

Carolina Power & Light Company, Docket No. 50-261, H. B. Robinson Steam Electric Plant, Unit No. 2, Darlington County, South Carolina

Date of amendment request: June 11, 2003, as supplemented by letter dated August 20, 2003, and October 13, 2003.

Description of amendment request:

The proposed amendment would modify Technical Specification (TS) 5.5.16, "Containment Leakage Rate Testing Program" to allow a one-time extension of the containment Type A leak rate test interval from once in 10 years to once in 15 years.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The Proposed Change Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The proposed change to TS 5.5.16 provides a one-time extension of the containment Type A test interval to 15 years for HBRSEP (H. B. Robinson Steam Electric Plant), Unit No. 2. The proposed TS change does not involve a physical change to the plant or a change in the manner in which the plant is operated or controlled. The containment vessel is designed to provide a leak-tight barrier against the uncontrolled release of radioactivity to the environment in the unlikely event of postulated accidents. As such, the containment vessel is not considered as the initiator of an accident. Therefore, the proposed TS change does not involve a significant increase in the probability of an accident previously evaluated.

The proposed change involves only a one-time change to the interval between containment Type A tests. Types B and C leakage testing will continue to be performed at the intervals specified in 10 CFR part 50, Appendix J, Option A, as required by the HBRSEP, Unit No. 2, TS. As documented in NUREG-1493, "Performance-Based Containment Leakage-Test Program," industry experience has shown that Types B and C containment leak rate tests have identified a very large percentage of containment leak paths, and that the percentage of containment leak paths that are detected only by Type A testing is very small. In fact, an analysis of 144 integrated leak rate tests, including 23 failures, found that none of the failures involved a containment liner breach. NUREG-1493 also concluded, in part, that reducing the frequency of containment Type A testing to once per 20 years results in an imperceptible increase in risk. The HBRSEP, Unit No. 2, test history and risk-based evaluation of the proposed extension to the Type A test interval supports this conclusion. The design and construction requirements of the containment vessel, combined with the containment inspections performed in accordance with the American

Society of Mechanical Engineers (ASME) Code, Section XI, and the Maintenance Rule (10 CFR 50.65) provide a high degree of assurance that the containment vessel will not degrade in a manner that is detectable only by Type A testing. Therefore, the proposed TS change does not involve a significant increase in the consequences of an accident previously evaluated.

Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The Proposed Change Does Not Create the Possibility of a New or Different Kind of Accident From Any Previously Evaluated.

The proposed change to TS 5.5.16 provides a one-time extension of the containment Type A test interval to 15 years for HBRSEP, Unit No. 2. The proposed change to the Type A test interval does not result in any physical changes to HBRSEP, Unit No. 2. In addition, the proposed test interval extension does not change the operation of HBRSEP, Unit No. 2, such that a failure mode involving the possibility of a new or different kind of accident from any accident previously evaluated is created.

Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The Proposed Change Does Not Involve a Significant Reduction in the Margin of Safety.

The proposed change to TS 5.5.16 provides a one-time extension of the containment Type A test interval to 15 years for HBRSEP, Unit No. 2. The NUREG-1493 study of the effects of extending containment leak rate testing found that a 20 year extension for Type A testing resulted in an imperceptible increase in risk to the public. NUREG-1493 found that, generically, the design containment leak rate contributes a very small amount to the individual risk, and that the decrease in Type A testing frequency would have a minimal affect on this risk, since most potential leak paths are detected by Type B and C testing.

The proposed change only involves a one-time extension of the interval for containment Type A testing; the overall containment leak rate specified by the HBRSEP, Unit No. 2, TS is being maintained. Type B and C testing will continue to be performed at the frequency required by the HBRSEP, Unit No. 2, TS. The regular containment inspections being performed in accordance with the ASME Code, Section XI, and the Maintenance Rule (10 CFR 50.65) provide a high degree of assurance that the containment will not degrade in a manner that is only detectable by Type A testing. In addition, a plant-specific risk evaluation demonstrates that the extension of the Type A test interval from 10 years to 15 years results in a "very small" increase in risk for those accident sequences influenced by Type A testing and a "small" increase in risk when compared to the test frequency of 3 tests per 10 years.

Therefore, this change does not involve a significant reduction in a margin of safety.

Based on the above discussion, Progress Energy Carolinas, Inc., has determined that

the requested change does not involve a significant hazards consideration.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Attorney for licensee: Steven R. Carr, Associate General Counsel—Legal Department, Progress Energy Service Company, LLC, Post Office Box 1551, Raleigh, North Carolina 27602.

NRC Section Chief: Allen G. Howe.

Duke Energy Corporation, et al., Docket Nos. 50-413 and 50-414, Catawba Nuclear Station, Units 1 and 2, York County, South Carolina

Date of amendment request: March 20, 2003.

Description of amendment request:

The amendments would revise the Technical Specifications to update the heatup, cooldown, criticality, and inservice test pressure and temperature limits for the reactor coolant system.

Basis for proposed no significant hazards consideration determination:

As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

First Standard

Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated.

Response: No.

The proposed changes to the reactor coolant system (RCS) pressure-temperature (P/T) limits are developed utilizing the methodology of ASME (American Society of Mechanical Engineers) XI, 10 CFR (part) 50 Appendix G, in conjunction with the methodology of Code Case N-640. Usage of these methodologies provides compliance with the underlying intent of 10 CFR (part) 50 Appendix G and provides operational limits that ensure failure of the reactor vessel will not occur. The proposed changes to allow operation with two pumps capable of injecting into the RCS and utilization of the residual heat removal (RHR) suction relief valves has been evaluated and determined to provide adequate protection of the RCS from the worst case pressure transient.

The probability of any design basis accident (DBA) is not affected by these changes, nor are the consequences of any DBA affected by these changes. The P/T limits, and low temperature overpressure protection (LTOP) setpoints, and T_{enable} value are not considered to be initiators or contributors to any accident analysis addressed in the Catawba UFSAR (updated final safety analysis report).