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John P. Stetz
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Davis-Besse

Docket Number 50-346

License Number NPF-3

Serial Number 2264

January 30, 1995

United States Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Subject: License Amendment Application to Revise Technical
Specifications and Associated Bases for Containment Systems -
Containment Leakage

Gentlemen:

Enclosed is an application for an amendment to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1 Operating License NPF-3, Appendix A, Technical Specifications, to reflect the changes attached. The proposed changes involve Technical Specification (TS) 3/4.6.1.2, Containment Systems - Containment Leakage, and associated Bases 3/4.6.1.2, Primary Containment - Containment Leakage.

The proposed change would revise TS Surveillance Requirement (SR) 4.6.1.2.a to state that Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted in accordance with the requirements specified in Appendix J of 10 CFR 50, as modified by NRC-approved exemptions, and would make associated administrative changes to TS SR 4.6.1.2.b and Bases 3/4.6.1.2. The proposed change would allow the next DBNPS Type A surveillance test to be scheduled in accordance with the flexibility provided by the current Appendix J requirements. The next Type A test would, therefore, be performed during the tenth refueling outage instead of during operating Cycle 10.

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Operating Companies
Cleveland Electric Illuminating
Toledo Edison

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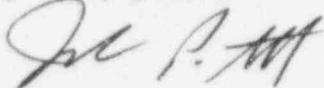
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Toledo Edison requests that this amendment be issued by the NRC by June 1, 1995.

Should you have any questions or require additional information, please contact Mr. William T. O'Connor, Manager - Regulatory Affairs, at (419) 249-2366.

Very truly yours,



MKL/laj

cc: L. L. Gundrum, DB-1 NRC/NRR Project Manager
J. B. Martin, Regional Administrator, NRC Region III
S. Stasek, DB-1 NRC Senior Resident Inspector
J. R. Williams, Chief of Staff, Ohio Emergency Management
Agency, State of Ohio (NRC Liaison)
Utility Radiological Safety Board

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APPLICATION FOR AMENDMENT
TO
FACILITY OPERATING LICENSE NPF-3
DAVIS-BESSE NUCLEAR POWER STATION
UNIT NUMBER 1

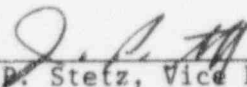
Attached are requested changes to the Davis-Besse Nuclear Power Station, Unit Number 1 Facility Operating License Number NPF-3. Also included is the Safety Assessment and Significant Hazards Consideration.

The proposed changes (submitted under cover letter Serial Number 2264) concern:

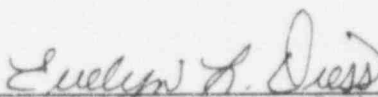
Appendix A, Technical Specification 3/4.6.1.2, Containment Systems - Containment Leakage

Appendix A, Technical Specification Bases 3/4.6.1.2, Primary Containment - Containment Leakage

By:


J. D. Stetz, Vice President - Nuclear

Sworn and subscribed before me this 30th day of January, 1995.


Notary Public, State of Ohio

EVELYN L. DRESS
Notary Public, State of Ohio
My Commission Expires 7/28/99

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The following information is provided to support issuance of the requested changes to Davis-Besse Nuclear Power Station, Unit Number 1 Operating License Number NPF-3, Appendix A, Technical Specification (TS) 3/4.6.1.2, Containment Systems - Containment Leakage, and associated Bases 3/4.6.1.2, Primary Containment - Containment Leakage.

- A. Time Required to Implement: This change is to be implemented within 90 days after NRC issuance of the License Amendment.
- B. Reason for Change (License Amendment Request Number 94-0014, Revision 0):

The proposed change would revise TS Surveillance Requirement (SR) 4.6.1.2.a to state that Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted in accordance with the requirements specified in Appendix J of 10 CFR 50, as modified by NRC-approved exemptions, and would make associated administrative changes to TS SR 4.6.1.2.b and Bases 3/4.6.1.2. The proposed change would allow the next DBNPS Type A surveillance test to be conducted during the tenth refueling outage instead of during operating Cycle 10, in accordance with the flexibility provided by the current Appendix J requirements.

- C. Safety Assessment and Significant Hazards Consideration: See Attachment

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Attachment

SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION
FOR
LICENSE AMENDMENT REQUEST 94-0014

(9 pages follow)

SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION
FOR
LICENSE AMENDMENT REQUEST NUMBER 94-0014

TITLE:

Revision of Technical Specification (TS) 3/4.6.1.2, Containment Systems - Containment Leakage, and associated Bases 3/4.6.1.2, Primary Containment - Containment Leakage.

DESCRIPTION:

The purpose of the proposed changes is to modify the Davis-Besse Nuclear Power Station (DBNPS) Operating License NPF-3, Appendix A Technical Specifications (TS) and associated Bases, as described in detail below. The proposed changes would allow overall integrated containment leakage rate testing to be scheduled in accordance with the flexibility provided by 10 CFR 50, Appendix J, as modified by NRC-approved exemptions.

TS Surveillance Requirement (SR) 4.6.1.2.a presently states: "Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at 40 ± 10 month intervals during shutdown at P, 38 psig, during each 10 year service period." The proposed change would revise this SR to state: "Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted in accordance with the requirements specified in Appendix J of 10 CFR 50, as modified by approved exemptions."

Since the revised SR 4.6.1.2.a would no longer include a schedule, SR 4.6.1.2.b is proposed to be revised to delete the reference to the testing schedule contained in the previous version of SR 4.6.1.2.a.

Associated with the above changes, TS Bases 3/4.6.1.2 is proposed to be revised to delete the statement which reads: "The operational readiness of the vessel is considered proven by the ILRT, and in accordance with license requirements, when completed per the 40 ± 10 months frequency."

These changes are shown in the attached, marked-up changes to the Operating License.

This license amendment request is similar to a license amendment request which was approved by the NRC on June 30, 1994 for Facility

Operating License Numbers NPF-37 (Byron Station Unit No. 1), NPF-66 (Byron Station Unit No. 2), NPF-72, (Braidwood Station Unit No. 1), and NPF-77 (Braidwood Station Unit No. 2). This license amendment request would also revise the subject SRs to be more consistent with SR 3.6.1.1 of the Improved Standard Technical Specifications for Babcock and Wilcox Reactors, NUREG-1430, Revision 0.

SYSTEMS, COMPONENTS, AND ACTIVITIES AFFECTED:

Surveillance test scheduling associated with 10 CFR 50 Appendix J Type A testing.

FUNCTIONS OF THE AFFECTED SYSTEMS, COMPONENTS AND ACTIVITIES:

TS Limiting Condition for Operation (LCO) 3.6.1.2.a requires that containment leakage rates be limited to an overall integrated leakage rate of $\leq L_a$, 0.50 percent by weight of the containment air per 24 hours at P_a , 38 psig. Surveillance testing conducted in accordance with SR 4.6.1.2 provides assurance that the LCO is met. As stated in TS Bases 3/4.6.1.2, as an added conservatism, the measured overall integrated leakage rate is further limited to ≤ 0.75 of the maximum allowable leakage rate (L_a), during performance of the periodic tests to account for possible degradation of the containment leakage barriers between leakage tests. The $\leq 0.75 L_a$ limit is reflected in Action 3.6.1.2.a and SR 4.6.1.2.b.

EFFECTS ON SAFETY:

The proposed change to SR 4.6.1.2.a would allow overall integrated containment leakage rate testing to be scheduled in accordance with the flexibility provided by 10 CFR 50 Appendix J, as modified by NRC-approved exemptions. Appendix J Section III.D.1(a) states that a set of three Type A tests shall be performed at approximately equal intervals during each 10-year service period, whereas present SR 4.6.1.2.a states that the three Type A tests shall be performed at 40 ± 10 month intervals. Appendix J also requires that the Type A test be performed at P_a , which is 38 psig for the DBNPS.

The second 10-year service period for the DBNPS commenced in September 1990. The first Type A test of the second period was performed in October 1991, during the seventh refueling outage (7RFO). Applying the present SR 4.6.1.2.a maximum 50 month interval, the second Type A test of the second period is required to be performed no later than December 1995, which is during Cycle 10. Assuming the present requirements of Appendix J remain unchanged, the proposed change would allow the second Type A test of the second period to be performed during the tenth refueling outage (10RFO), which is scheduled to commence in early April 1996. The resulting interval between the 7RFO and 10RFO Type A tests would be approximately 54 months.

Allowing use of the flexibility in scheduling provided by Appendix J, as proposed by this request, is acceptable since the overall containment leakage rate at the DBNPS has consistently remained well below the surveillance test acceptance criteria. During the five previous Type A tests conducted to date, the leakage has never exceeded 52.6% of L, the maximum allowable leakage rate at the peak containment internal pressure. In the last two Type A tests, the leakage has averaged only 12.5% of L. The Type B and C testing performed each refueling outage, which serves to effectively detect containment leakage caused by the degradation of active containment isolation components (e.g., valves), as well as by sealing materials within containment penetrations, provides confidence that the high degree of containment integrity demonstrated by the previous Type A tests will continue during the interval to the next Type A test. In summary, the proposed change to SR 4.6.1.2.a would have no adverse effect on plant safety.

The proposed change to SR 4.6.1.2.b, which would delete the reference to the testing schedule contained in the previous version of SR 4.6.1.2.a, is an administrative change and would have no adverse effect on plant safety.

The proposed administrative change to TS Bases 3/4.6.1.2 is associated with the other proposed changes and would have no adverse effect on plant safety.

SIGNIFICANT HAZARDS CONSIDERATION:

The Nuclear Regulatory Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazard exists due to a proposed amendment to an Operating License for a facility. A proposed amendment involves no significant hazards if operation of the facility in accordance with the proposed changes would: (1) Not involve a significant increase in the probability or consequences of an accident previously evaluated; (2) Not create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) Not involve a significant reduction in a margin of safety. Toledo Edison has reviewed the proposed change and determined that a significant hazards consideration does not exist because operation of the Davis-Besse Nuclear Power Station (DBNPS), Unit No. 1, in accordance with these changes would:

- 1a. Not involve a significant increase in the probability of an accident previously evaluated because no accident initiators, conditions or assumptions are significantly affected by the proposed changes.

The proposed change would revise Technical Specification (TS) Surveillance Requirement (SR) 4.6.1.2.a to allow overall integrated containment leakage rate (Type A) testing to be

scheduled in accordance with 10 CFR 50 Appendix I, as modified by approved exemptions, and would make associated administrative changes to TS SR 4.6.1.2.b and to TS Bases 3/4.6.1.2. As stated above, none of these proposed changes involve accident initiators, conditions, or assumptions.

- 1b. Not involve a significant increase in the consequences of an accident previously evaluated because no accident conditions or assumptions are affected by the proposed changes.

The results of the previous Type A testing demonstrate a high degree of containment integrity. The Type B and C testing performed since the last Type A test provides confidence that the high degree of containment integrity will be maintained during the interval to the next Type A test. Therefore, the proposed changes do not alter the source term, containment isolation, or allowable releases, and will not increase the radiological consequences of a previously evaluated accident.

2. Not create the possibility of a new or different kind of accident from any accident previously evaluated because no new or different accident initiators or assumptions are introduced by the proposed changes. The proposed changes do not affect the design or operation of any plant system, structure, or component. The proposed changes do not affect any accident initiators and are not initiators themselves. The proposed changes do not alter any accident scenarios.
3. Not involve a significant reduction in a margin of safety. The initial conditions and methodologies used in the accident analyses remain unchanged. As described above, the proposed changes do not significantly reduce or adversely affect the confidence that the present high degree of containment integrity will be maintained.

CONCLUSION:

On the basis of the above, Toledo Edison has determined that the License Amendment Request does not involve a significant hazards consideration. As this License Amendment Request concerns a proposed change to the Technical Specifications that must be reviewed by the Nuclear Regulatory Commission, this License Amendment Request does not constitute an unreviewed safety question.

ATTACHMENT:

Attached are the proposed marked-up changes to the Operating License.

REFERENCES:

1. Title 10 Code of Federal Regulations (CFR) Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors."
2. Amendment 62 to Facility Operating License (FOL) No. NPF-37, Byron Unit 1; Amendment 62 to FOL No. NPF-66, Byron Unit 2; Amendment 52 to FOL No. NPF-72, Braidwood Unit 1; Amendment 52 to FOL No. NPF-77, Braidwood Unit 2; all dated June 30, 1994.
3. "Improved Standard Technical Specifications for Babcock and Wilcox Reactors," NUREG-1430, Revision 0, dated September 1992.
4. Updated Safety Analysis Report (USAR) Sections 3D.1.45, "Criterion 52 - Capability for Containment Leakage Rate Testing," and 6.2.1.4, "Testing and Inspection."