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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 205 TO FACILITY OPERATING LICENSE NO. NPF-3

TOLEDO EDISON COMPANY

CENTERIOR SERVICE COMPANY

AND

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

DOCKET NO. 50-346

1.0 INTRODUCTION

By letter dated December 12, 1995, the Toledo Edison Company, Centerior Service Company, and the Cleveland Electric Illuminating Company (the licensees), submitted a request for changes to the Davis-Besse Nuclear Power Station (DBNPS), Unit No. 1, Technical Specifications (TS). By facsimile transmission dated January 26, 1996, the licensees transmitted two revised TS pages to reflect administrative clarifications to the amendment application. The clarifications were the result of telephone conversation with the staff, as discussed in the evaluation below, and were not outside the scope of the original no significant hazards determination. The requested amendment would revise TS 3/4.6.1.1, Containment Systems - Primary Containment - Containment Integrity; TS 3/4.6.1.2, Containment Systems - Containment Leakage; TS 3/4.6.1.6, Containment Systems - Containment Vessel Structural Integrity; TS 3/4.6.5.3, Containment Systems - Shield Building Structural Integrity; and associated Bases. The proposed revisions adopt the provisions of 10 CFR Part 50, Appendix J, Option B, for Type A containment leakage testing as modified by approved exemptions and in accordance with the guidance of Regulatory Guide 1.163 dated September 1995. The licensees propose to delete surveillance requirement (SR) 4.6.1.2, SR 4.6.1.2.b, SR 4.6.1.2.c, and SR 4.6.1.2.i since these requirements contain details that are now included in standards that are referenced by the September 1995 version of Regulatory Guide 1.163. TS 3/4.6.1.6 and TS 3/4.6.5.3 which address containment building and shield building structural integrity are proposed to be deleted since the requirements are addressed in revised TS 3.6.1.2.a. The licensees propose to delete reference to the exemption included in Bases 3/4.6.1.2 since it is no longer applicable. Additionally, the licensees propose to modify the Action statement associated with TS 3.6.1.2 to reflect the action to take if the as-left rather than the as-found leakage exceeds 0.75 L_a.

2.0 EVALUATION

The proposed amendment was submitted to request approval to use 10 CFR Part 50, Appendix J, Option B, for Type A testing. A revision to Appendix J was published on September 26, 1995, and became effective on October 26, 1995. The Appendix J revision allows use of Option B, based on a performance-based approach to containment leakage testing, which allows performance of a Type A leakage test at a periodic interval based on the previous performance of the overall containment system as a barrier to fission product releases. A general visual inspection of the accessible interior and exterior surfaces of the containment system for structural deterioration which may affect the containment leak-tight integrity must be conducted prior to the test, and at intervals between tests if the test interval has been extended to its maximum permitted value of 10 years.

The licensees propose to change TS 4.6.1.2.a to require performing Type A tests in accordance with 10 CFR Part 50, Appendix J, Option B, as modified by approved exemptions, and Regulatory Guide 1.163 dated September 1995. Additionally, the licensees propose to add a new surveillance requirement, SR 4.6.1.1.c, to TS 3/4.6.1.1, Containment Systems - Primary Containment - Containment Integrity to require visual examinations of the containment vessel and shield building in accordance with 10 CFR Part 50, Appendix J, Option B, as modified by approved exemptions, and Regulatory Guide 1.163. The licensees provided additional information on these TS changes to add the applicable date of the Regulatory Guide and to revise the sentence for clarity. Based on the new SR, the licensees propose deleting TS 3/4.6.1.6, Containment Systems - Containment Vessel Structural Integrity, and its associated Bases, and TS 3/4.6.5.3, Containment Systems - Shield Building Structural Integrity, and its associated Bases. The licensees have reviewed the Type A testing performed at DBNPS and concluded that the overall containment leakage rate has consistently remained well below the surveillance test acceptance criteria. During the five previous Type A tests conducted, the leakage has never exceeded 52.6 % of L_a. L_a is the maximum allowable leakage rate at the peak containment internal pressure related to the design basis loss-of-coolant accident. Section V.B of Option B of 10 CFR Part 50, Appendix J requires licensees who wish to voluntarily adopt Option B, or parts thereof, to submit to the NRC an implementation plan and a request for a revision to TS, including a general reference in the plant TS to the regulatory guide or other implementation document used by the licensee to develop a performance-based leakage-testing program. Accordingly, the licensees propose the addition of SR 4.6.1.1.c and the proposed changes to SR 4.5.1.2.a to require Type A testing, including visual examinations and leakage testing, to be performed in accordance with 10 CFR Part 50, Appendix J, Option B as modified by approved exemptions, and in accordance with Regulatory Guide 1.163 dated September 1995. These changes are consistent with the revised Appendix J, Option B requirements and the staff finds the proposed changes acceptable.

The licensees propose to delete SR 4.6.1.2.b, 4.6.1.2.c and 4.6.1.2.i. SR 4.6.1.2.b describes testing requirements if any periodic Type A test fails to meet 0.75 L_a. SR 4.6.1.2.c requires the performance of a supplemental test to verify the accuracy of the Type A test. SR 4.6.1.2.i requires all test

leakage rates be calculated using observed data converted to absolute values and error analyses be performed to select a balanced integrated leakage measurement system. The information included in these three SRs are redundant to requirements contained in ANSI/ANS-56.8-1994 which is included by reference in the Nuclear Energy Institute document, NEI 94-01, Rev. 0, dated July 21, 1995, and which is endorsed by Regulatory Guide 1.163 dated September 1995. Therefore, the staff finds the proposed changes acceptable.

A change to SR 4.6.1.2.d is proposed to clarify that the requirements for Type B and C leak rate testing will remain in accordance with Appendix J, Option A. The proposed SR will state, "Perform Type B and C tests in accordance with 10 CFR Part 50, Appendix J, Option A, as modified by approved exemptions." The staff finds this clarification acceptable.

The licensees propose to modify Action 3.6.1.2.a and Bases 3/4.6.1.2 to clarify that the acceptance criteria for measured overall integrated containment leakage rate is an "as-left" value. The change is proposed as a clarification only to ensure that action is required only if the result of the last Type A test is unacceptable. This change does not alter the requirements to determine an as-found leakage rate as required by the test methodology specified by Regulatory Guide 1.163 dated September 1995, and to evaluate the as-found leakage rate against the reporting requirements contained in Appendix J, Option B. Therefore, the staff finds the changes acceptable.

The licensees propose to delete the second paragraph of TS Bases 3/4.6.1.2. This paragraph discusses an exemption regarding the Type A test schedule. With the proposed adoption of 10 CFR Part 50, Appendix J, Option B, the exemption is no longer applicable since Option B does not specify test schedules. The staff finds this change acceptable.

The licensees propose an administrative change to the Table of Contents to show that portions of TS 3/4.6.1 and 3/4.6.5 for the containment vessel structural integrity and shield building structural integrity, based on the evaluation above, are deleted. The staff finds the administrative change acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

This 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 or changes a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluent 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 (61 FR 1637). 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.

5.0 CONCLUSION

The staff 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: February 22, 1996