

Docket Number 50-346  
License Number NPF-3  
Serial Number 2383  
Enclosure  
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APPLICATION FOR AMENDMENT  
TO  
FACILITY OPERATING LICENSE NUMBER NPF-3  
DAVIS-BESSE NUCLEAR POWER STATION  
UNIT NUMBER 1

Attached are the 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 2383) concern:

Appendix A, Technical Specifications (TS):

TS 3/4.5.2	Emergency Core Cooling Systems - ECCS Subsystems - Tavg $\geq$ 280°F
TS 3/4.6.5.1	Containment Systems - Shield Building - Emergency Ventilation System
TS 3/4.7.6.1	Plant Systems - Control Room Emergency Ventilation System
TS 3/4.7.7	Plant Systems - Snubbers
TS 3/4.9.12	Refueling Operations - Storage Pool Ventilation
TS Bases 3/4.7.7	Snubbers

For: J. K. Wood, Vice-President - Nuclear

By: R. E. Donnellon  
R. E. Donnellon, Director - Engineering and Services

Sworn to and subscribed before me this 17th day of September, 1996.

Nora Lynn Flood  
Notary Public, State of Ohio

Nora Lynn Flood - My commission expires 9/3/97.

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The following information is provided to support issuance of the requested changes to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1 Operating License Number NPF-3, Appendix A, Technical Specifications (TS). The proposed changes involve TS 3/4.5.2, Emergency Core Cooling Systems - ECCS Subsystems - T avg  $\geq 280^{\circ}\text{F}$ ; TS 3/4.6.5.1, Containment Systems - Shield Building - Emergency Ventilation System; TS 3/4.7.6.1, Plant Systems - Control Room Emergency Ventilation System; TS 3/4.7.7, Plant Systems - Snubbers; TS 3/4.9.12, Refueling Operations - Storage Pool Ventilation; and TS Bases 3/4.7.7, Snubbers.

A. Time Required to Implement: This change is to be implemented consistent with related changes to be proposed by separate license amendment applications, prior to the commencement of the Eleventh Refueling Outage (11RFO). The 11RFO is presently scheduled to commence in April 1998.

B. Reason for Change (License Amendment Request Number 95-0019):

The proposed changes would increase the surveillance test intervals from 18 to 24 months for the trisodium phosphate dodecahydrate (TSP) volume, (Surveillance Requirement 4.5.2.d.4), Shield Building and Storage Pool Emergency Ventilation Systems, (Surveillance Requirements 4.6.5.1.b, 4.6.5.1.d, 4.9.12.1, and 4.9.12.2), Control Room Emergency Ventilation System, (Surveillance Requirements 4.7.6.1.c and 4.7.6.1.e), and Plant Systems - Snubbers, (Surveillance Requirement 4.7.7.2.b and associated Bases 3/4.7.7). These changes are in accordance with the NRC guidance provided by Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," and will support conversion of the DBNPS from an 18 month to a 24 month fuel cycle.

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

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Attachment

SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION

FOR

LICENSE AMENDMENT REQUEST NUMBER 95-0019

(54 pages follow)

SAFETY ASSESSMENT AND SIGNIFICANT HAZARD CONSIDERATION  
FOR  
LICENSE AMENDMENT REQUEST NO. 95-0019

TITLE:

Revise the following Technical Specifications (TS) for a 24 Month Fuel Cycle:

- |                  |  |
|------------------|--|
| TS 3/4.5.2       | Emergency Core Cooling Systems - ECCS Subsystems -<br>$T_{avg} \geq 280^{\circ}\text{F}$ |
| TS 3/4.6.5.1     | Containment Systems - Shield Building - Emergency<br>Ventilation System                  |
| TS 3/4.7.6.1     | Plant Systems - Control Room Emergency Ventilation<br>System                             |
| TS 3/4.7.7       | Plant Systems - Snubbers   |
| TS 3/4.9.12      | Refueling Operations - Storage Pool Ventilation  |
| TS Bases 3/4.7.7 | Snubbers   |

DESCRIPTION:

The Davis-Besse Nuclear Power Station (DBNPS) Unit No. 1 is converting from an 18 month to a 24 month fuel cycle. This conversion will allow the DBNPS to operate at full power for a longer period of time between refueling outages. In order to support this conversion, it is necessary that the DBNPS Operating License NPF-3, Appendix A, Technical Specifications be amended to change the 18 month interval Surveillance Requirements to 24 month interval Surveillance Requirements. In addition, the continued application of TS 4.0.2, which allows surveillance intervals to be increased up to 25% on a non-routine basis, will allow a 24 month surveillance interval to be extended up to 30 months.

License Amendment Request Number 95-0019 addresses only a portion of the scope of changes required for the 24 month cycle conversion. Additional required Technical Specification changes will be submitted under separate license amendment applications. Associated changes to the DBNPS Updated Safety Analysis Report (USAR), including the Chapter 15 Accident Analysis, are being evaluated under the 10 CFR 50.59 process. In accordance with 10 CFR 50.59, should this evaluation determine that an unreviewed safety question exists, the USAR changes would be submitted for NRC approval under the license amendment application process.

The NRC guidance provided by Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991, was utilized in the preparation of this Safety Assessment and Significant Hazards Consideration. Consistent with this guidance,

the phrase "at least once per 18 months, during shutdown" is proposed to be replaced with "at least once each REFUELING INTERVAL," where applicable. REFUELING INTERVAL is proposed to be defined as "a period of time  $\leq$  730 days" under a separate License Amendment Request (LAR 95-0018; DENPS letter Serial Number 2342). The restriction "during shutdown" is being deleted in accordance with Generic Letter 91-04 wherein the NRC staff concluded that the TS need not restrict surveillances as only being performed during shutdown, and that licensees are to give proper regard for performing refueling interval surveillances during power operation or during another mode that is consistent with the safe conduct of that surveillance.

This Safety Assessment and Significant Hazard Consideration (SASHC) proposes the revision of several such Surveillance Requirements. These Surveillance Requirements are individually described in the enclosures to this SASHC.

This SASHC also proposes a related change to TS Bases 3/4.7.7 to state that a representative sample of the installed snubbers will be functionally tested "each REFUELING INTERVAL". The Bases presently states that snubbers will be functionally tested "at 18 month intervals".

#### SYSTEMS, COMPONENTS, AND ACTIVITIES AFFECTED:

The basic activity affected by these proposed revisions is the performance of certain surveillance tests on a 24 month frequency instead of an 18 month frequency. The enclosures to this SASHC identify the systems, or components affected by the individually proposed Surveillance Requirement revisions.

#### FUNCTIONS OF THE AFFECTED SYSTEMS, COMPONENTS, AND ACTIVITIES:

The enclosures to this SASHC describe the functions performed by the affected systems, components, and activities.

#### EFFECTS ON SAFETY:

The enclosures to this SASHC describe the effects on safety due to increasing certain surveillance test intervals from 18 to 24 months and the continued application of TS 4.0.2 (which allows surveillance intervals to be increased up to 25% on a non-routine basis). Historical surveillance test data and maintenance records were reviewed in evaluating the effect on safety. In addition, the licensing basis was reviewed for each revision to ensure it was not invalidated.

Based on the results of these reviews, it is concluded that there is no adverse effect on plant safety due to increasing the surveillance test intervals from 18 to 24 months and the continued application of TS 4.0.2. In addition, the licensing basis remains valid.

The proposed change to TS Bases 3/4.7.7 is an administrative change related to the proposed change to SR 4.7.7.2.b, and will have no adverse effect on safety.

Manufacturer or vendor maintenance information for the affected components is considered in the DBNPS Preventive Maintenance (PM) Program. The PM Program is being evaluated as a separate activity in support of the conversion from an 18 month to a 24 month fuel cycle. Changes will be made, as necessary, in the PM Program to facilitate a 24 month fuel cycle.

#### SIGNIFICANT HAZARDS CONSIDERATION:

The Nuclear Regulatory Commission has provided standards in 10CFR50.92(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 consideration 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 changes and determined that a significant hazards consideration does not exist because operation of the Davis-Besse Nuclear Power Station, 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 such accidents are affected by the proposed revisions to increase the surveillance test intervals from 18 to 24 months for the trisodium phosphate dodecahydrate (TSP) volume, (Surveillance Requirement 4.5.2.d.4), Shield Building and Storage Pool Emergency Ventilation Systems, (Surveillance Requirements 4.6.5.1.b, 4.6.5.1.d, 4.9.12.1, and 4.9.12.2), and the Control Room Emergency Ventilation System, (Surveillance Requirements 4.7.6.1.c and 4.7.6.1.e) and Snubbers (Surveillance Requirement 4.7.7.2.b and associated Bases 3/4.7.7). Initiating conditions and assumptions remain as previously analyzed for all accidents in the DBNPS Updated Safety Analysis Report.

These revisions do not involve any physical changes to systems or components, nor do they alter the typical manner in which the systems or components are operated.

A review of historical 18 month surveillance data and maintenance records support an increase in the surveillance test intervals from 18 to 24 months (and up to 30 months on a non-routine basis) because no potential for a significant increase in a failure rate of a system or component was identified during these reviews.

These proposed revisions are consistent with the NRC guidance on evaluating and proposing such revisions as provided in Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991.



- 1b. Not involve a significant increase in the consequences of an accident previously evaluated because the source term, containment isolation or radiological releases are not being changed by these proposed revisions. Existing system and component redundancy is not being changed by these proposed changes. Existing system and component operation is not being changed by these proposed changes. The assumptions used in evaluating the radiological consequences in the DBNPS Updated Safety Analysis Report are not invalidated.
2. Not create the possibility of a new or different kind of accident from any accident previously evaluated because these revisions do not involve any physical changes to systems or components, nor do they alter the typical manner in which the systems or components are operated. A review of historical 18 month surveillance data and maintenance records support an increase in the surveillance test intervals from 18 to 24 months (and up to 30 months on a non-routine basis) because no potential for a significant increase in a failure rate of a system or component was identified during these reviews. No changes are being proposed to the type of testing currently being performed, only to the length of the surveillance test interval.
3. Not involve a significant reduction in a margin of safety because the review results of the historical 18 month surveillance data and maintenance records identified no potential for a significant increase in a failure rate of a system or component due to increasing the surveillance test interval to 24 months. Existing system and component redundancy and operation is not being changed by these proposed changes.

There are no new or significant changes to the initial conditions contributing to accident severity or consequences. Therefore, there are no significant reductions in a margin of safety.

#### CONCLUSIONS:

On the basis of the above, Toledo Edison has determined that this License Amendment Request does not involve a significant hazards consideration. As this License Amendment Request involves 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. Also attached are summaries of the licensing basis, surveillance data and maintenance record reviews for the surveillance interval extensions addressed by this license amendment request:

Enclosure 1, Surveillance Requirement 4.5.2.d.4 (TSP Volume).

Enclosure 2, Surveillance Requirements 4.6.5.1.b and 4.6.5.1.d (Shield Building EVS Filters) and 4.9.12.1 and 4.9.12.2 (Storage Pool Ventilation).

Enclosure 3, Surveillance Requirements 4.7.6.1.c and 4.7.6.1.e (Control Room Emergency Ventilation System).

Enclosure 4, Surveillance Requirements 4.7.7.2.b (Snubber Functional Test Program) and associated Bases 3/4.7.7.

REFERENCES:

1. Davis-Besse Nuclear Power Station (DBNPS) Unit No. 1, Operating License NPF-3, Appendix A, Technical Specifications, through Amendment 211.
2. Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991.
3. Updated Safety Analysis Report, through Revision 19.
4. 10 CFR 50.59, "Changes, Tests, and Experiments."