

APPLICATION FOR AMENDMENT  
TO  
FACILITY OPERATING LICENSE NO. NPF-3  
FOR  
DAVIS-BESSE NUCLEAR POWER STATION  
UNIT NO. 1

Enclosed are forty-three (43) copies of the requested changes to the Davis-Besse Nuclear Power Station Unit No. 1 Facility Operating License No. NPF-3, together with the Safety Evaluation for the requested change.

The proposed changes include:

1. Section 3.6.1.2
2. Section 3.3.3.2
3. Sections 2.0, 2.1, 2.2, 2.3, 3.1, 4.0 and 5.4.1 Part A of Appendix B
4. Section 3.6.3.1, Table 3.6-2
5. Section 3.0.3 and 4.0.3 and adds Section 3.0.5
6. Revision to Radiological Technical Specifications (RETS) Section 4.3.3.10, Table 4.3-16, Item 3

By /s/ R. P. Crouse  
Vice President, Nuclear

Sworn and subscribed before me this 18th day of August, 1983.

Laurie A. Hinkle, nee (Brudzinski)  
Notary Public, State of Ohio  
My Commission Expires 5/16/86

S E A L

Docket No. 50-346  
License No. NPF-3  
Serial No. 979  
August 18, 1983  
Attachment I

I. Changes to Davis-Besse Nuclear Power Station Unit 1, Appendix A  
Technical Specifications

A. Time required to Implement. This change is to be effective upon  
NRC approval.

B. Reason for Change (Facility Change Request 83-093).

In response to a letter from Mr. J. Stolz dated December 3,  
1982, (Log No. 1143) concerning status of generic Item B-24 and  
NUREG 0737 Item II.E.4.2.

C. Safety Evaluation

(See attached)

D. Significant Hazards Considerations

(See attached)

## SAFETY EVALUATION

This amendment request revises Technical Specification Section 3.6.1.2 to include a special leakage test requirement for the containment purge and exhaust isolation valves.

The safety function of the containment purge and exhaust isolation valves is to isolate the containment upon a design basis LOCA, and the safety function of the special leakage test for these valves is to verify that gross seal failure has not occurred on the valves.

The current Technical Specifications require that the containment isolation valves to be leak tested once each operating cycle during the refueling outage. The NRC requested in their letter dated December 3, 1982, (log No. 1143), that these valves be tested more frequently to determine if excessive degradation of their seats has occurred. The concern indicated in the NRC letter is the gross seal failures in 48" butterfly type isolation valve which could exceed the allowable leakage rate limits for these valves. Further communications with the NRC staff indicated that the required tests would be in addition to the existing Technical Specifications requirements.

For the purposes of verifying the seal integrity a special leak test for 48" isolation valves is proposed to be performed every time the valves are opened, if the valves have not been tested per Local Leak Rate Test (LLRT) or this special test in the previous six months. The test will be sufficient to ensure the integrity of seals and the valve seats. The test is to be performed by pressurizing the section of piping between one valve inside and one valve outside the containment to a pressure greater than 20 psig. The acceptance criteria for the leakage rate per penetration shall be less than 0.15 La (150,000 standard cubic centimeters per minute), which is considerably lower than the amount allowed for the combined tests. The leakage rate can be measured by either constant pressure method or the pressure decay method.

The special test is an addition to the existing Technical Specifications, this change does not affect the safety function of these valves. Based on the above, it is concluded that this change in the Technical Specification does not present any unreviewed safety questions.

### SIGNIFICANT HAZARD CONSIDERATION

The amendment request to include a special leakage test for the containment purge and exhaust isolation valves does not contain a Significant Hazard. The request is in addition to requirements in Technical Specifications - comply with 10CFR50 Appendix J, leak testing of isolation valves. The proposed test would verify the seal integrity each time the valves are opened if the valves have not been tested in accordance with Technical Specifications within the last six months.

The amendment request is in response to the NRC request of December 3, 1982 (Log 1143) concerning Status of Generic Item B-24 and NUREG-0737 Item II.E.4.2. Contained in the letter was a request to address containment leakage due to seal deterioration. Our proposed testing would verify the seal integrity by pressurizing the section of piping between the valves to a pressure greater than 20 psig and the acceptance criteria of 0.15 La is less than the amount allowed for the combined tests.

The granting of the request would not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated 10CFR50.92(C)(1).

The leak testing verifies the seal integrity of the isolation valves and does not increase the probability or consequences of an accident previously evaluated. The testing constitutes an additional limitation and restriction not previously included in the technical specifications that conservatively addresses the probability or consequences of previously analyzed accidents.

- 2) Create the possibility of a new or different kind of accident previously evaluated 10CFR50.92(C)(2).

All accidents are still bounded by previous analysis and no new accidents are involved. The testing is done in a plant configuration that will not create the potential for an accident.

- 3) Involve a significant reduction in a margin of safety 10CFR50.92(C)(3).

This request will maintain the margins assumed in the accident analysis. The additional testing should enhance the margin of safety due to increased surveillance.

Therefore, based on the attached safety evaluation and the above, the requested amendment does not contain a Significant Hazard.