OYSTER CREEK **NUCLEAR GENERATING STATION**

JCP&L / GPU

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March 6, 1981

Mr. Boyce H. Grier, Director
Office of Inspection and Enforcement
Region I
United States Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report
Reportable Occurrence No. 50-219/80-62/3L-1

This letter forwards three copies of a Licensee Event Report to report Reportable Occurrence No. 50-219/80-62/3L-1 in compliance with paragraph 6.9.2.b(2) of the Technical Specifications.

This report supplies additional information concerning the failure of "A" Control Rod Drive pump. The original report was submitted to the NRC by letter dated January 16, 1981, Re: Reportable Occurrence No. 50-219/80-62/3L.

Very truly yours,

J. T. Carroll Jr. for

Ivan R. Finfrock, Jr.
Vice President - JCP&L
Director - Oyster Creek

Enclosures

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

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

NRC Resident Inspector (1)
Oyster Creek Nuclear Generating Station
Forked River, N.J.

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OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Licensee Event Report
Reportable Occurrence No. 50-219/80-62/3L-1

Report Date

March 6, 1981

Occurrence Date

December 18, 1980

Identification of Occurrence

Operation in a degraded mode permitted by a limiting condition for operation per Technical Specifications, section 3.4.D.2 when Control Rod Drive (CRD) Hydraulic Pump NC08A failed in service.

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 operating at steady state. Major plant parameters at the time of occurrence were:

Power:	Core	1837MWt
	Electrical	610MWe
Flow:	Recirculation	15.5×10^4 gpm
	Feedwater	6.8×10^6 lb/hr

Description of Occurrence

On Thursday, December 18, 1980, at approximately 1900 hours the operating CRD Hydraulic Pump NC08A failed as indicated by alarms and decreasing pressure indications on Control Room Instrumentation. The operators immediately started the standby CRD pump, restoring the system to normal.

Following repairs, CRD pump NC08A was returned to service on December 22, 1980, at approximately 1300 hours; however, at 1800 hours the pump again failed, requiring the operators to start the standby pump. The pump motor was then replaced with a spare and CRD pump NC08A was returned to service at about 1:00 a.m. on December 24, 1980.

Apparent Cause of Occurrence

A visual inspection of the CRD pump following the initial failure indicated that the pump motor had failed. Further investigation revealed that the pump shaft had failed at a point outboard of the balancing disc, which resulted in motor overheating, causing it to trip on overload.

Following repairs and after being returned to service, the pump failed after approximately 5 hours of operation. Initial meggar readings following this failure indicated zero resistance to ground, confirming a motor failure. Due to the apparent extensive damage to the motor, it is unlikely that the exact cause of failure can be determined.

Analysis of Occurrence

The CRD pump supplies control rod drive cooling and accumulator charging pressure; and, in addition, provides the high pressure coolant injection capability. For break sizes up to .002 sq. ft., the flow from a single CRD pump will maintain the reactor water level above the core, thus alleviating the need for auto-relief valve actuation. Since the redundant pump remained operable while repairs were made, the safety significance of this event is considered minimal.

Corrective Action

After the initial failure, the pump was rebuilt with all new components, and the pump motor was cleaned, inspected, and revarnished since initial meggar readings indicated near infinite resistence to ground. Meggar readings following maintenance yielded the following results:

Meggar (Phase to ground)	Phase A: near infinite Phase B: near infinite Phase C: near infinite
Bridge (Phase to phase)	AB: 0.45 ohms BC: 0.45 ohms CA: 0.455 ohms

Following the second failure of the CRD pump, the motor was replaced with a spare and returned to service after completion of an operability check.

Failure Data

Pump

Worthington Pump Corp.
Type 2WTF810 Diffuse type centrifugal pump
Serial #1613735

Motor

General Electric
Custom 8000 Horizontal Induction Motor
Model #5K814316A72
Serial #LB-8358387