REGION DUKE POWER COMPANY P.O. BOX 33189 CHARLOTTE, N.C. 28242 . 01A Marta P. 15 1983

HAL B. TUCKER VICE PRESIDENT NUCLEAR PRODUCTION

TELEPHONE (704) 373-4531

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

Subject: Oconee Nuclear Station Docket No. 50-287

Dear Mr. O'Reilly:

Please find attached Reportable Occurrence Report RO-287/83-01. This report is submitted pursuant to Oconee Nuclear Station Technical Specification 6.6.2.1.a(2) which concerns an operation subject to a limiting condition for operation which was less conservative than the least conservative aspect of the limiting condition for operation established in the Technical Specifications, 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. Tuchan 1-100

Hal B. Tucker

PFG/php Attachment

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

> Mr. J. C. Bryant NRC Resident Inspector Oconee Nuclear Station

> INPO Records Center Suite 1500 1100 Circle 75 Parkway Atlanta, Georgia 30339

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-287/83-01

Report Date: March 9, 1983

Occurrence Date: February 23, 1983

Facility: Oconee Unit 3, Seneca, South Carolina

Identification of Occurrence: The High Pressure Injection (HPI) train 3A was found to be inoperable due to a blown control power fuse for valves 3HP-24 and 3HP-26.

Conditions Prior to Occurrence: Oconee 3 100% Full Power

Description of Occurrence: On February 23, 1983 a computer alarm indicated a problem on Valves 3HP-24 and 3HP-26. Upon investigation, it was discovered that the power control fuses for these two valves were blown. 3HP-24 is the A train HPI suction valve to the Borated Water Storage Tank (BWST). 3HP-26 is the A train HPI injection valve to the A loop of the Reactor Coolant System (RCS). Both valves are Engineered Safeguards (ES) valves. With the control power fuse blown on each valve, this rendered the A train of HPI inoperable, at which time power reduction was started.

Apparent Cause of Occurrence: The cause of this incident was a component failure and a design deficiency. While attempting to change out a lightbulb in 3HP-24 switch, a short circuit occurred causing the control power fuse for 3HP-24 to blow. While personnel were preparing to replace the blown fuse, the bulb for 3HP-26 was replaced. When inserted the bulb shorted causing the control power fuse for 3HP-26 to blow. These types of bulbs need to be inserted perfectly straight into the socket or there is a possibility of shorting the switch causing the power control fuse to blow and thus rendering the valve inoperable.

<u>Analysis of Occurrence</u>: During the time that 3HP-24 and 3HP-26 were inoperable, the alternate train was both operable and available. In addition, an operator was stationed at 3HP-24 to manually open the valve should the need arise and 3HP-410 (A train injection bypass), which bypasses 3HP-26, was always operable and available. Therefore, sufficient HPI flow would be available in the unlikely event of a major RCS failure occurring during the time period that 3HP-24 and 3HP-26 were inoperable. Thus, the health and safety of the public were not compromised by this incident.

<u>Corrective Action</u>: The immediate corrective action was to investigate and repair the cause of the computer alarms, and to replace the blown fuses. New bulbs were also installed into the appropriate switches. In addition, the operators began power reduction when it was determined that the A HPI train was inoperable. Appropriate Operations personnel will review this incident.