



DUKE POWER COMPANY

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HAL B. TUCKER

VICE PRESIDENT  
NUCLEAR PRODUCTION

83 OCT 11 P 1:51  
September 30, 1983

TELEPHONE  
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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-269/83-16. 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*  
Hal B. Tucker

JCP/php

Attachment

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

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

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

Mr. John F. Suermann  
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-269/83-16

Report Date: September 30, 1983

Occurrence Date: September 2, 1983

Facility: Oconee Units 1, 2, and 3, Seneca, South Carolina

Identification of Occurrence: Hydrogen Purge Unit Inoperable Due to Damaged Flow Instrument

Conditions Prior to Occurrence:

Oconee 1:	65%
Oconee 2:	100%
Oconee 3:	100%

Description of Occurrence: On September 2, 1983, at approximately 1130 hours, while performing an in-place system test for the Hydrogen Purge System, the discharge flow instrument (FT-100) for the Hydrogen Purge Unit (HPU) was damaged. The flow instrument is considered essential auxiliary equipment for testing and operation of the HPU; therefore, the Hydrogen Purge Unit was declared inoperable. This constituted a degraded mode of operation permitted by Technical Specification 3.16.

The in-place system test of the HPU required one to demonstrate that under simulated emergency conditions the system can be taken from storage and placed into operation within 48 hours. While moving the HPU from its storage location on the turbine floor to the Penetration Room it acquired a hole in the transmitter box, and the tubing that connects the box to the flow rotometer was bent sufficiently to prevent either local or remote flow indication.

Apparent Cause of Occurrence: The damage appears to have been caused while moving the HPU through the door to the Penetration Room. The narrow maneuvering space available and the weight of the HPU made this effort more difficult. The HPU contacted a logbook platform, thus causing the damage. This occurrence was caused by personnel error in that the responsible supervisor did not take adequate measures to prevent a collision that resulted in damaging FT-100.

Analysis of Occurrence: Per the Oconee Final Safety Analysis Report, the Reactor Building Hydrogen Purge System is designed to prevent the hydrogen concentration in the Reactor Building from exceeding 3.5 percent by volume following a loss of coolant accident (LOCA) or a maximum hypothetical accident (MHA). For radiological reasons the HPU is not started until this concentration is reached, which is approximately 780 hours (33 days) for a LOCA or 620 hours (26 days) for a MHA.

The HPU was returned to operable status (in approximately 36 hours), long before the system would have been needed. Also, sufficient time would have been available for the Hydrogen Recombiner to be installed and used as the preferred method of hydrogen control. Therefore, the health and safety of the public were not affected by this incident.

Corrective Action: Repairs to the discharge flow instrument, FT-100, were completed on September 3, 1983 at 1630 hours. At 2335, the HPU passed its performance test and was declared operable, approximately 36 hours after it was made inoperable. This was well within the seven day period allowed by Technical Specifications to return to operable status. It has been emphasized to the responsible personnel of the importance of taking necessary precautions in the performance of assigned tasks. The Hydrogen Purge Unit will be relocated near the Hydrogen Recombiner when permanent hookups on each unit have been installed. The anticipated completion date for this is January 1, 1985.