

BEFORE THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of : Docket Nos. 50-277  
:   
PHILADELPHIA ELECTRIC COMPANY : 50-278

APPLICATION FOR AMENDMENT  
OF  
FACILITY OPERATING LICENSES  
DPR-44 and DPR-56

Edward G. Bauer, Jr.  
Eugene J. Bradley

2301 Market Street  
Philadelphia, Pennsylvania 19101

Attorneys for  
Philadelphia Electric Company

786010

7908230482

BEFORE THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of	:	Docket Nos. 50-277
	:	
PHILADELPHIA ELECTRIC COMPANY	:	50-278

APPLICATION FOR AMENDMENT  
OF  
FACILITY OPERATING LICENSES  
DPR-44 and DPR-56

---

Philadelphia Electric Company, Licensee under Facility Operating Licenses DPR-44 and DPR-56 for Peach Bottom Atomic Power Station Units 2 and 3 respectively, hereby requests that the Environmental Technical Specifications incorporated in Appendix B of the Operating Licenses be amended by deleting Section 6.1.a.1, 6.1.a.2, and 6.3.a as indicated by the attached revised pages 14, 15 through 33 and 40.

Since initial operation of Peach Bottom Units 2 and 3 in 1974, extensive studies of fisheries, limnology and thermal effects in the Conowingo Pond have been conducted in accordance

**786011**

with the technical specification requirements of these Sections of the Peach Bottom Environmental Technical Specifications. The results of the various studies have been reported in the Semi-Annual Post-Operational Reports on the Ecology of Conowingo Pond up to and including Post-Operational Report No. 11, dated March, 1979<sup>1/</sup>. The primary purpose of the ecological studies required by the Technical Specifications was to identify any significant adverse impact on the ecology of Conowingo Pond resulting from the operation of the Peach Bottom units, with particular emphasis on the possible adverse impacts of chemical and thermal discharges to the Pond. A comparison of the results reported in the various post-operational monitoring reports with data collected since 1966, prior to operation of Peach Bottom units, shows that operation of the Peach Bottom units has had no adverse effect on the ecology of Conowingo Pond.

The five-year post-operational monitoring and analytical program conducted at Peach Bottom has revealed the following facts concerning the impact of the operation of Peach Bottom Units 2 and 3 on Conowingo Pond:

1. No significant differences attributable to plant operations in total chlorophyll "a" concentrations were noted either at the surface or within the water column among the

---

<sup>1/</sup> See also "A Critical Evaluation of Non-Radiological Environmental Specifications, Volume 3, Peach Bottom Units 2 and 3," prepared by Oak Ridge National Laboratories.

different monitoring stations in the Pond; nor were there any significant differences in chlorophyll "a" concentrations noted between pre-operational and post-operational periods.

2. No significant differences attributable to plant operation were observed in zooplankton densities among the monitoring stations in the Pond; nor were there any significant differences noted between pre-operational and post-operational periods. Fluctuations in zooplankton densities appear to be attributable to natural variations, and to some extent to predation by a strong year class of gizzard shad which had been accidentally introduced into the Pond in 1972.

3. No significant differences were observed in biomass and species composition of benthos in Conowingo Pond during pre-operational and operational periods. Variations in the standing crop appeared to be attributable to natural variation.

4. There is no evidence of a reduction in the fish population caused by impingement, because small numbers of fishes were impinged. Impingement appears to be influenced primarily by river flow. Other factors having a small influence include pond elevation, season, and specific characteristics of the species.

5. Since the plant has no effect on zooplankton densities, the effects of entrainment are considered minimal. The loss of adult fishes through entrainment of larvae is insignificant when compared with the exploitation rate of anglers.

6. No winter fish kills were observed due to plant operation even though numerous unit shutdowns have occurred. The factors that assure the protection of fishes in Conowingo Pond in relation to the discharge of the plant are the preference and avoidance behavioral responses of the fishes which cause the fish to select or reject specific temperatures. Routine power plant operation procedure also minimizes the rate of change in the plant discharge temperature.

Based upon the foregoing, Licensee has concluded that the post-operational studies conducted pursuant to Technical Specifications 6.1.a.1, 6.1.a.2, and 6.3.a have confirmed that the operation of Peach Bottom Units 2 and 3 to date has not had any adverse impact on the ecology of Conowingo Pond and that continued operation of the units will not have any such impact in the future. Analysis of the post-operational monitoring data demonstrate that Peach Bottom Units 2 and 3 operations, including thermal discharges, are not having adverse effects on primary producers, zooplankton, or benthos.

Although fish population densities in the discharge area have varied with species, these variations are attributable to natural causes rather than plant operations. It should be noted that all thermal effects prior to November, 1977, reflect operations with no more than three cooling towers. In November, 1977, Licensee placed in service two additional cooling towers. The availability of this additional cooling capacity during critical periods will assure further reductions in thermal discharges to the Pond.

Accordingly, since the objectives of Technical Specification Sections 6.1.a.1, 6.1.a.2, and 6.3.a have been met and further studies are not necessary to evaluate the impacts of plant operations on Conowingo Pond, Licensee requests that these Sections and their associated Bases be deleted from the Environmental Technical Specifications.

Pursuant to 10 CFR 170.22 "Schedule of Fees for Facility License Amendment," Philadelphia Electric Company proposes that this Application for Amendment be considered a Class III Amendment for Unit 2 and a Class I for Unit 3 since the proposed changes involved a single environmental issue which does not involve a significant environmental hazard.

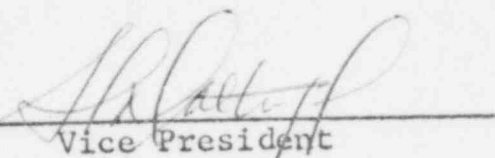
The Plant Operation Review Committee and the Operation and Safety Review Committee have reviewed these

proposed changes to the Environmental Technical Specifications and have concluded that these deletions do not involve a hazard consideration, will not endanger the health and safety of the public, and will not have a harmful environmental effect.

Respectfully submitted,

PHILADELPHIA ELECTRIC COMPANY

By



Vice President

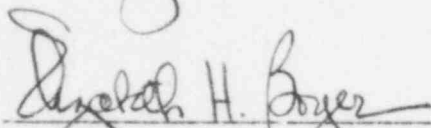
COMMONWEALTH OF PENNSYLVANIA :  
COUNTY OF PHILADELPHIA : AS.

S. L. Daltroff, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company, the Applicant herein; that he has read the foregoing Application for Amendment of Facility Operating Licenses and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.

  
\_\_\_\_\_

Subscribed and sworn to  
before me this 17<sup>th</sup> day  
of August, 1979

  
\_\_\_\_\_

Notary Public

ELIZABETH H. BOYER

Notary Public, Phila., Phila. Co.

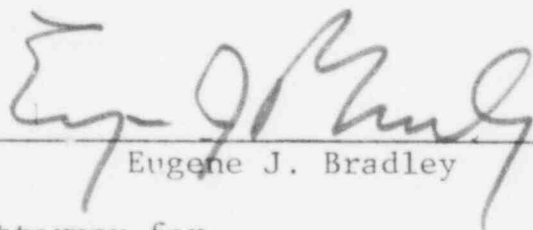
My Commission Expires Jan. 30, 1982

786017



CERTIFICATE OF SERVICE

I certify that service of the foregoing Application was made upon the Board of Supervisors, Peach Bottom Township, York County, Pennsylvania, by mailing a copy thereof, via first-class mail, to Albert R. Steele, Chairman of the Board of Supervisors, R. D. No. 1, Delta, Pennsylvania 17314; upon the Board of Supervisors, Fulton Township, Lancaster County, Pennsylvania, by mailing a copy thereof, via first-class mail, to George K. Brinton, Chairman of the Board of Supervisors, Peach Bottom, Pennsylvania 17563; and upon the Board of Supervisors, Drumore Township, Lancaster County, Pennsylvania, by mailing a copy thereof, via first-class mail, to Wilmer P. Bolton, Chairman of the Board of Supervisors, R. D. No. 1, Holtwood, Pennsylvania 17532; all this 20th day of August, 1979.

A handwritten signature in dark ink, appearing to read "Eugene J. Bradley", is written over a horizontal line.

Eugene J. Bradley

Attorney for  
Philadelphia Electric Company

786018

PBAPS

6.0 Environmental Surveillance and Special Study Programs

Studies described in this section will be terminated upon agreement by Philadelphia Electric Company and the Nuclear Regulatory Commission that the intended purpose of the study has been satisfied.

6.1 Aquatic

6.1.a This Section has been deleted.

PBAPS

Pages 15 through 33  
LEFT BLANK INTENTIONALLY

786020

## PBAPS

collected data will be reviewed and those metal concentrations which are shown not to be significantly affected by plant operation will be eliminated from the program.

### Bases

This study will provide information as to the degree and nature of heavy metal pick-up in the PBAPS circulating water system.

Data from this study will be reported as per Section 7.4.

### 6.3 Physical

6.3.a This section has been deleted.