

July 6, 1984

DMB 016

Docket No. 50-346

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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. 70 TO FACILITY OPERATING LICENSE NO. NPF-3;
INCORE DETECTOR OPERABILITY REQUIREMENTS

The Commission has issued Amendment No. 70 to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. This amendment modifies the Appendix A Technical Specifications in response to Item 2 of your application dated August 18, 1983. The remaining items are under review and will be acted upon in the future.

This amendment modifies Technical Specification 3.3.3.2 to clarify in-core detector operability requirements. A copy of the Safety Evaluation supporting this amendment is enclosed.

The Notice of Issuance will be included in the Commission's Monthly Notice in the Federal Register.

Sincerely,

"ORIGINAL SIGNED BY:"

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

Enclosures:

1. Amendment No. 70
2. Safety Evaluation

cc w/enclosures:

See next page

ORB#2:DL
SNorris
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Toledo Edison Company

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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. 70
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 August 18, 1983, 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, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-3 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 70, 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 its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



George W. Rivenbark, Acting Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 6, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 70

FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

Replace page 3/4 3-35 of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains a vertical line indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

INSTRUMENTATION

INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

3.3.3.2 As a minimum, the incore detectors shall be OPERABLE as specified below.

- a. For AXIAL POWER IMBALANCE measurements:
 1. Nine detectors shall be arranged such that there are three detectors in each of three strings and there are three detectors lying in the same axial plane with one plane at the core mid-plane and one plane in each axial core half.
 2. The axial planes in each core half shall be symmetrical about the core mid-plane.
 3. The detector strings shall not have radial symmetry.
- b. For QUADRANT POWER TILT measurements with the Minimum Incore Detector System:
 1. Two sets of 4 detectors shall lie in each core half. Each set of detectors shall lie in the same axial plane. The two sets in the same core half may lie in the same axial plane.
 2. Detectors in the same plane shall have quarter core radial symmetry.
- c. For QUADRANT POWER TILT measurements, at least 75% of the Symmetric Incore Detectors in each core quadrant shall be OPERABLE.
- d. For $F_{\Delta H}^N$ and F_Q measurements with the Incore Detector System at least 75% of all incore detectors in each core quadrant shall be OPERABLE.

APPLICABILITY: When the incore detection system is used for measurement of:

- a. The AXIAL POWER IMBALANCE.
- b. The QUADRANT POWER TILT.
- c. $F_{\Delta H}^N$.
- d. F_Q .

ACTION:

With less than the specified minimum incore detector arrangement OPERABLE, do not use incore detectors for the above applicable measurement. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

4.3.3.2 The incore detector system shall be demonstrated OPERABLE:

- a. By performance of a CHANNEL CHECK within 7 days prior to its use for measurement of the AXIAL POWER IMBALANCE or the QUADRANT POWER TILT.
- b. At least once per 18 months by performance of a CHANNEL CALIBRATION which does not include the neutron detectors.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 70 TO FACILITY OPERATING LICENSE NO. NPF-3
TOLEDO EDISON COMPANY
AND
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1
DOCKET NO. 50-346

Introduction

By letter dated August 18, 1983, the Toledo Edison Company (TED) proposed several amendments to the Davis-Besse Unit No. 1 operating license. One of these proposed amendments concerns rewording the present Technical Specification (TS), Appendix A, Section 3.3.3.2.c. and the addition of Section 3.3.3.2.d. to differentiate between the required minimum number of operable symmetric incore detectors needed for Quadrant Power Tilt measurements and the minimum incore detectors in each quadrant needed for the calculation of hot channel factors $F_{\Delta H}$ and F_Q .

Evaluation

Section 3.3.3.2.c. of the current Davis-Besse TSs and Standard Technical Specification (STS) for Babcock and Wilcox Reactors, NUREG-0103 Rev. 4 are identical but as stated in the TED proposal the wording incorrectly implies that the hot channel factors $F_{\Delta H}$ and F_Q use only the Symmetric Incore Detector System detectors when actually all incore detectors are used in calculating these factors. TED has proposed adding a new Section 3.3.3.2.d. to correct this misstatement in the specifications. Proposed Section 3.3.3.2.d. requires that 75% of all incore detectors in each quadrant be operable. Section 3.3.3.2.c. has been reworded to reflect this additional section, requiring 75% of the symmetric incore detectors be operable for Quadrant Power Tilt measurements. Since these proposed changes to Page 3/4 3-35 of the specifications only clarify which incore detectors will be used for each function and also maintain the 75% operability requirement, we find them acceptable and agree that they correctly reflect the intent of the STS.

Environmental Consideration

This amendment involves a change in the installation or use of a facility component located within the restricted area. The staff has determined that the amendment involves no significant increase in the amounts of any

effluents that may be released offsite and that there is no significant increase in individual or cumulative occupation radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that:

- (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and
- (2) 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: July 6, 1984

The following NRC personnel have contributed to this Safety Evaluation:
K. R. Ridgway