

Docket No. 50-346
License No. NPF-3
Serial No. 1458
Enclosure

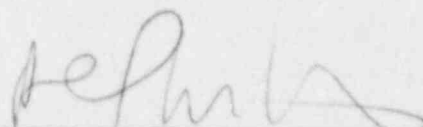
APPLICATION FOR AMENDMENT
TO
FACILITY OPERATING LICENSE NO. NPF-3
FOR
DAVIS-BESSE NUCLEAR POWER STATION
UNIT NO. 1

Attached is a requested change to the Davis-Besse Nuclear Power Station, Unit No. 1 Facility Operating License No. NPF-3. Also included are the Safety Evaluation and Significant Hazards Consideration.

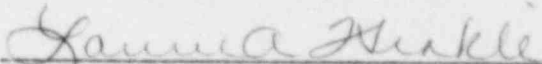
The proposed change (submitted under cover letter Serial No. 1458) concerns:

Technical Specification 4.4.5.2.

By:


D. C. Shelton, Vice President, Nuclear

Sworn and subscribed before me this 11th day of January, 1988.


Notary Public, State of Ohio

My commission expires 5/15/91

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The following information is provided to support issuance of the requested change to the Davis-Besse Nuclear Power Station, Unit No. 1 Operating License No. NPF-3, Appendix A, Technical Specifications.

- A. Time Required to Implement: This change will be implemented within 30 days following NRC issuance of the License Amendment.
- B. Reason for Change (FCR No. 87-0119): Revise Technical Specification 4.4.5.2, Steam Generator Tube Sample Selection, to include a third special interest group.
- C. Safety Evaluation: See attached Safety Evaluation (Attachment No. 1).
- D. Significant Hazards Consideration: See attached Significant Hazards Consideration (Attachment No. 2).

SAFETY EVALUATION

DESCRIPTION OF THE PROPOSED ACTIVITY

The purpose of this Safety Evaluation is to review a proposed change to the Davis-Besse Nuclear Power Station, Unit No. 1 Operating License, Appendix A, Technical Specifications. The proposed change involves revising Technical Specification 4.4.5.2, Steam Generator Tube Sample Selection and Inspection, to add an additional special interest group comprised of the center tubes of each steam generator.

During the August 1986 eddy current inspection of Steam Generator 1-2, a large number of indications were discovered on many of the tubes near the center of the steam generator through the first random inspection. According to Technical Specification 4.4.5, an additional inspection was performed on another random sample. Toledo Edison decided to inspect all the tubes near the center of the generator. This inspection resulted in the plugging of 17 tubes.

Technical Specification 4.4.5.2.b allows tubes in special groups to be excluded from the first random sample if all tubes in that group are inspected. This ensures areas prone to tube degradation are thoroughly inspected for defects and plugged accordingly. The random sample provides an indication of overall steam generator condition and pinpoints problem areas. If an area shows excessive degradation, it is prudent to inspect it in its entirety.

Toledo Edison proposes adding a third special interest group (A-3) under Technical Specification 4.4.5.2.b comprised of the tubes near the center of both steam generators (see Figure 1). This inspection requirement will ensure steam generator performance and provide valuable information on the condition of the tubes around the center support column.

SYSTEMS AFFECTED

Steam Generators

SAFETY FUNCTIONS OF SYSTEMS AFFECTED

Provide primary to secondary pressure boundary and provide heat removal from the reactor vessel. The tube inspection ensures this boundary is maintained by verifying tube material integrity.

PROPOSED AMENDMENT REQUEST DISCUSSION

The proposed License Amendment Request revises the following section of the Davis-Besse Nuclear Power Station, Unit No. 1 Operating License, Appendix A, Technical Specifications:

4.4.5.2.b (page 3/4 4-7) - Adds "3. Group A-3: Tubes included in the rectangle bounded by rows 62 and 90 and by tubes 58 and 76 excluding tubes included in Group A-1."

This identifies the tubes around the center of each steam generator as a special interest group to be inspected completely and separately from the random sample.

UNREVIEWED SAFETY QUESTION EVALUATION

The proposed change adds a special interest group comprised of the tubes near the center of the steam generators for in-depth inspection. Therefore, implementation of this change:

Will not increase the probability of occurrence of an accident previously evaluated in the USAR because the accident conditions and assumptions are not affected by the proposed Technical Specification change. The proposed change does not involve a test or experiment, or a modification to a system. The proposed change identifies an additional special interest group to ensure that all the steam generator tubes are capable of performing as assumed in the Updated Safety Analysis Report (USAR) accident analyses, and does not increase the probability of an accident previously evaluated [10CFR50.59(a)(2)(i)].

Will not increase the consequences of an accident previously evaluated in the USAR because the accident conditions and assumptions are not affected by the proposed Technical Specification change. The proposed change does not involve a test or experiment, or a modification to a system. The proposed change identifies an additional special interest group to ensure that all the steam generator tubes are capable of performing as assumed in the USAR accident analyses, and do not increase the consequences of an accident previously evaluated [10CFR50.59(a)(2)(i)].

Will not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the USAR because the proposed change does not involve a test or experiment and no station equipment is modified. The proposed change identifies an additional special interest group to ensure that all the steam generator tubes are capable of performing as assumed in the USAR accident analyses, and do not increase the probability of a malfunction of equipment important to safety [10CFR50.59(a)(2)(i)].

Will not increase the consequences of a malfunction of equipment important to safety previously evaluated in the USAR because the proposed change does not involve a test or experiment and no station equipment is modified. The proposed change identifies an additional special interest group to ensure that all the steam generator tubes are capable of performing as assumed in the USAR accident analyses, and do not increase the consequences of a malfunction of equipment important to safety [10CFR50.59(a)(2)(i)].

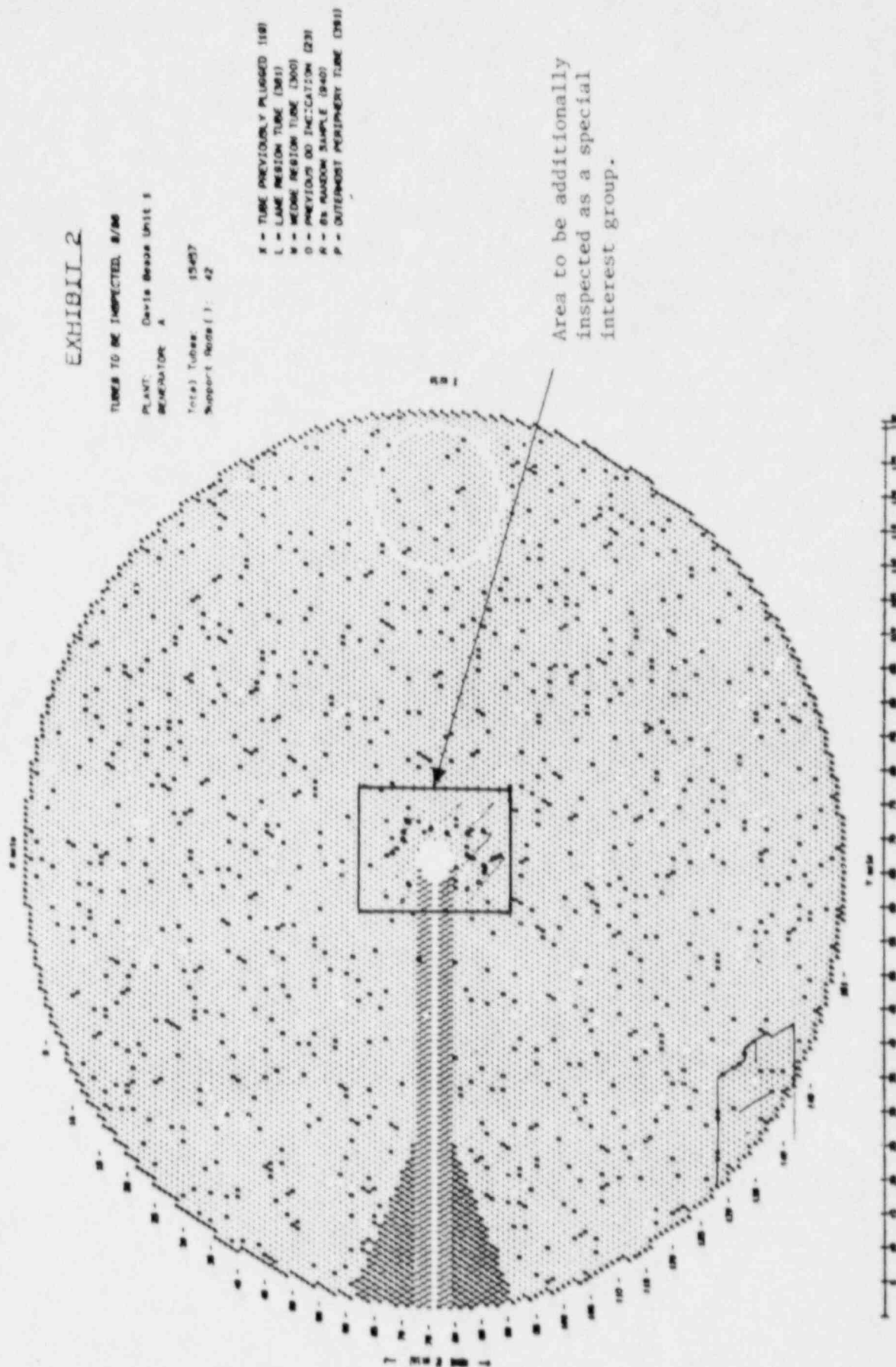
Will not create the possibility for an accident of a different type than any evaluated previously in the USAR because the proposed change does not involve a test or experiment and no station equipment is being modified or added. The change involves no accident scenario. Accidents are bounded by previous analysis and no new accidents are involved [10CFR50.59(a)(2)(ii)].

Will not create the possibility for a malfunction of equipment of a different type than any evaluated previously in the USAR because the proposed change does not involve a test or experiment and no station equipment is being modified or added. The change involves no malfunction scenario [10CFR50.59(a)(2)(iii)].

Will not reduce the margin of safety as defined in the basis for the Technical Specifications because the accident conditions and assumptions are not affected by the proposed change and the proposed change does not involve a test or experiment and no station equipment is modified. The additional special interest group increases a margin of safety by increasing the number of tubes inspected. Consequently, the change will not reduce any margin of safety [10CFR50.59(a)(2)(iii)].

Therefore, based on the above evaluation, it is determined that this change does not constitute an unreviewed safety question.

Figure 1
 Special Interest Group Addition



SIGNIFICANT HAZARDS CONSIDERATION

DESCRIPTION OF THE PROPOSED ACTIVITY

The purpose of this License Amendment Request is to review a proposed change to the Davis-Besse Nuclear Power Station, Unit No. 1 Operating License, Appendix A, Technical Specifications. The proposed change involves revising Technical Specification 4.4.5.2, Steam Generator Tube Sample Selection and Inspection, to add an additional special interest group comprised of the center tubes of each steam generator.

During the August 1986 eddy current inspection of Steam Generator 1-2, a large number of indications were discovered on many of the tubes near the center of the steam generator through the first random inspection. In accordance with Technical Specification 4.4.5, an additional inspection was performed on another random sample. Toledo Edison decided to inspect all the tubes near the center of the generator. This inspection resulted in the plugging of 17 tubes.

Technical Specification 4.4.5.2.b allows tubes in special groups to be excluded from the first random sample if all tubes in that group are inspected. This ensures areas prone to tube degradation are thoroughly inspected for defects and plugged accordingly. The random sample provides an indication of overall steam generator condition and pinpoints problem areas. If an area shows excessive degradation, it is prudent to inspect it in its entirety.

Toledo Edison proposes adding a third special interest group (A-3), under Technical Specification 4.4.5.2.b, comprised of the tubes near the center of both steam generators (see Figure 1 of the Safety Evaluation). This inspection requirement will ensure steam generator performance and provide valuable information on the condition of the tubes around the center support column.

SYSTEMS AFFECTED

Steam Generators

SAFETY FUNCTIONS OF SYSTEMS AFFECTED

The safety function of the steam generators is to provide the primary to secondary pressure boundary and provide heat removal from the reactor vessel. The tube inspection ensures this boundary is maintained by verifying tube material integrity.

PROPOSED AMENDMENT REQUEST DISCUSSION

The proposed License Amendment Request revises the following section of the Davis-Besse Nuclear Power Station, Unit No. 1 Operating License, Appendix A, Technical Specifications:

4.4.5.2.b (page 3/4 4-7) - Adds "3. Group A-3: Tubes included in the rectangle bounded by rows 62 and 90 and by tubes 58 and 76 excluding tubes included in Group A-1."

This identifies the tubes around the center of each steam generator as a special interest group to be inspected completely and separately from the random sample.

SIGNIFICANT HAZARDS CONSIDERATION

The proposed change does not involve a significant hazards consideration because the operation of the Davis-Besse Nuclear Power Station, Unit No. 1, in accordance with this change would not:

Involve a significant increase in the probability or consequences of an accident previously evaluated because the accident conditions and assumptions previously evaluated in the Updated Safety Analysis Report (USAR) are not affected by the proposed Technical Specification change. The proposed change involves only the addition of steam generator tubes to be inspected to ensure they are capable of performing as described in the USAR accident analysis (10CFR50.92(c)(1)).

Create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed change does not involve a test or experiment and no station equipment is being modified. The proposed change involves only the addition of steam generator tubes to be inspected to ensure they are capable of performing as described in the USAR accident analysis (10CFR50.92(c)(2)).

Involve a significant reduction in a margin of safety because this Technical Specification submittal proposes adding additional steam generator tube inspection requirements. By adding an additional special interest group, more steam generator tubes will be inspected for defects and the tubes prone to degradation will be plugged accordingly. This will ensure the steam generator tubes are capable of performing as described in the USAR accident analysis (10CFR50.92(c)(3)).

CONCLUSION

On the basis of the above, Toledo Edison has determined that the amendment request does not involve a significant hazards consideration.