

PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION

P. O. BOX 2300

POTTSTOWN, PA 19464-0920

(215) 327-1200, EXT. 3000

GRAHAM M. LEITCH
VICE PRESIDENT
LIMERICK GENERATING STATION

April 15, 1992
Docket Nos. 50-352
50-353
License Nos. NPF-39
NPF-85

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


Subject: Limerick Generating Station, Units 1 and 2
1991 Annual Environmental Operating Report
(Non-Radiological)

Gentlemen:

Attached is the Limerick Generating Station, Units 1 and 2, 1991 Annual Environmental Operating Report (Non-Radiological). This report is being submitted in accordance with Section 5.4.1 of Appendix B of the Facility Operating Licenses, Environmental Protection Plan (EPP) (non-radiological), and describes the implementation of the EPP for 1991.

If you have any questions, please do not hesitate to contact us.

Very truly yours,



KWM,dtc

Attachment

cc: T. T. Martin, Administrator, Region I, USNRC
T. J. Kenny, USNRC Senior Resident Inspector

LIMERICK GENERATING STATION
UNITS 1 AND 2

1991
ANNUAL ENVIRONMENTAL OPERATING REPORT
(NON-RADIOLOGICAL)

JANUARY 1991 - DECEMBER 1991

FACILITY OPERATING LICENSES[®] NOS. NPF-39, NPF-85
DOCKET NOS. 50-352, 50-353

PHILADELPHIA ELECTRIC COMPANY

1. Introduction

This report describes the implementation of the Environmental Protection Plan (EPP) from January 1, 1991 through December 31, 1991.

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 mechanism 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 (DMR) which were submitted to the DER and EPA.

A summary of the results as reported in the monthly DMR's is on Table 1. In addition, studies of corbicula and Zebra mussels, fish impingement on the Schuylkill River intake screens, and water quality sampling and observations at Still Creek and Owl Creek Reservoirs were performed in support of LGS in 1991.

Periodic inspections of the Still Creek and Owl Creek reservoirs and receiving streams revealed no sign of increased erosion, sedimentation, or other environmental damage.

The survey for corbicula and Zebra mussels covered many locations in the Point Pleasant Water Diversion System, the Schuylkill River and Blue Marsh Lake. No Zebra mussels were found, but the range of corbicula in LGS source waters continued to expand over the areas previously known. Living corbicula and/or shells were found in Bradshaw Reservoir, many locations in the Schuylkill River including the vicinity of the LGS

intake, Blue Marsh Lake, the Point Pleasant Pumping Station, the Perkiomen Creek and the East Branch Perkiomen Creek.

The Schuylkill River near LGS was occasionally electrofished to obtain Radiological Environmental Monitoring Programs samples and as part of the Environmental Education program. Biologists observed production of an exceptionally large year class of carp and goldfish correlated with low, stable river flow in the spring and summer.

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 Monitorin

All noise surveys required by the LGS Final Environmental Statement, Section 5.14.4, Atomic Safety Licensing Board (ASLB) ruling LBP-83-11, dated March 8, 1983, and LGS Appendix B Technical Specifications, Sections 2.3 and 4.2.4, were completed in 1990 for Limerick Generating Station Unit 2 operation and Bradshaw Reservoir. These studies were reported on in the 1990 Annual Environmental Operating Report (Non-radiological).

2.5 Environmental Protection Plan

There were two Environmental Protection Plan (EPP) noncompliances identified by the 1991 EPP Audit by the Nuclear Quality Assurance Department.

- a. Corrective Action Request (CAR), Q0001904, identified a failure to provide notification to the NRC of proposed and approved changes to the NPDES permits within the interval required by the EPP. A Common Nuclear Procedure identifying responsibilities and

overall programmatic controls is being developed.

- b. Corrective Action Request, Q0001905, identified a failure to obtain the required number of samples to determine the amount of free available chlorine present from sampling location 001. The CAR was issued closed because corrective actions to prevent a recurrence were agreed upon and verified to have been completed prior to the conclusion of the audit.

2.6 Changes in Station Design on Operation, Tests or Experiments

There were no changes in the Limerick Generating Station operation that required an Environmental Evaluation in accordance with the requirements of Section 3.1 of the Environmental Protection Plan.

2.7 Non-routine Reports Submitted

Ten non-routine reports were submitted in accordance with EPP Subsection 5.4.2. Copies of all letters were supplied to the NRC.

A. Twenty-four Hour Notifications

1. An NPDES violation for unanticipated bypass of the normal cooling tower discharge occurred on May 12, 1991. The PA DER was notified by telephone on May 13, 1991. A notification letter was sent on May 17, 1991.
2. An NPDES violation for discharge temperature from Bradshaw Reservoir occurred on May 28, 1991. The Bucks County Department of Health was notified by telephone on May 28, 1991. A notification letter was sent on June 20, 1991.
3. NPDES violations for discharge temperature from Bradshaw Reservoir occurred on June 29, 1991 and June 30, 1991. The Bucks County Department of Health was notified by telephone on June 29, 1991 and July 1, 1991 respectively for each violation. A notification letter was sent on July 8, 1991.

4. NPDES violations for discharge temperature from Bradshaw Reservoir occurred on July 7, 1991, July 19, 1991 and July 26, 1991 due to electrical storm induced loss of power and on July 21, 1991, July 23, 1991 and July 25, 1991 due to extreme ambient conditions. The Bucks County Department of Health was notified by telephone in accordance with NPDES permit requirements for each occurrence. The 5-day reporting requirement was waived by the Department. A notification letter was sent on August 28, 1991.

B. Other Notifications

1. An NPDES violation for a potential unmonitored effluent release from Discharge Point 003 was identified on February 4, 1991. Discharge Point 003 is permitted for storm water releases only. However a mixture of storm water and steam condensate may have occurred intermittently since January 1985. The DER was notified by letter on March 22, 1991.
2. An NPDES violation for an unpermitted discharge of fire water from stormwater outfall 014 occurred on October 16, 1990. The DER was notified by letter on November 22, 1991.
3. An NPDES violation for release of cooling tower blowdown to Possum Hollow Creek occurred on December 18, 1991. The DER was notified by letter on January 23, 1992.

TABLE 1

YEARLY MEAN AND RANGE OR MAXIMUM (AS APPROPRIATE)
OF PARAMETERS REPORTED IN THE 1991 DISCHARGE
MONITORING REPORTS

| | DISCHARGE NUMBER * | | |
|--------------------------|--------------------|---------------|-----------------|
| | 001 | 201A | 301A |
| INLET TEMP., F | | | |
| maximum | 82 | NR** | NR |
| mean | 60 +/- 26*** | NR | NR |
| DISCHARGE TEMP., F | | | |
| maximum | 92 | NR | NR |
| mean | 75 +/- 19 | NR | NR |
| pH, range | 7.1 - 8.8 | NR | NR |
| FLOW, MGD | | | |
| maximum | 18.6 | 0.69 | NR |
| mean | 11.1 +/- 4.0 | 0.13 +/- 0.03 | 0.019 +/- 0.030 |
| CHLORINE, MG/L | | | NR |
| maximum | 0.06 | NR | |
| range | <0.02 - 0.06 | NR | |
| NALCO 1372, MG/L | | | |
| maximum | 26.8 | NR | NR |
| range | 8.9 - 26.8 | NR | NR |
| TOTAL SUSP. SOLIDS, MG/L | | | |
| maximum | NR | 28.5 | NR |
| mean | NR | 10.6 +/- 4.2 | NR |
| OIL & GREASE, MG/L | | | |
| maximum | NR | 4.1 | NR |
| mean | 0.17 +/- 0.66 | 0.57 +/- 0.65 | NR |

* There were no discharges reported for 1991 from discharge no. 101A

** NR = not reported.

*** Reported as mean +/- 2 s.d.