

OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Nonroutine Environmental Operating Report No. 50-219 82-3

Report Date

May 20, 1982

Occurrence Date

April 30, 1982

Identification of Occurrence

Exceeding a limiting condition as defined in the Environmental Technical Specifications, paragraph 2.1.4.3, when an insufficient number of dilution pumps were in operation as specified in paragraph 2.1.4.2. Less than two dilution pumps were operating for greater than 15 minutes, and ambient water temperature was less than 60°F.

This event is considered to be a Nonroutine Environmental Operating Report as defined in the Technical Specifications, Appendix "B", Paragraph 5.6.2.

Conditions Prior to Occurrence

Steady State Power

Dilution Pump Flow 5.20 E5 GPM

Circulating Water
Pump Flow 3.45 E5 GPM

Dilution Pump 1-1 out of service for maintenance.

Prior to the occurrence, the ambient water temperature in the intake canal was 57.0°F. The condenser discharge water temperature was 73.7°F and the U.S. Route 9 Discharge Bridge temperature was 64.3°F.

Description of Occurrence

At 0957 hours on April 30, 1982, dilution pump 1-2 tripped off, leaving only dilution pump 1-3 in service. Dilution pump 1-2 was returned to service at 1150 hours on April 30, 1982.

At 1243 hours on April 30, 1982, dilution pump 1-2 tripped off, leaving only dilution pump 1-3 in service. Dilution pump 1-2 was returned to service at 1312 hours on April 30, 1982.

At 1417 hours on April 30, 1982, dilution pump 1-2 tripped off because of low oil flow, leaving only dilution pump 1-3 in service. Dilution pump 1-2 was returned to service at 1505 hours on April 30, 1982.

At 1545 hours on April 30, 1982, dilution pump 1-2 tripped off, leaving only dilution pump 1-3 in operation. Dilution pump 1-2 was returned to service at 1715 hours on April 30, 1982.

At 1715 hours on April 30, 1982, dilution pump 1-3 was taken out of service to correct a seal water flow problem, leaving only dilution pump 1-2 in operation. Dilution pump 1-3 was returned to service at 2100 hours on April 30, 1982.

At 2100 hours on April 30, 1982, dilution pump 1-2 was taken out of service to make an adjustment on the calibration flow switch, leaving only dilution pump 1-3 in service. Dilution pump 1-2 was returned to service at 2320 hours on April 30, 1982.

Analysis of Occurrence

The continuous operation of the dilution pumps is required to maintain water temperatures within the specified limiting conditions. The objective of operating the dilution pumps in the prescribed manner is to minimize the occurrence of adverse biological effects in Oyster Creek and contiguous waters. Since the operation of an insufficient number of dilution pumps was of limited duration, there were no harmful marine biological effects observed.

Corrective Action

- 0957-1150 hours: Pump 1-2 was restarted immediately after the lube oil system was flushed.
- 1243-1312 hours: Immediate corrective action involved restarting dilution pump 1-2.
- 1417-1505 hours: Pump 1-2 was restarted once the proper oil flow was restored.
- 1545-1715 hours: Immediate corrective action involved restarting dilution pump 1-2.
- 1715-2100 hours: Corrective action involved cleaning the seal water strainer in order to restore proper seal water flow, then restarting pump 1-3.
- 2100-2320 hours: Immediate corrective action involved restarting dilution pump 1-2 after a calibration flow switch was adjusted.

Long term corrective action: the company has committed to a total dilution pump improvement program designed to improve their reliability and operability. This includes upgrading of the dilution pump seal water and lubricating oil cooling water systems, pipe line strainers, pipe and heat tracing and overhaul of dilution pumps. Orders have been placed for the necessary parts, with delivery occurring in advance of the start of the next refueling outage. In addition, a monitoring system will be installed that will specifically identify the cause of the pump trips in order to effectively plan maintenance.