

DUKE POWER COMPANY
OCONEE UNIT 2

Report No.: RO-270/76-1

Report Date: January 22, 1976

Occurrence Date: January 10, 1976

Facility: Oconee Unit 2, Seneca, South Carolina

Identification of Occurrence: Unidentified reactor coolant leakage exceeding 1 gpm.

Conditions Prior to Occurrence: Unit at 100% full power.

Description of Occurrence:

On January 10, 1976, surveillance testing was performed to determine the Reactor Coolant System leakage for Oconee Unit 2. A system leakage greater than 1 gpm, the maximum unidentified reactor coolant leakage as stated in Oconee Technical Specification 3.1.6.2, was detected. Within approximately 13 hours, the leakage was determined to be in an area of the Reactor Building which is inaccessible during reactor operation. A reactor shutdown was begun to facilitate inspection in these areas. Further investigation traced the leakage to an upper instrument root valve to pressurizer level transmitter LT-1. Within a total elapsed time of 19 hours following the initial determination of leakage, reactor shutdown was completed, and coolant leakage was reduced to allowable limits by isolating the pressurizer level transmitter and closing the root valve.

Apparent Cause of Occurrence:

This incident was apparently caused by a packing leak on an upper instrument root valve to pressurizer level transmitter LT-1.

Analysis of Event:

Estimated leakage during this incident was approximately 3 gpm. The leakage was contained inside the Reactor Building and did not present a problem in respect to in-plant radioactivity and contamination. The amount of leakage was well within the capacity of the Radioactive Waste Treatment System to handle, and the amount of make-up necessary to the primary system was well within the capacity of the High Pressure Injection System. Also, the leakage did not exist through a non-isolable fault in a reactor coolant strength boundary. It is concluded that the health and safety of the public was not affected by this incident.

8001140 692

RO-270/76-1
January 21, 1976
Page 2

Corrective Action:

Pressurizer level transmitter LT-1 was isolated, and the leaking root valve was closed to stop the leakage. The valve packing will be repaired during a subsequent reactor outage. In the meantime, pressurizer level will be monitored during operation by two additional back-up pressurizer level transmitters.