

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 2393) concern:

Appendix A, Technical Specifications (TS):

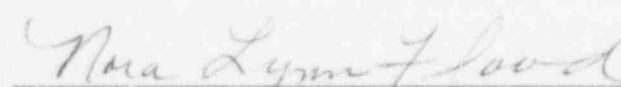
TS 3/4.5.2	ECCS Subsystems, $T_{avg} \geq 280^{\circ}F$
TS 3/4.5.3	ECCS Subsystems, $T_{avg} < 280^{\circ}F$
TS 3/4.7.1.2	Auxiliary Feedwater System
TS 3/4.7.1.7	Motor Driven Feedwater Pump System
TS 3/4.7.3.1	Component Cooling Water System
TS 3/4.7.4.1	Service Water System

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

By: 

T. J. Myers, Director - Nuclear Assurance

Sworn to and subscribed before me this 20th day of January, 1997.



Notary Public, State of Ohio

Nora Lynn Flood - My commission expires September 3, 1997.

Docket Number 50-346  
License Number NPF-3  
Serial Number 2393  
Enclosure  
Page 1

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 2393) concern:

Appendix A, Technical Specifications (TS):

TS 3/4.5.2	ECCS Subsystems, $T_{avg} \geq 280^{\circ}\text{F}$
TS 3/4.5.3	ECCS Subsystems, $T_{avg} < 280^{\circ}\text{F}$
TS 3/4.7.1.2	Auxiliary Feedwater System
TS 3/4.7.1.7	Motor Driven Feedwater Pump System
TS 3/4.7.3.1	Component Cooling Water System
TS 3/4.7.4.1	Service Water System

By: \_\_\_\_\_  
J. K. Wood, Vice President - Nuclear

Sworn to and subscribed before me this

\_\_\_\_\_  
Notary Public, State of Ohio

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, ECCS Subsystems - T avg equal to or greater than 280 degrees F; TS 3/4.5.3, ECCS Subsystems - T avg less than 280 degrees F; TS 3/4.7.1.2, Auxiliary Feedwater System; TS 3/4.7.1.7 Motor Driven Feedwater Pump System; TS 3/4.7.3.1, Component Cooling Water System; and TS 3/4.7.4.1, Service Water System.

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 95-0022):

The proposed changes would modify the presently specified 18 month surveillance frequencies in TS Surveillance Requirement (SR) 4.5.2.d.2.a, SR 4.5.2.e, SR 4.5.2.g.2, SR 4.5.3, SR 4.7.1.2.1.c, SR 4.7.1.7.d, SR 4.7.3.1.b, and SR 4.7.4.1.b to new specified frequencies of once each Refueling Interval. 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.

Docket Number 50-346  
License Number NPF-3  
Serial Number 2393  
Attachment

SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION  
FOR  
LICENSE AMENDMENT REQUEST NUMBER 95-0022

(58 pages follow)

SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION  
FOR  
LICENSE AMENDMENT REQUEST NO. 95-0022

TITLE:

Proposed Modification to the Davis-Besse Nuclear Power Station Unit Number 1, Facility Operating License NPF-3, Appendix A, Technical Specifications to Revise the Following Technical Specifications (TS):

TS 3/4.5.2	ECCS Subsystems, $T_{avg} \geq 280^{\circ}\text{F}$
TS 3/4.5.3	ECCS Subsystems, $T_{avg} < 280^{\circ}\text{F}$
TS 3/4.7.1.2	Auxiliary Feedwater System
TS 3/4.7.1.7	Motor Driven Feedwater Pump System
TS 3/4.7.3.1	Component Cooling Water System
TS 3/4.7.4.1	Service Water System

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 95-0022 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" for the 24 month fuel cycle under separate License Amendment Request (LAR) 95-0018 submitted to the NRC by Toledo Edison letter Serial Number 2342, dated August 7, 1996. 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 Hazards Consideration (SASHC) proposes the revision of several such Surveillance Requirements. These Surveillance Requirements are individually described in the enclosures to this SASHC.

#### 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 specific 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 effect 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 proposed 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.

Manufacturer or vendor maintenance information for the affected components is considered in the DENPS 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 ECCS Subsystems (Surveillance Requirements 4.5.2.d.2.a, 4.5.2.e, 4.5.2.g.2, and 4.5.3), Auxiliary Feedwater System (Surveillance Requirement 4.7.1.2.1.c), Motor Driven Feedwater Pump System (Surveillance Requirement 4.7.1.7.d), Component Cooling Water System (Surveillance Requirement 4.7.3.1.b) and Service Water System (Surveillance Requirement 4.7.4.1.b). Initiating conditions and assumptions remain as previously analyzed for 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 an affected 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.

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 an affected system or component was identified during these reviews.

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 a review 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 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 Requirements 4.5.2.d.2.a, 4.5.2.e, 4.5.2.g.2, and 4.5.3 (ECCS Subsystems).

Enclosure 2, Surveillance Requirement 4.7.1.2.1.c (Auxiliary Feedwater System)



Enclosure 3, Surveillance Requirement 4.7.1.7.d (Motor Driven Feedwater Pump System)

Enclosure 4, Surveillance Requirement 4.7.3.1.b (Component Cooling Water System)

Enclosure 5, Surveillance Requirement 4.7.4.1.b (Service Water System)

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. DBNPS Updated Safety Analysis Report, through Revision 19.
4. 10CFR50.59, "Changes, Tests, and Experiments."