

DUKE POWER COMPANY
OCONEE NUCLEAR STATION

ATTACHMENT 1

PROPOSED TECHNICAL SPECIFICATION (SUPPLEMENT)

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(2) Verification of the engineered safety features function of the Low Pressure Service Water System which supplies coolant to the reactor building coolers shall be made to demonstrate operability of the coolers.

(b) The test will be considered satisfactory if control board indication verifies that all components have responded to the actuation signal properly, the appropriate pump breakers have completed their travel, fans are running at half speed, LPSW flow through each cooler exceeds 1400 GPM and air flow through each fan exceeds 40,000 CFM.

4.5.2.2 Component Tests

4.5.2.2.1 Pumps

The reactor building spray pumps shall be started and operated to verify proper operation in accordance with the requirements of Specification 4.0.4. Acceptable performance will be indicated if the pump starts, operates for 15 minutes, and the measured discharge pressure and flow results in a point above the pump head curve. (Figure 4.5.2-1).

4.5.2.2.2 Valves

Valves of the reactor building spray system will be tested in accordance with the requirements of Specification 4.0.4.

Bases

The Reactor Building Coolant System and Reactor Building Spray System are designed to remove heat in the containment atmosphere to control the rate of depressurization in the containment. The peak transient pressure in the containment is not affected by the two heat removal systems. Hence, the basis for the spray pump flow acceptance test is the flow rate required during recirculation (1,000 gpm).

The delivery capability of one reactor building spray pump at a time can be tested by opening the valve in the line from the borated water storage tank, opening the corresponding valve in the test line, and starting the corresponding pump. Pump discharge pressure and flow indication demonstrate performance.

With the pumps shut down and the borated water storage tank outlet closed, the reactor building spray injection valves can each be opened and closed by operator action. With the reactor building spray inlet valves closed, low pressure air or fog can be blown through the test connections of the reactor building spray nozzles to demonstrate that the flow paths are open.

The equipment, piping, valves, and instrumentation of the Reactor Building Cooling System are arranged so that they can be visually inspected. The cooling units and associated piping are located outside the secondary concrete shield. Personnel can enter the Reactor Building during power operations to inspect and maintain this equipment. The service water piping and valves outside the Reactor Building are inspectable at all times. Operational tests and inspections will be performed prior to initial startup.

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ATTACHMENT 2

No Significant Hazards Consideration Evaluation

NO SIGNIFICANT HAZARDS CONSIDERATION EVALUATION

The Reactor Building Spray System (BS) and the Reactor Building Cooling System are provided to remove heat from containment following an accident. These systems prevent building pressure from exceeding design pressure. The BS System serves no function during normal operation. Removal of post-accident energy is accomplished by directing borated water spray into the Reactor Building atmosphere.

The BS System consists of two pumps, two spray headers, isolation valves, and the necessary piping, instrumentation, and controls. The pumps and remotely operated valves for each unit can be operated from the control room. The BS System is sized to furnish 100 percent of the design cooling capacity with both of the spray paths in operation. Both paths operate independently, and the BS system also operates separately from the Reactor Building Cooling Units, which independently possess full post-accident cooling capability.

The proposed Technical Specification (T.S.) addressed in this submittal involves a change that would eliminate a redundant test of the BS System, while maintaining the intent of the original T.S. The intent of the original T.S. 4.5.2.1.1 is to test the initiation control circuitry. The proposed amendment requires a test of the initiation control circuitry, however it eliminates the requirement for valve line-up and pump operation which constitute a redundant test to Oconee's Inservice Test (IST) program. Currently, in order to test all components without spraying the reactor building, each train of the BS System must be tested twice, once with pump power isolated (to verify valve movement) and once with the valves inoperable (to verify pump operation).

Testing with the pump breaker in "TEST" position allows the control circuitry to be tested without actually energizing the pump. This type of testing is permitted for the HPI System (see T.S. 4.5.1.1.1).

Testing of components of the Reactor Building Cooling System is performed in accordance with the requirements of the ASME Boiler and Pressure Vessel Code, Section XI. 10CFR 50.55a specifies that systems and components of boiling and pressurized water-cooled nuclear power reactors must meet the requirements of the ASME Boiler and Pressure Vessel Code. The specific schedule and requirements for fulfilling ASME Section XI are provided for the IST Program in the Oconee Nuclear Station Inservice Inspection Program Manual. Technical Specification 4.0.4 requires performance of the Inservice Inspection Program. Therefore, the Inservice Inspection Program Manual is considered to be a binding extension of Technical Specifications, and any failure to meet these requirements is a violation of Technical Specifications.

The proposed clarification to T.S. 4.5.2.2.2 provides additional assurances that testing of valves associated with the Reactor Building Cooling System is in accordance with the requirements of ASME Section XI.

The Inservice Inspection Program Manual requires verification of BS pump operation every 3 months. The program tests Inlet Pressure, Differential Pressure, Flow, Vibration, Lube Oil Level, and Bearing Temperature. Valve operation is verified at least once each refueling outage. Therefore, Duke sees no significant enhancement to safety or reliability by requiring redundant testing.

Duke has made the determination that this amendment request involves a No Significant Hazards Consideration by applying the standards established by the Commission's regulations in 10CFR50.92. This ensures that the operation of the facility in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated:

The proposed T.S. addressed in this submittal involves a change that would eliminate a redundant test of the Reactor Building Spray (BS) System, while maintaining the intent of the original T.S. In addition, a clarification to T.S. 4.5.2.2.2 provides additional assurances that testing of Reactor Building Cooling System valves is in accordance with the requirements of ASME Section XI. Each accident analysis addressed in the Oconee Final Safety Analysis Report (FSAR) has been examined with respect to the proposed T.S. 4.5.2. The probability of any Design Basis Accident (DBA) is not affected by this change, nor are the consequences of a DBA affected by this change, since surveillance testing is not considered to be an initiator or contributor to any accident analysis addressed in the Oconee FSAR.

As this change eliminates a redundant requirement, it will not involve a significant increase in the probability or consequences of an accident previously evaluated.

- (2) Create the possibility of a new or different kind of accident from any kind of accident previously evaluated:

Duke has made the determination that a new or different kind of accident will not be possible due to this change. The possibility of an accident due to errors in valve lineups will be decreased with the elimination of redundant test requirements. The intent of the original Technical Specification is maintained, consequently this change does not create the possibility of a new or different kind of accident.

- (3) Involve a significant reduction in a margin of safety

The elimination of redundant testing requirements does not constitute a significant reduction in a margin of safety. Assurance of Reactor Building Spray Pump and valve operability is provided by the IST program. The intent of the original Technical Specification (to test the initiation control circuitry) is maintained by this proposal. Therefore, it has been determined that this change will not involve a significant reduction in a margin of safety.

Duke has determined, based on the above discussion and the Technical Justification provided in Attachment 3 to the February 6, 1986 submittal that there is a No Significant Hazards Consideration involved in this amendment request.