

**Regulatory Docket File**

DUKE POWER COMPANY  
POWER BUILDING  
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28201

A. C. THIES  
SENIOR VICE PRESIDENT  
PRODUCTION AND TRANSMISSION

P. O. Box 2178

July 1, 1974

Mr. Angelo Giambusso  
Deputy Director for Reactor Projects  
Directorate of Licensing  
Office of Regulation  
U. S. Atomic Energy Commission  
Washington, D. C. 20545

Re: Oconee Unit 1  
Docket No. 50-269

Dear Mr. Giambusso:

Pursuant to Sections 6.2 and 6.6.2 of the Oconee Nuclear Station  
Technical Specifications, please find attached Abnormal Occurrence  
Report AO-269/74-10.

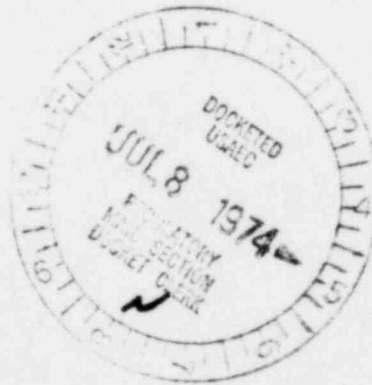
Very truly yours,



A. C. Thies

ACT:vr  
Attachment

cc: Mr. Norman C. Moseley



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DUKE POWER COMPANY  
OCONEE UNIT 1

Report No.: AO-269/74-10

Report Date: July 1, 1974

Occurrence Date: June 21, 1974

Facility: Oconee Unit 1

Identification of Occurrence: Gaseous release during LDST sampling

Conditions Prior to Occurrence: Steady-state operation at 100 percent power

Description of Occurrence:

On June 21, 1974, Oconee Units 1 and 2 were at 100 percent power. After a technician obtained a sample from the letdown storage tank (LDST) gas space, radiation monitors in the Auxiliary Building alarmed or indicated higher-than-normal levels. The personnel assembly alarm was sounded and the Auxiliary Building was evacuated. Valves in the Unit 1 waste disposal sample hood were closed and the leak apparently stopped. Soon afterwards the radiation levels returned to normal and the Auxiliary Building was cleared for entry.

Regulatory Operations, Region II, was verbally notified of the occurrence on June 21, 1974.

Designation of Apparent Cause of Occurrence:

The occurrence resulted, following the correct, routine sampling of the LDST, due to leakage from the sampling system. Gas from the sampling system is discharged into the Gaseous Waste Disposal System (GWD) as shown in the attached figure. This piping configuration apparently allowed gaseous activity to leak around the shaft of the waste gas exhauster into the Auxiliary Building.

Analysis of Occurrence:

The amount of radioactive material released to the atmosphere was calculated based on changes in volume and pressure in the LDST and assuming that all the material that left the LDST was released to the atmosphere. It was calculated that a maximum of 144 Ci was released; 99 percent of this activity was attributed to Xe-133. The release rate was approximately  $1 \times 10^{-2}$  Ci/sec, which is 13 percent of the maximum release rate of  $8.4 \times 10^{-2}$  Ci/sec per Technical Specification 3.10.3. The maximum exposure to any one man was 25 mRem; as read from the dosimeter of the technician involved. A whole body count showed that the technician had absorbed 0.014  $\mu$ Ci of Xe-135 and 0.416  $\mu$ Ci of Xe-133. Because the maximum release rate was not exceeded

and personnel exposure was less than occupational limits, it is concluded the occurrence did not adversely affect the safe operation of the unit or the health and safety of the public.

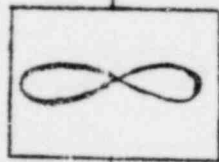
Corrective Action:

A leak test will be performed on the sampling system to verify that gas did indeed leak from the waste gas exhauster. Necessary modifications will be instituted prior to returning the sampling system to service.

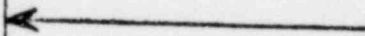
TO UNIT VENT



GWD-7



WASTE GAS EXHAUSTER



LDST GAS  
SAMPLE LINE



GWD-6