



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 84 TO FACILITY OPERATING LICENSE NO. NPF-47

ENTERGY OPERATIONS, INC.

RIVER BEND STATION, UNIT 1

DOCKET NO. 50-458

1.0 INTRODUCTION

By application dated October 24, 1995, supplemented by letter dated November 22, 1995, Entergy Operations, Inc. (the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License No. NPF-47) for the River Bend Station, Unit 1. The proposed changes would revise the technical specifications to reflect the approval for the licensee to use 10 CFR Part 50, Appendix J, Option B for the River Bend Station containment leakage rate test program. The November 22, 1995, letter corrected the October 24, 1995, letter to incorporate the latest technical specification changes as agreed to by the Nuclear Energy Institute (NEI) and the NRC. These changes provided clarifications and did not change the initial no significant hazards consideration determination. That determination was published in the Federal Register on November 8, 1995 (60 FR 56368).

This request by the licensee supersedes the licensee's request for an exemption submitted by letter dated May 30, 1995, as corrected by letter dated June 20, 1995. That request was noticed in the Federal Register on July 5, 1995 (60 FR 35079).

2.0 BACKGROUND

Compliance with Appendix J provides assurance that the primary containment, including those systems and components which penetrate the primary containment, do not exceed the allowable leakage rate values specified in the technical specifications and bases. The allowable leakage rate is determined so that the leakage assumed in the safety analyses is not exceeded.

On February 4, 1992, the NRC published a notice in the Federal Register (57 FR 4166) discussing a planned initiative to begin eliminating requirements marginal to safety which impose a significant regulatory burden. 10 CFR Part 50, Appendix J, "Primary Containment Leakage Testing for Water-Cooled Power Reactors" was considered for this initiative and the staff undertook a study of possible changes to this regulation. The study examined the previous performance history of domestic containments and examined the effect on risk of a revision to the requirements of Appendix J. The results of this study are reported in NUREG-1493, "Performance-Based Leak-Test Program".

Based on the results of this study, the staff developed a performance-based approach to containment leakage rate testing. On September 12, 1995, the NRC approved issuance of this revision to 10 CFR Part 50, Appendix J, which was subsequently published in the Federal Register on September 26, 1995, and became effective on October 26, 1995. The revision added Option B "Performance-Based Requirements" to Appendix J to allow licensees to voluntarily replace the prescriptive testing requirements of Appendix J with testing requirements based on both overall and individual component leakage rate performance.

Regulatory Guide 1.163, "Performance-Based Containment Leak Test Program", was developed as a method acceptable to the NRC staff for implementing Option B. This regulatory guide states that NEI 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J" provides methods acceptable to the NRC staff for complying with Option B with four exceptions.

Option B requires that Regulatory Guide 1.163 or another implementation document used by a licensee to develop a performance-based leakage testing program must be included, by general reference, in the plant technical specifications.

Regulatory Guide 1.163 specifies an extension in Type A test frequency to at least one test in 10 years based upon two consecutive successful tests. Type B tests may be extended up to a maximum of 10 years based upon completion of two consecutive successful tests and Type C tests may be extended up to 5 years based on two consecutive successful tests.

By letter dated October 20, 1995, NEI proposed technical specifications for implementing Option B. After some discussion, the staff and NEI agreed on a set of model technical specifications which were transmitted to NEI in a letter dated November 2, 1995. These technical specifications are to serve as a model for licensees to develop plant specific technical specifications in preparing amendments requests to implement Option B.

In order for a licensee to determine the performance of each component, Regulatory Guide 1.163 provides that a licensee establish an administrative leakage limit. The administrative limit is selected to be indicative of the potential onset of component degradation. Although these limits are subject to NRC inspection to assure that they are selected in a reasonable manner, they are not technical specifications requirements. Failure to meet an administrative limit requires the licensee to return to the minimum value of the test interval.

Option B requires that the licensee maintain records to show that the criteria for Type A, B and C tests have been met. In addition, the licensee must maintain comparisons of the performance of the overall containment system and the individual components to show that the test intervals are adequate. These records are subject to NRC inspection.

### 3.0 EVALUATION

The licensee's October 24, 1995 letter to the NRC proposes to establish a "Primary Containment Leakage Rate Program" and proposes to add this program to the technical specifications. The program references Regulatory Guide 1.163. "Performance-Based Containment Leak Test Program" which specifies methods acceptable to the NRC for complying with Option B. This requires a change to existing Technical Specifications 3.6.1.1, 3.6.1.2 and 3.6.1.3 and the addition of the program to section 5.5 of the technical specifications.

Option B permits a licensee to choose Type A; or Type B and C; or Type A, B and C; testing to be done on a performance basis. The licensee has elected to perform Type A, B and C testing on a performance basis.

As discussed above, Option B permits the Type A test interval to be up to 10 years provided two consecutive successful tests have been performed. River Bend has satisfied this criterion. Therefore, the next Type A test is not required until refueling outage 10, currently scheduled for mid-year 2002.

The technical specifications changes proposed by the licensee differ with the model technical specification developed by the NRC staff in cooperation with NEI, on one item. The acceptance criteria for air lock leakage testing contained in Surveillance Requirement (SR) 3.6.1.2.1 were not moved to the Primary Containment Leakage Rate Testing Program (Section 5.5.13 of the River Bend Station Technical Specifications). This change was not proposed because of the unique differences that exist between the River Bend Station air lock surveillance requirement and the related surveillance requirement documented in the staff's November 2, 1995 letter to NEI. This difference is acceptable since only the location of the criteria in the technical specifications is changed. The staff finds that the technical specifications changes proposed by the licensee meets the requirements of 10 CFR Part Appendix J, Option B and, therefore, are acceptable.

Option B states that specific existing exemptions to Option A are still applicable unless specifically revoked by the NRC. River Bend Station has no existing exemptions to Option A.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Louisiana State Official was notified of the proposed issuance of the amendment. The State official had no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released

offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (60 FR 56368). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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