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March 4, 1983

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Re: Oconee Nuclear Station
Docket No. 50-269

Dear Mr. O'Reilly:

Please find attached Reportable Occurrence Report RO-270/83-01. This report is submitted pursuant to Oconee Nuclear Station Technical Specification 6.6.2.1.b(2) which concerns operation in a degraded mode permitted by a limiting condition for operation, and describes an incident which is considered to be of no significance with respect to its effect on the health and safety of the public.

Very truly yours,

H. B. Tucker / BT

Hal B. Tucker

PFG/php
Attachment

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

INPO Records Center
Suite 1500
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Mr. J. C. Bryant
NRC Resident Inspector
Oconee Nuclear Station

Mr. E. L. Conner, Jr.
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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Duke Power Company
Oconee Nuclear Station

Report Number: RO-270/83-01

Report Date: March 4, 1983

Occurrence Date: February 3, 1983

Facility: Oconee Unit 2, Seneca, South Carolina

Identification of Occurrence: The 2A High Pressure Injection (HPI) Pump was taken out of service and declared inoperable due to a high motor bearing temperature.

Conditions Prior to Occurrence: 100% Full Power

Description of Occurrence: On February 3, 1983, Unit 2 Control Room personnel received a computer alarm on the 2A HPI pump lower motor bearing. The alarm was an indication of high temperature of 185°F. Concurrent with this alarm, Control Room operators received a fire alarm for zone F-1, which is the Units 1 and 2 HPI room. Operators immediately took action to start the 2B HPI pump. However, it took three attempts to start the 2B pump. After the 2B pump was started, the 2A pump was secured.

Apparent Cause of Occurrence: Inspection of the HPI room revealed a smoky haze in the air apparently related to the fire alarms. Also noted was a light film of oil on the floor with some puddled accumulation in the low spots of the floor. This amount of oil was more than that normally found during rounds. Thus, the apparent cause of the high bearing temperature was a loss of oil due to leakage, and the cause of the incident is classified as component failure.

Analysis of Occurrence: Three HPI pumps are required to be operable when a reactor is above 60 percent power. This provides one pump as redundant to the other two. The reason is based on a small break LOCA on the discharge of a reactor coolant pump, which would require at least two HPI pumps to provide adequate core cooling. A degraded mode is allowed for a period of 72 hours due to the low probability of this type of break. The 2B HPI pump was running and the 2C pump was always operable; therefore, the required number of pumps were always available.

When the 72 hours expired, the unit reduced power to below 60 percent where only one pump is required to provide adequate core cooling in the event of the same accident. Therefore, the health and safety of the public were never endangered by this occurrence.

Corrective Action: Upon receiving the high bearing temperature alarm the 2B HPI pump was started prior to securing the 2A HPI pump. The required power reduction began on February 6, 1983 reducing unit power to 58 percent. The unit remained below 60 percent full power until the 2A pump motor was replaced and declared operable.

All other eight HPI pump motors were inspected for oil level and oil was added to three other motors. An indexing tool was manufactured and is currently being used to measure the proper oil level in all HPI pumps once per shift. A modification is planned to change out the existing sightglasses with longer sightglasses. In addition, the mechanical maintenance section has committed to reviewing all safety related pumps with oil sightglasses to verify that oil levels are properly indicated.

Steps were taken to investigate and repair the control switch to the 2B HPI pump. The investigation included a complete string check of the normal manual control switch, continuity was verified, and no additional problems could be found. It is possible that the switch contacts were dirty causing the circuit to be incomplete for a brief period. This work request will be held open until a new switch is installed. New switches have been ordered.