

Docket Number 50-346
License Number NPF-3
Serial Number 2403
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.

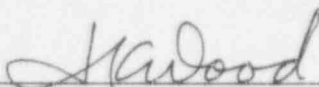
The proposed changes (submitted under cover letter Serial Number 2403) concern:

Appendix A, Technical Specifications (TS):

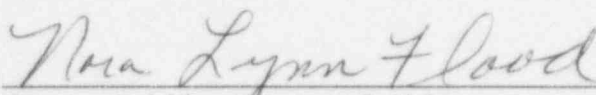
- 3/4.8.1.1 Electrical Power Systems - A.C. Sources - Operating.
- 3/4.8.1.2 Electrical Power Systems - A.C. Sources - Shutdown.
- 3/4.8.2.3 Electrical Power Systems - D.C. Distribution - Operating.
- 3/4.8.2.4 Electrical Power Systems - D.C. Distribution - Shutdown.

Appendix A, TS Bases:

- 3/4.8 Electrical Power Systems

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

Sworn to and subscribed before me this 28th day of October, 1996.


Notary Public, State of Ohio
Nora Lynn Flood
My commission expires September 3, 1997.

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) and TS Bases:

- A. Time Required to Implement: This change is to be implemented 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 95-0021):

The proposed changes would modify the presently specified 18 month surveillance frequencies in Surveillance Requirements 4.8.1.1.1.b, 4.8.1.1.2.d, and 4.8.2.3.2.c,d and f to new specified frequencies of once each refueling interval. Surveillance Requirement 4.8.2.3.2.e would be modified by deletion of the requirement to perform the surveillance "during shutdown." Surveillance Requirements 4.8.1.2 and 4.8.2.4.2 would also be affected as they reference the aforementioned Surveillance Requirements. 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," dated April 2, 1991, and will support conversion of the DBNPS from an 18 month to a 24 month fuel cycle.

Technical Specification Bases 3/4.8, Electrical Power Systems, is also revised to reflect that the change to 24 month surveillance testing would be an exception to the 18 month testing interval guidance specified in Regulatory Guide 1.129, "Maintenance, Testing and Replacement of Large Lead Storage Batteries for Nuclear Power Plants," dated February 1978, and IEEE Standard 450-1980, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations."

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

Docket Number 50-346
License Number NPF-3
Serial Number 2403
Attachment

SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION
FOR
LICENSE AMENDMENT REQUEST NUMBER 95-0021
(34 pages follow)

**SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION
FOR
LICENSE AMENDMENT REQUEST NO. LAR 95-0021**

TITLE:

License Amendment Application to Revise Technical Specifications Regarding A.C. Sources and D.C. Distribution for Conversion to a 24 Month Fuel Cycle.

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 (TS) 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 (LAR) Number 95-0021 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 phrases "at least once per 18 months," and "at least

once per 18 months, during shutdown," are proposed to be replaced with "at least once each REFUELING INTERVAL." "REFUELING INTERVAL" is proposed to be defined in a separate license amendment application (LAR 95-0018; DBNPS letter Serial Number 2342 dated August 7, 1996) as "a period of time \leq 730 days" for the 24 month fuel cycle. 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) addresses the revision of several such Surveillance Requirements. These Surveillance Requirements are individually described in the enclosures to this SASHC.

An administrative change is proposed to TS Surveillance Requirement (SR) 4.8.2.3.2.c to denote that the battery charger performance test required in current SR 4.8.2.3.2.c.4 will continue to be performed on an 18 month surveillance interval.

A change is proposed to SR 4.8.2.3.2.e to remove the requirement to conduct a battery performance discharge test "during shutdown."

A revision is proposed to TS Bases 3/4.8, Electrical Power Systems to reflect an exception to current guidance for battery testing intervals.

Each change is described in further detail below. Each of the proposed changes is also shown on the attached marked-up Operating License pages.

SYSTEMS, COMPONENTS, AND ACTIVITIES AFFECTED:

The basic activity affected by the proposed revisions to SR 4.8.1.1.1.b, SR 4.8.1.1.2.d, and SR 4.8.2.3.2.c, d and f and Bases 3/4.8 is the performance of certain surveillance tests on a 24 month frequency instead of an 18 month frequency. Surveillance Requirements 4.8.1.2 and 4.8.2.4.2 reference these SR's and, therefore, are similarly affected.

The basic activity affected by the proposed revision to SR 4.8.2.3.2.e is the conduct of a battery performance discharge test at least once per 60 months without restriction to shutdown conditions. The enclosures to this SASHC identify the specific systems and components affected by the individually proposed Surveillance Requirements.

FUNCTIONS OF THE AFFECTED SYSTEMS, COMPONENTS, AND ACTIVITIES:

The enclosures to this SASHC describe the functions performed by the affected systems, components, and activities for the proposed revisions to SR 4.8.1.1.1.b, SR 4.8.1.1.2.d and SR 4.8.2.3.2.c, d, e and f.

EFFECTS 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.

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 nuclear 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 changes to SR 4.8.2.3.2.c to denote that the battery charger performance test required in current Surveillance Requirement 4.8.2.3.2.c.4 will continue to be performed on an 18 month surveillance interval, is an administrative change and will have no adverse effect on plant safety.

This proposed revision to SR 4.8.2.3.2.e removes the restriction to conduct the performance discharge test "during shutdown." 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 proposed revision, therefore, has no adverse effect on safety.

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 A.C. Offsite Sources, the Emergency Diesel Generators and the Station Batteries or the proposed revision to remove the "during shutdown" restriction for conduct of the battery performance test.

Results of the 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.

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.

The proposed revision to reflect that the battery charger performance test will continue to be conducted on a 18 month surveillance interval is an administrative change and does not affect previously analyzed accidents.

The proposed revision to the Bases to reflect that a change to a 24 month surveillance test interval is an exception to current guidance is an administrative change and does not affect previously analyzed accidents.

- 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 and 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.

No changes are being proposed to the type of testing currently being performed, only to the length of the surveillance test interval and to restrictions on conducting testing only during shutdown conditions.

Results of the 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.

The proposed revision to reflect that the battery charger performance test will continue to be conducted on a 18 month surveillance interval is an administrative change and does not alter testing currently being performed.

The proposed revision to the Bases to reflect that a change to a 24 month surveillance test interval is an exception to current guidance is an administrative change and does not alter testing currently being performed.

3. Not involve a significant reduction in a margin of safety because the results of the historical 18 month surveillance data and maintenance records review 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, consequently there are no significant reductions in a margin of safety.

CONCLUSIONS:

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 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 Surveillance Requirement 4.8.1.1.1.b (Enclosure 1), Surveillance Requirement 4.8.1.1.2.d (Enclosure 2), and Surveillance Requirements 4.8.2.3.2.c, d, e, and f and Bases 3/4.8 (Enclosure 3).

REFERENCES:

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