

GPU Nuclear

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Writer's Direct Dial Number:

September 27, 1982

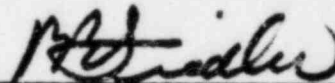
Mr. Ronald C. Haynes, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Haynes:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report
Reportable Occurrence No. 50-219/82-48/03L

This letter forwards three copies of a Licensee Event Report to report Reportable Occurrence No. 50-219/82-48/03L in compliance with paragraph 6.9.2.b(2) of the Technical Specifications.

Very truly yours,



Peter B. Fiedler
Vice President and Director
Oyster Creek

PBF:lse
Enclosures

cc: Director (40 copies)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Director (3)
Office of Management Information and
Program Control
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

NRC Resident Inspector
Oyster Creek Nuclear Generating Station
Forked River, NJ 08731

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OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Licensee Event Report
Reportable Occurrence No. 50-219/82-48/03L

Report Date

September 27, 1982

Occurrence Date

August 26, 1982

Identification of Occurrence

Violation of Technical Specification 3.1.A, when the reactor water level instrumentation for one channel in each Reactor Protection System and one channel in each of several safety systems were rendered inoperable as a result of the loss of reference column head.

This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.b(2).

Conditions Prior to Occurrence

The plant was shutdown with the reactor vessel vented. Reactor coolant temperature was being maintained at less than 212°F.

Description of Occurrence

On August 28, 1982 at 4:30 AM, a ten inch reactor water level error was entered into the shutdown logs. Approximately four hours later, the instrument error increased another ten inches which represented 100% of full scale or vessel high water level. All other level instrumentation indicated normal reactor water level. At 2:30 PM, the instrument reference leg was back-filled to correct the level error. A close observation of four sensors was maintained for a day and one half with no evidence of level error. Valve alignment was checked with attention given to the bypass valves; local piping was also observed for leakage, but none was evident.

A calculation was performed to determine the leak rate required to reduce the reference leg by approximately twenty-one and three quarter inches (21-3/4"). Assuming ten inches (10") or 27.7 cc of water was lost in four hours (taken from log readings) from the reference leg piping, the leak rate would be .12 cc/min. The volume of the constant head chamber is 168 cc. To evacuate this chamber at the constant rate of .12 cc/min. or 2.3 drops/min would take 24 hours and 15 minutes. It would take 8 hours to drain 20 inches of reference leg piping and an additional 116 hours and 15 minutes to drain the constant head reserve chamber, for a total of 148 hours and 30 minutes to reach the as-found level. A review of various logs indicated that no maintenance or surveillance tests had been performed on the sensors or piping in question during this time. The last surveillance test was performed on August 6, 1982, nine days prior to plant shutdown, and nineteen days prior to the error event.

It should be noted that there are no piping connections with other systems and the affected water level reference leg. This was confirmed, at an earlier date, by a hand over hand walkdown of the instrument sensor piping.

Apparent Cause of Occurrence

The cause of the erroneous vessel water level reading was a decrease in reference leg head.

Analysis of Occurrence

The reactor water level instruments in question provide various reactor protection and safety system functions associated with reactor scram, core spray initiation, isolation condenser initiation and ATWS recirculation pump trip. Redundant instrumentation, which was operable, also provides these functions; and, since the Reactor was shutdown, vented and reactor coolant was less than 212°F, the safety significance of this event is considered minimal. During power operation, steam condensing in the constant head chamber provides continuous make-up to the reference leg thereby preventing erroneous high readings. Additionally, it should be noted that no change in actual reactor water level occurred as a result of this event.

Corrective Action

The reference leg for the affected level instruments was backfilled which restored it to an operable condition. As stated above, in response to a similar incident, a hand over hand walkdown of the reference leg piping for proper configuration together with a check of the instrumentation connected to the reference leg was performed with no abnormalities noted. A program will be developed in an attempt to determine the cause for the loss of reference leg.