



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Enclosure

SAFETY EVALUATION
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
GENERIC LETTER 83-28, ITEMS 3.1.3 AND 3.2.3
POST-MAINTENANCE TESTING FOR REACTOR TRIP
SYSTEM COMPONENTS AND ALL OTHER SAFETY-RELATED COMPONENTS
DUKE POWER COMPANY
OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3
DOCKETS NOS. 50-269, 50-270 AND 50-287

1.0 Introduction

On February 25, 1983, both of the scram circuit breakers at Unit 1 of the Salem Nuclear Power Plant failed to open upon an automatic reactor trip signal from the reactor protection system. This incident occurred during the plant start-up and the reactor was tripped manually by the operator about 30 seconds after the initiation of the automatic trip signal. The failure of the circuit breakers has been determined to be related to the sticking of the under voltage trip attachment. Prior to this incident, on February 22, 1983, at Unit 1 of the Salem Nuclear Power Plant, an automatic trip signal was generated based on steam generator low-low level during plant start-up. In this case, the reactor was tripped manually by the operator almost coincidentally with the automatic trip. Following these incidents, on February 28, 1983, the staff started to investigate and report on the generic implications of these occurrences at Unit 1 of the Salem Nuclear Power Plant. The results of the staff's inquiry into the generic implications of the Salem unit incidents are reported in NUREG-1000, "Generic Implications of ATWS Events at the Salem Nuclear Power Plant." As a result of this investigation, the NRC requested (by Generic Letter 83-28 dated July 8, 1983) all licensees of operating reactors, applicants for an operating license, and holders of construction permits to respond to certain generic concerns. These concerns are categorized into four areas: (1) Post-Trip Review, (2) Equipment Classification and Vendor

Interface, (3) Post-Maintenance Testing, and (4) Reactor Trip System Reliability Improvements. This Safety Evaluation addresses items 3.1.3 and 3.2.3 only.

2.0 Review Guidelines

Item 3.1.3 (Post-Maintenance Testing of Reactor Trip System(RTS) Components) requires that licensees and applicants identify, if applicable, any post-maintenance test requirements for the RTS in existing Technical Specifications which can be demonstrated to degrade rather than enhance safety. Item 3.2.3 extends this same requirement to include all other safety-related components. Any proposed Technical Specification changes resulting from this action shall receive a pre-implementation review by the NRC.

The November 4, 1983 submittal for Oconee was reviewed to determine compliance with items 3.1.3 and 3.2.3 of the Generic Letter. First, the submittal was reviewed to determine that these two items were specifically addressed. Second, the submittal was checked to determine if there were any post-maintenance test items specified by the Technical Specifications that were suspected to degrade rather than enhance safety. Last, the submittal was reviewed for evidence of special conditions or other significant information relating to the two items of concern.

3.0 Evaluation and Conclusion

Oconee Nuclear Station, Units 1, 2 and 3 contains three B&W designed reactors, with a type 3B containment. At Oconee, the onsite emergency power is two Keowee hydro plants. Three class IE power trains are used. The reactor trip breakers are type AK-2.

Duke Power Company (the licensee) for the Oconee Nuclear Station, states in the November 4, 1983 submittal that to the best of their knowledge, the Oconee Technical Specifications do not contain test requirements that can be demonstrated to degrade rather than enhance safety. The depth of review

supporting this statement is not revealed in the submittal.

The licensee statement that no test requirements have been identified in the Technical Specifications that degrade safety meets the requirements of items 3.1.3 and 3.2.3 and is acceptable to the staff. Therefore, the licensee's response to items 3.1.3 and 3.2.3 is adequate and acceptable.

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