

OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Nonroutine Environmental Operating Report No. 50-219 82-1

Report Date

May 20, 1982

Occurrence Date

April 17, 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 the 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

Increasing Power

Dilution Pump Flow 2.60 E5 GPM

Circulating Water
Pump Flow 4.60 E5 GPM

Dilution Pump 1-1 out of service for maintenance.

Prior to the occurrence, the ambient water temperature in the intake canal was 57.5°F. The condenser discharge water temperature was 63.0°F and the U.S. Route 9 Discharge bridge temperature was 60.5°F.

Description of Occurrence

At 0656 hours on April 17, 1982, the reactor scrammed. Prior to the reactor scram, dilution pumps 1-2 and 1-3 were operating. Reactor start-up occurred at 2145 hours on April 17, 1982, with only one dilution pump (#1-2) operating. A second dilution pump (#1-3) was not placed in service until 0825 hours on April 18, 1982.

Apparent Cause of Occurrence

Procedural inadequacy. Procedure 201.1 entitled "Approach to Critical" specifies that dilution pump(s) be put in service during reactor start-up. However, it gives no guidelines regarding the necessity of having two dilution pumps in operation when ambient water temperature is less than 60°F or water temperature exceeds 87°F at the U.S. Route 9 Bridge at Oyster Creek

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

Immediate corrective action involved putting dilution pump 1-3 in operation.

In addition, Procedure 201.1 (Approach to Critical) has been revised such that it specifies that two dilution pumps shall be put into service prior to reactor start-up when water temperature at the U.S. Route 9 Bridge exceeds 87°F or ambient water temperature is less than 60°F.

Long term corrective action also involves a total dilution pump improvement program designed to improve the reliability and operability of the pumps per a submittal to the Nuclear Regulatory Commission on July 1, 1981. This improvement program includes upgrading of the dilution pump seal water and lubricating oil cooling water systems, pipe line strainers, pipe and heat tracing and overhaul of the dilution pumps. Material orders have been placed for the necessary parts, with delivery dates 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 pump trips in order to effectively plan maintenance.