DUKE POWER COMPANY OCONEE UNIT 3

Report No.: RO-287/77-1

Report Date: February 15, 1977

Occurrence Date: January 26, 1977

Facility: Oconee Unit 3, Seneca, South Carolina

Identification of Occurrence: Reactor Building containment isolation valve

3RC-7 inoperable

Conditions Prior to Occurrence: Unit at 100 percent full power

Description of Occurrence:

On January 26, 1977, while performing a channel 5 and 6 Engineered Safeguards (ES) on-line test, Reactor Building containment isolation valve 3RC-7 failed to close. This valve is located in the pressurizer sample line and is required to close upon receiving an ES actuation signal in order to assure containment integrity. Valve 3RC-7 was isolated within one and one-half hours by locking closed the redundant isolation valves 3RC-5 and 3RC-6, pursuant to Oconee Technical Specification 3.6.4.b.2.

Apparent Cause of Occurrence:

Investigation revealed that two circumstances could have resulted in the malfunction of valve 3RC-7. The failure could have been related to maintenance performed on the valve on January 2, 1977. The maintenance was minor and consisted of adjusting the valve packing; however, the valve was not cycled after the adjustment as required by the maintenance procedure. Also, paint was discovered on the valve stem which could have prevented the valve from functioning properly.

Analysis of Occurrence:

Valve 3RC-7 was properly isolated in compliance with Oconee Technical Specification 3.6.4(b)(2) by securing the redundant valves, 3RC-5 and 3RC-6, in the closed position. In the event that containment integrity had been required, the redundant isolation valves were available to close upon an ES actuation. It is concluded that the health and safety of the public were not affected.

Corrective Action:

The valve stem was cleaned and lubricated and the valve packing was loosened. The valve was cycled several times and functioned properly. This occurrence was discussed with the personnel involved and the deficiency in their actions identified. Also, all maintenance personnel will review this incident to assure that maintenance procedures are followed properly.