

Duke Power Company
Oconee Nuclear Station

Attachment 1

Proposed Technical Specification Revision

Pages

3.3-6.

6.4-1

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Three hundred and fifty thousand (350,000) gallons of borated water (a level of 46 feet in the BWST) are required to supply emergency core cooling and reactor building spray in the event of a loss-of-core cooling accident. This amount fulfills requirements for emergency core cooling. The borated water storage tank capacity of 388,000 gallons is based on refueling volume requirements. Heaters maintain the borated water supply at a temperature above 50°F to lessen the potential for thermal shock of the reactor vessel during high pressure injection system operation. The boron concentration is set at the amount of boron required to maintain the core 1 percent subcritical at 70°F without any control rods in the core. The minimum value specified in the tanks is 1835 ppm boron.

It has been shown for the worst design basis loss-of-coolant accident (a 14.1 ft² hot leg break) that the Reactor Building design pressure will not be exceeded with one spray and two coolers operable.(4) Therefore, a maintenance period of seven days is acceptable for one Reactor Building cooling fan and its associated cooling unit provided two Reactor Building spray systems are operable for seven days or one Reactor Building spray system provided all three Reactor Building cooling units are operable.

Three low pressure service water pumps serve Oconee Units 1 and 2 and two low pressure service water pumps serve Oconee Unit 3. There is a manual cross-connection on the supply headers for Units 1, 2, and 3. One low pressure service water pump per unit is required for normal operation. The normal operating requirements are greater than the emergency requirements following a loss-of-coolant accident.

Prior to initiating maintenance on any of the components, the redundant component(s) shall be tested to assure operability. Operability shall be based on the results of testing as required by Technical Specification 4.5. The maintenance period of up to 24 hours is acceptable if the operability of equipment redundant to that removed from service is demonstrated within 24 hours prior to removal. The 24 hour period prior to removal is adequate to permit efficient scheduling of manpower and equipment testing while ensuring that the testing is performed directly prior to removal. The basis of acceptability is the low likelihood of failure within a clearly defined 48 hours following redundant component testing.

REFERENCES

- (1) ECCS Analysis of B&W's 177-FA Lowered-Loop NSS, BAW-10103, Babcock & Wilcox, Lynchburg, Virginia, June 1975.
- (2) Duke Power Company to NRC letter, July 14, 1978, "Proposed Modifications of High Pressure Injection System".
- (3) FSAR, Section 9.5.2
- (4) FSAR, Supplement 13

6.4 STATION OPERATING PROCEDURES

Specification

6.4.1 The station shall be operated and maintained in accordance with approved procedures. Written procedures with appropriate check-off lists and instructions shall be provided for the following conditions:

- a. Normal startup, operation and shutdown of the complete facility and of all systems and components involving nuclear safety of the facility.
- b. Refueling operations.
- c. Actions taken to correct specific and foreseen potential malfunctions of systems or components involving nuclear safety and radiation levels, including responses to alarms, suspected primary system leaks and abnormal reactivity changes.
- d. Emergency procedures involving potential or actual release of radioactivity.
- e. Preventive or corrective maintenance which could affect nuclear safety or radiation exposure to personnel.
- f. Station survey following an earthquake.
- g. Radiation control procedures.
- h. Operation of radioactive waste management systems.
- i. Control of pH in recirculated coolant after loss-of-coolant accident. Procedure shall state that pH will be measured and the addition of appropriate caustic to coolant will commence within 30 minutes after switchover to recirculation mode of core cooling to adjust the pH a range of 7.0 to 8.0 within 24 hours.
- j. Nuclear safety-related periodic test procedures.
- k. Long-term emergency core cooling systems. Procedures shall include provision for remote or local operation of system components necessary to establish high and low pressure injection within 15 minutes after a line break.
- l. Fire Protection Program implementation.

6.4.2 A respiratory program approved by the Commission shall be in force.

Discussion of Proposed Technical Specification Revision

Specification 6.4.2

This specification is being deleted since it is an unnecessary duplication of requirements. The Oconee Nuclear Station Emergency Plan Part N addresses the upgraded requirements for emergency preparedness drills and exercises and should be the controlling document for this area.

In revision 82-5 to the Oconee Nuclear Station Emergency Plan the site assembly drill was added as a semiannual requirement. This is consistent with the company's program at McGuire and with what is planned at Catawba. The communications and other drills (as listed in NUREG-0654, FEMA REP-1, Rev. 1) are addressed in the Emergency Plan Part N.

Bases of Specification 3.3

The present bases describe the redundant testing as occurring "immediately prior to removal". Due to the actual time involved in testing redundant components and then preparing for the actual maintenance the exact limit of the "immediately prior" description is often judgemental. This is especially true if one shift completes the testing but does not have time to begin maintenance and the next shift requires a few hours to prepare for the maintenance work as well as get appropriately dressed and equipped for the work area. The proposed change to the bases imposes a clearly defined time limit within which the test must be performed as well as allows some flexibility for scheduling the test when the appropriate personnel and equipment are available.