

February 17, 1983

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Mr. Richard P. Crouse
Vice President, Nuclear
Toledo Edison Company
Edison Plaza - Stop 712
300 Madison Avenue
Toledo, Ohio 43652

Dear Mr. Crouse:

SUBJECT: AMENDMENT NO. 54 TO FACILITY OPERATING LICENSE NO. NPF-3

The Commission has issued the enclosed Amendment No. 54 to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. The amendment consists of changes to the Appendix A Technical Specifications (TSS) in response to Item 3 of your application dated September 25, 1981 (No. 738). Item 2 of your application was closed by issuance of Amendment No. 50 dated November 30, 1982; the remaining items are under review and will be acted upon separately.

This amendment modifies the TSS to eliminate the requirement for Thirty Day Written Reports under certain conditions. This change is consistent with applicable portions of Regulatory Guide 1.16. The amendment also clarifies the surveillance requirement applicable to the reactor coolant system pressure isolation valves by indicating that leak testing can be accomplished in combination with a closed containment isolation valve.

Copies of the Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,

Original signed by

Albert W. De Agazio, Project Manager
Operating Reactors Branch #4
Division of Licensing

Enclosures:

- 1. Amendment No. 54
- 2. Safety Evaluation
- 3. Notice

cc w/enclosures:

See next page

OFFICE	ORB#4:DL	ORB#4:DL	C-ORB#4:DL	AD/OR:DL	OELD		
SURNAME	RIngram	Ade Agazio	JStolz	GLamas	M. Karmay		
DATE	1/17/83	1/21/83: cab	1/21/83	1/14/83	1/27/83		



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 WASHINGTON, D.C. 20555
February 17, 1983

DISTRIBUTION
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Docket No. **50-346**

Docketing and Service Section
 Office of the Secretary of the Commission

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

Two signed originals of the Federal Register Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (**12**) of the Notice are enclosed for your use.

- Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.
- Notice of Availability of Applicant's Environmental Report.
- Notice of Proposed Issuance of Amendment to Facility Operating License.
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- Notice of Availability of NRC Draft/Final Environmental Statement.
- Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- Notice of Issuance of Construction Permit(s).
- Notice of Issuance of Facility Operating License(s) or Amendment(s).

Other: **Amendment No. 54.**
Referenced documents have been provided PDR.

Division of Licensing, ORB#4
 Office of Nuclear Reactor Regulation

Enclosure:
 As Stated

OFFICE →	ORB#4:DL					
SURNAME →	RIngram;cf					
DATE →	2/24/83					

Toledo Edison Company

cc w/enclosure(s):

Mr. Donald H. Hauser, Esq.
The Cleveland Electric
Illuminating Company
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Cleveland, Ohio 44101

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Oak Harbor, Ohio 43449

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Nuclear Power Generation Division
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Ohio Department of Health
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Program Director
P. O. Box 118
Columbus, Ohio 43216

President, Board of County
Commissioners of Ottawa County
Port Clinton, Ohio 43452

Attorney General
Department of Attorney General
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Columbus, Ohio 43215

Harold Kahn, Staff Scientist
Power Siting Commission
361 East Broad Street
Columbus, Ohio 43216

Mr. James G. Keppler, Regional Administrator
U. S. Nuclear Regulatory Commission, Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Mr. Larry D. Young
Manager, Nuclear Licensing
Toledo Edison Company
Edison Plaza
300 Madison Avenue
Toledo, Ohio 43652



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

THE TOLEDO EDISON COMPANY

AND

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

DOCKET NO. 50-346

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 54
License No. NPF-3

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by The Toledo Edison Company and The Cleveland Electric Illuminating Company (the licensees) dated September 25, 1981, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Facility Operating License No. NPF-3 is hereby amended as indicated below and by changes to the Technical Specifications as indicated in the attachment to this license amendment:

Revise paragraph 2.C.(2) to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 54, are hereby incorporated in the license. The Toledo Edison Company shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 17, 1983

ATTACHMENT TO LICENSE AMENDMENT NO. 54

FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages as indicated. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Pages

3/4 4-16

6-17

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.6.2.1 Reactor Coolant System leakages shall be demonstrated to be within each of the above limits by:

- a. Monitoring the containment atmosphere particulate radioactivity monitor at least once per 12 hours.
- b. Monitoring the containment sump inventory and discharge at least once per 12 hours.
- c. Measurement of the CONTROLLED LEAKAGE to the reactor coolant pump seals to the makeup system when the Reactor Coolant System pressure is 2185 + 20 psig at least once per 31 days.
- d. Performance of a Reactor Coolant System water inventory balance at least once per 72 hours during steady state operation.

4.4.6.2.2 Each Reactor Coolant System Pressure Isolation Valve specified in Table 3.4-2 shall be individually demonstrated OPERABLE by verifying leakage testing (or the equivalent) to be within its limit prior to entering MODE 2:

- a. After each refueling outage,
- b. Whenever the plant has been in COLD SHUTDOWN for 72 hours, or more, and if leakage testing has not been performed in the previous 9 months, and
- c. Prior to returning the valve to service following maintenance, repair or replacement work on the valve.

4.4.6.2.3 Whenever integrity of a pressure isolation valve listed in Table 3.4-2 cannot be demonstrated, the integrity of the remaining pressure isolation valve or the integrity of the remaining pressure isolation valve in series with the motor-operated containment isolation valve in each high pressure line having a leaking valve shall be determined and recorded daily. In addition, the position of the closed motor-operated containment isolation valve located in the high pressure piping shall be recorded daily.

- e. Failure or malfunction of one or more components which prevents or could prevent, by itself, the fulfillment of the functional requirements of system(s) used to cope with accidents analyzed in the SAR.
- f. Personnel error or procedural inadequacy which prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR.
- g. Conditions arising from natural or man-made events that, as a direct result of the event require plant shutdown, operation of safety systems, or other protective measures required by technical specifications.
- h. Errors discovered in the transient or accident analyses or in the methods used for such analyses as described in the safety analysis report or in the bases for the technical specifications that have or could have permitted reactor operation in a manner less conservative than assumed in the analyses.
- i. Performance of structures, systems, or components that requires remedial action or corrective measures to prevent operation in a manner less conservative than assumed in the accident analyses in the safety analysis report or technical specifications bases; or discovery during plant life of conditions not specifically considered in the safety analysis report or technical specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

THIRTY DAY WRITTEN REPORTS*

6.9.1.9 The types of events listed below shall be the subject of written reports to the Director of the Regional Office within thirty days of occurrence of the event. The written report shall include, as a minimum, a completed copy of a licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the technical specifications but which do not prevent the fulfillment of the functional requirements of affected systems.

Amendment No. ~~8,12~~, 54

DAVIS-BESSE, UNIT 1

6-17

*Routine surveillance testing, instrument calibration, or preventive maintenance which require system configurations as described in Section 6.9.1.9.a and 6.9.1.9.b need not be reported except where test results themselves reveal a degraded condition requiring corrective action.

- b. Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.
- c. Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems.
- d. Abnormal degradation of systems other than those specified in 6.9.1.8.c above designed to contain radioactive material resulting from the fission process.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Director of the Office of Inspection and Enforcement Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

- a. ECCS Actuation, Specifications 3.5.2 and 3.5.3.
- b. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.3.3.
- c. Inoperable Meteorological Monitoring Instrumentation, Specification 3.3.3.4.
- d. Seismic event analysis, Specification 4.3.3.3.2.
- e. Fire Detection Instrumentation, Specification 3.3.3.8.
- f. Fire Suppression Systems, Specifications 3.7.9.1 and 3.7.9.2.

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:

- a. Records and logs of facility operation covering time interval at each power level.
- b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
- c. ALL REPORTABLE OCCURRENCES submitted to the Commission.
- d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 54 TO FACILITY OPERATING LICENSE NO. NPF-3

TOLEDO EDISON COMPANY

AND

CLEVELAND ELECTRIC ILLUMINATING COMPANY

DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1

DOCKET NO. 50-346

Introduction

By letter dated September 25, 1981, Toledo Edison Company (the licensee) transmitted a Technical Specification (TS) Change Request to amend Appendix A of Facility Operating License No. NPF-3. The subject change involves Section 4.4.6.2.3, Reactor Coolant System Surveillance Requirements, and Section 6.9.1.9, Thirty Day Written Reports.

Discussion

By Order for Modification of License dated April 20, 1981, we modified the Davis-Besse TSs by adding the maximum leakage requirement for the Reactor Coolant System Pressure Isolation Valves (PIVs), Section 3.4.6.2.f., and the surveillance requirements for leak testing these valves, Sections 4.4.6.2.2 and 3 and Table 3.4-2. The four PIVs involved are CF-30, DH-76, CF-31, and DH-77.

The safety function of the PIVs is to provide a pressure isolation barrier between the high pressure reactor coolant system inside containment and the two low pressure Decay Heat Removal Systems (DHRS) outside of containment. A motor operated Containment Isolation Valve (CIV), DH 1A and DH 1B, is also in series with the two PIV check valves in each DHRS. During normal power operation, these valves are in the open position and electric power is removed to prevent inadvertent closure.

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TS 4.4.6.2.3 permits one of the PIVs to exceed the maximum allowable leakage rate denoted in Table 3.4-2 provided the other PIV in series with it meets the maximum allowable leakage rate and is leak tested daily. If a PIV exceeds the maximum specified leakage rate, the CIV in series with it must be closed and the power supplies deenergized as denoted in Action Statement C. of Section 3.4.6.2. When the CIV is closed, the Low Pressure Injection System (LPIS), an Emergency Core Cooling System, a dual function of the DHRS, is placed in a degraded mode as denoted in Section 3.5.2, and an Action Statement of this Section requires the facility be placed in Hot Standby if the leak cannot be corrected within 72 hours. Section 4.4.6.2.3 also requires that the position of the closed CIV must be recorded daily.

The licensee proposes to clarify the wording of TS 4.4.6.2.3 by including the fact that the motor operated CIV must be closed if a PIV in that line fails to meet the maximum leakage requirement and to clarify the daily documentation requirement when the CIV is placed in the closed position.

The licensee also proposes a note be added to TS 6.9.1.9, Thirty Day Written Reports, that is essentially taken verbatim from Regulatory Guide 1.16, Reporting of Operating Information-Appendix A Technical Specifications, Revision 4, August 1975, and states: "Routine surveillance testing, instrument calibration, or preventive maintenance which require system configurations as described in Item 6.9.1.9(a) and 6.9.1.9(b) need not be reported except where test results themselves reveal a degraded condition requiring corrective action."

Evaluation

The Reactor Safety Study (RSS), WASH-1400, identified in a PWR an inter-system Loss of Coolant Accident (LOCA) which is a significant contributor to risk of core melt accidents (Event V). The design examined in the RSS contained in-series check valves isolating the high pressure Primary Coolant System from the LPIS piping. The scenario which leads to the Event V accident is initiated by the failure of these check valves to function as a pressure isolation barrier. This would cause an overpressurization and rupture of the LPIS low pressure piping which results in a LOCA that bypasses containment.

It was determined that one or more of the valve configurations existed at Davis-Besse, and the April 20, 1981 Order for Modification of License was issued to amend the TSs to require leak testing of the four PIVs in the DHRS. The wording change to TS 4.4.6.2.3 was proposed to clarify the requirements of Section 3.4.6.2 which states that the motor operated CIV will be closed and deenergized if the integrity of a PIV in the same line could not be demonstrated. Continued power operation is permitted in this case; however, closing the motor operated CIV puts the LPIS in a degraded mode and into the action requirements of TS 3.5.2 which

necessitates correcting the leak within 72 hours or be in Hot Shutdown within 12 hours. The proposed change would also permit leak testing the remaining PIV separately or in combination with the closed motor operated CIV. Since the motor operated CIV is required to be placed in the closed position by Section 3.4.6.2 when one PIV is leaking, the combined leakage test will not compromise safety of the plant. The wording change also clarifies the documentation requirement for the closed CIV.

The licensee also proposes to add a note to TS 6.9.1.9, Thirty Day Written Reports, from Regulatory Guide 1.16 which includes the exemption from making Thirty Day Reports when a system is placed in a degraded mode for required surveillance testing, instrument calibration, or preventive maintenance.

We agree that the proposed changes clarify the TSs and do not compromise safety of the plant. Therefore, the proposed changes are acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR 51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that:
(1) because the amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a margin of safety, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: February 17, 1983

The following NRC personnel have contributed to this Safety Evaluation:

K. R. Ridgway
T. N. Tambling

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-346THE TOLEDO EDISON COMPANYANDTHE CLEVELAND ELECTRIC ILLUMINATING COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 54 to Facility Operating License No. NPF-3, issued to The Toledo Edison Company and The Cleveland Electric Illuminating Company (the licensees), which revised Technical Specifications (TSs) for operation of the Davis-Besse Nuclear Power Station, Unit No. 1 (the facility) located in Ottawa County, Ohio. The amendment is effective as of its date of issuance.

This amendment modifies the TSs to eliminate the requirement for Thirty Day Written Reports under certain conditions. This change is consistent with applicable portions of Regulatory Guide 1.16. The amendment also clarifies the surveillance requirement applicable to the reactor coolant system pressure isolation valves by indicating that leak testing can be accomplished in combination with a closed containment isolation valve.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as-amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations

in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated September 25, 1981, (2) Amendment No. 54 to License No. NPF-3, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the University of Toledo Library, Documents Department, 2801 West Bancroft Avenue, Toledo, Ohio 43606. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 17th day of February 1983.

FOR THE NUCLEAR REGULATORY COMMISSION


John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing