

LIMERICK GENERATING STATION
UNITS 1 AND 2

1987
ANNUAL ENVIRONMENTAL OPERATING REPORT
(NON - RADIOLOGICAL)

JANUARY 1987 - DECEMBER 1987

FACILITY OPERATING LICENSE NO. NPF-39
DOCKET NOS. 50-352, 50-353

PHILADELPHIA ELECTRIC COMPANY

8805020260 871231
PDR ADOCK 05000352
R DCD

I^E
25/11

1.0 Introduction

This report describes the implementation of the Environmental Protection Plan (EPP) from January 1, 1987, through December 31, 1987.

Provided herein are summaries and results of the environmental protection activities required by Subsection 4.2 of the EPP.

2.0 Environmental Protection Activities

2.1 Aquatic Monitoring

The Environmental Protection Plan states that the NRC will rely on decisions made by the Commonwealth of Pennsylvania, under the authority of the Clean Water Act, for any requirements for aquatic monitoring. Industrial Waste NPDES Permit PA 0051926 dated September 19, 1984, provides the mechanisms for protecting water quality and indirectly aquatic biota.

In accordance with the requirements of Section 3 of the Permit, monitoring results were summarized for each month and reported on Discharge Monitoring Reports which were submitted to the DER and EPA.

2.2. Terrestrial Monitoring

No terrestrial monitoring is required.

2.3 Maintenance of Transmission Line Corridors

Transmission line maintenance records concerning herbicide use are being maintained by the Company's Electric Transmission and Distribution Department. As required by the EPP, these records can be made available to the NRC upon request.

2.4 Noise Monitoring

No noise surveys were required in 1987. The post operational survey for LGS Unit 1 was completed in 1986. Since construction of LGS Unit 2, Point Pleasant, and Bradshaw Reservoir was not completed in 1987, no sound surveys were made.

2.5 Environmental Protection Plan

There were two Environmental Protection Plan (EPP) noncompliances identified by the 1987 EPP Audit by the Quality Assurance Department.

- a. Finding Number AL87-172-01 Identified a failure to take samples from the Plant Outfall and failure to take the required number of samples for chloride analysis on November 13, 1987. In accordance with LGS NPDES Permit PA 0051926 Amendment No. 2. The proper method for obtaining and analyzing discharge samples was reviewed with the balance of plant technicians by their supervisor.
- b. Finding Number AL87-172-02 was issued for failure to sample and analyze treated radwaste discharges for toxic metal and organic pollutants as required by NPDES Permit PA 0051926, Requirement G. A sample was obtained from the floor drain sample tank (last point prior to discharge) and sent offsite for the required analyses.

2.6 Changes In Station Design or Operation, Test, or Experiments

Environmental evaluations were performed for the following changes in the Limerick Generating Station operation. In accordance with the requirements of Section 3.1 of the Environmental Protection Plan, each change includes a brief description, analyses, interpretation, and evaluation.

a. Environmental Evaluation No. 87-1

Environmental Evaluation No. 87-1 assessed the effect of the continuation in 1987 of three temporary changes in plant operation. These involved the withdrawal of water from the Schuylkill River for consumptive use at LGS. The changes were:

1. substitution of instream monitoring of dissolved oxygen levels in place of the 59°F temperature constraint on withdrawals;
2. consumptive use at LGS when consumptive use at Titus Generating Station or Cromby Generating Station was curtailed; and
3. consumptive use at LGS when an equal volume of water was released from Borough of Tamaqua Reservoir upstream of LGS.

The instream monitoring of dissolved oxygen levels was evaluated in 1985 and was summarized in the 1985 Annual Environmental Operating Report. The environmental advantages of directly measuring dissolved oxygen continued to be applicable in 1987. Automatic D.O. monitoring and transmitting facilities, which were installed in 1986, continued to be used.

Use of the Titus/Cromby allocations enhanced the flow in the reach between Titus and Limerick by 3.5 mgd over the amount which would occur if Titus were in operation. On the other hand, the reach downstream of LGS to the Cromby plant was depleted by 1.7 mgd. Because the quantities involved were a very small fraction of existing river flow, the effect on Schuylkill River water quality was determined to be negligible. Environmental monitoring in 1985 and 1986 confirmed the negligible effect on water quality.

The use of water from the Borough of Tamaqua reservoirs provides increased flow of high quality water in 77 miles of stream. Therefore, no water quality problems were expected in 1987.

These changes were also evaluated for their combined effect on impingement and entrainment. Since these changes were made under the same docket condition as in 1986, no significant effects were expected. The 1986 monitoring program found no significant effects.

B. Environmental Evaluation No. E7-2

Environmental Evaluation No. E7-2 assessed the modification of the design of the Bradford Reservoir. The design was modified to preserve an area classified as wetlands by the Corps of Engineers. The area of the reservoir was reduced from a water surface area of 18 acres to 7 acres and capacity was reduced from 70 million gallons to 25 million gallons. On December 30, 1986, the DEP issued Permit No. D09-18A for the modified design.

The reduction in the reservoir's size and capacity will have no significant environmental effects. The rate of flow into the East Branch Perkiomen Creek will be unchanged because there will be no change in the number, size, or plan of operation of the pumps.

The smaller reservoir will increase slightly (from 40% to 50%) the percentage of solids that will pass through the Bradshaw Reservoir. Therefore, the water downstream of the Reservoir will have slightly more suspended solids than under the original design. However, the DER in issuing the NPDES permits for discharges to the East Branch Perkiomen Creek and North Branch Neshaminy Creek will set appropriate limits to assure that all applicable water quality standards will be met for the two streams.

Seepage is expected to be minimal because the modified reservoir will be provided with a two-foot thick impervious blanket liner. Additionally, the smaller area of the modified reservoir will result in reduced total seepage.

None of the changes evaluated in 1987 involved an unreviewed environment question.

2.7 Non-routine Reports Submitted

Two non-routine reports were submitted in accordance with EPP Subsection 5.4.2:

- A. On February 13, 1987 a sanitary sewer line overflowed. The Pennsylvania DER was informed by letter dated February 25, 1987.
- E. An NPDES violation for Average Total Suspended Solids (TSS) at Discharge Point 201 occurred in April. The Pennsylvania DER was informed by letter dated May 28, 1987.

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

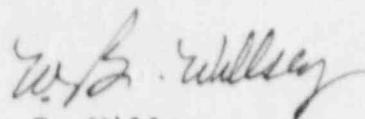
(215) 841-4000

April 27, 1988

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Pursuant to the requirements set forth in Limerick Generating Station Operating License NPF-39; Appendix B, Technical Specifications, Section 5.4.1., we are enclosing one copy of the 1987 Annual Environmental Operating Report (non-radiological) describing the implementation of the Environmental Protection Plan.

Yours truly,



W. B. Willsey
Director
Environmental Affairs

WBW:htr
Attachment

cc: W. T. Russell, Administrator, Region I, USNRC
E. M. Kelly, Senior Resident Site Inspector

TE25
11