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Braintree, Massachusetts 02184

E. J. Wagner
Vice President
Nuclear Engineering

January 15, 1992
BECo 5.92-008

NPDES Program Operations Section (WCP)
Environmental Protection Agency
P. O. Box 8127
Boston, MA 02114

Massachusetts Division of Water Pollution Control
Lakeville Hospital
Lakeville, MA 02346

DISCHARGE MONITORING REPORT

Dear Sirs:

Enclosed is the Discharge Monitoring Report for Pilgrim Nuclear Power Station (PNPS), NPDES Permit Number MA0003557 (Federal) and Number 359 (State).

The period covered by this report is December 1991.

E. J. Wagner

RDA/cab/6438

Attachments: 1. Summary
2. Discharge Monitoring Report

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

U. S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Senior NRC Resident Inspector
Pilgrim Nuclear Power Station

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ATTACHMENT 1 TO BECO LETTER 5.92-008

SUMMARY

PILGRIM I DISCHARGE MONITORING REPORT

In accordance with the Federal Clean Water Act, as amended (33USC 1251 et seq: the "CWA"), and the Massachusetts Clean Water Act, as amended (M.G.L.; Chap. 21, 26-53), regarding effluent limitations, monitoring requirements and other conditions set forth in the Pilgrim NPDES Permit (Federal Permit Number MA0003557, and State Permit Number 359), parts I and II. the following information is submitted for the period December 1991.

I. Discharge Points Covered in this Report

Discharge Point	Discharge Identification
001	Condenser Cooling Water
002	Thermal Backwash for Biofouling Control
003	Intake Screen Wash
004, 005, 006, and 007	Yard Drains (April and September)
010	Service Cooling Water
011	Makeup Water and Demineralizer Waste Discharge

II. Summary and Notes of Discharge Report

A. The flow at points 001 and 010 are calculated from system pump capacity and are equal to the total for all pumps in each system running at full capacity for a 24-hour period. The flow at point 011 is measured by noting sump levels before and after discharge. Flow at point 002 is a conservative figure obtained by calculating flow if backwashing took place for 24 hours. Flow at point 003 is calculated from system pump capacity and mean operating time.

B. The temperatures at points 001 and 002 are measured by resistance temperature detectors (RTD's).

C. Periodically, total residual chlorine (TRC) concentration in the service cooling water (010) exceeds Permit requirements (0.50 ppm daily average TRC and 1.00 ppm daily maximum TRC) prior to mixing with any other stream, primarily because of the number of service water pumps in operation. Chlorine injection levels are lowered as a corrective measure. The dilution provided by the PNPS circulating water flow keeps total residual chlorine concentrations discharged to Cape Cod Bay below the NPDES Permit limit of 0.1 ppm.

D. Intake traveling water screens were operated with dechlorination pumps operating.

E. Sawdust was applied to seek and seal PNPS condenser leaks on December 1 (960 pounds), 2 (1,000 pounds), 3 (200 pounds), 10 (1,280 pounds), 12 (520 pounds), 13 (800 pounds), 15 (600 pounds) and 17 (360 pounds) 1991.

F. The following boron and sodium nitrite discharges (ppm) occurred in December 1991 from discharge point #001. All discharges were below NPDES Permit limits prior to entering Cape Cod Bay.

Date Discharged	Gallons Discharged	Concentration Before Discharge	Concentration Discharged
		Boron	
12/10	13,026	0.11	<0.001
12/14	12,692	<0.05	<0.001
12/28	12,024	0.09	<0.001
		Sodium Nitrite	
12/10	13,026	20.0	0.026
12/14	12,692	<20.0	<0.026
12/28	12,024	24.4	0.032

G. On December 10, 1991 a telephone call (BECo Telecon 4.91.031) was made to USEPA to inform them of a discharge, residual chlorine concentration violation between 1235 and 1305 on 12/8/91. The discharge chlorine limit of 0.1 ppm was exceeded for a total of 30 minutes during this period with a maximum of 0.22 ppm being recorded.

H. The Pilgrim Station 1992 Environmental Monitoring, Thermal Discharge Fish Surveillance, and Dissolved Nitrogen Saturation Reduction Program and Plans were submitted to the USEPA and Mass. Div. of Water Pollution Control on December 16, 1991 in conformance with the NPDES Permit #MA0003557 (BECo Letter 5.91.121).

ATTACHMENT 2 TO BECO LETTER 5.92-008

DISCHARGE MONITORING REPORT