ANNUAL EFFLUENT RELEASE REPORT OF FEBRUARY, 1985" 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 or by hand-delivery as indicated by two asterisks, this 28th day of May, 1985:

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

Martha W. Bush, Esq.  
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

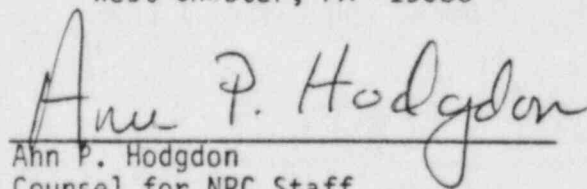
Atomic Safety and Licensing  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555\*

Atomic Safety and Licensing Appeal  
Board Panel  
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

  
Ann P. Hodgdon  
Counsel for NRC Staff