

May 13, 1988

Docket No. 50-346
Serial No. DB-88-020

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Mr. Donald C. Shelton
Vice President - Nuclear
Toledo Edison Company
Edison Plaza - Stop 712
300 Madison Avenue
Toledo, Ohio 43652

Dear Mr. Shelton:

SUBJECT: ENVIRONMENTAL ASSESSMENT RELATED TO APPLICATION TO SUPPORT ENHANCED
FEED AND BLEED OPERATION (TAC 66415)

Enclosed for your information is a copy of an Environmental Assessment and
Finding of No Significant Impact. This assessment applies to the issuance of
the license amendment requested in your application dated October 27, 1987,
and relates to changes desired to support enhanced feed and bleed operation.
This Environmental Assessment has been forwarded to the Office of the Federal
Register for publication.

Sincerely,

ISI

Albert W. De Agazio, Project Manager
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosure:
As stated

cc: See next page

Office: LA/PDIII-3
Surname: PKreutzer
Date: / /88

AKR
PM/PDIII-3
AdeAgazio/tg
4/26/88

AKR for
PD/PDIII-3
KPerkins
5/13/88

OGC-WF1 *AKR*
5/14/88

Mr. Donald C. Shelton
Toledo Edison Company

cc:

Donald H. Hauser, Esq.
The Cleveland Electric
Illuminating Company
P. O. Box 5000
Cleveland, Ohio 44101

Mr. Robert W. Schrauder
Manager, Nuclear Licensing
Toledo Edison Company
Edison Plaza
300 Madison Avenue
Toledo, Ohio 43652

Gerald Charnoff, Esq.
Shaw, Pittman, Potts
and Trowbridge
2300 N Street N.W.
Washington, D.C. 20037

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 525, 1700 Rockville Pike
Rockville, Maryland 20852

Resident Inspector
U.S. Nuclear Regulatory Commission
5503 N. State Route 2
Oak Harbor, Ohio 43449

Davis-Besse Nuclear Power Station
Unit No. 1

Radiological Health Program
Ohio Department of Health
1224 Kinnear Road
Columbus, Ohio 43212

Attorney General
Department of Attorney
General
30 East Broad Street
Columbus, Ohio 43215

Mr. James W. Harris, Director
(Addressee Only)
Division of Power Generation
Ohio Department of Industrial Relations
2323 West 5th Avenue
P. O. Box 825
Columbus, Ohio 43216

Ohio Environmental Protection Agency
361 East Broad Street
Columbus, Ohio 43266-0558

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

State of Ohio
Public Utilities Commission
180 East Broad Street
Columbus, Ohio 43266-0573

U. S. NUCLEAR REGULATORY COMMISSION
TOLEDO EDISON COMPANY
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
DOCKET NO. 50-346
ENVIRONMENTAL ASSESSMENT AND
FINDING OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-3, issued to Toledo Edison Company and The Cleveland Electric Illuminating Company (the licensees), for operation of the Davis-Besse Nuclear Power Station, Unit No. 1, located in Ottawa County, Ohio.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

The proposed amendment would revise the provisions in the Davis-Besse Nuclear Power Station, Unit No. 1, Technical Specifications (TS's) relating to Safety System Instrumentation and Containment Isolation Valves in accordance with Toledo Edison Company's application dated October 27, 1987. Specifically, the proposed amendment would:

- (1) revise TS Section 3/4.3.2, Table 3.3-5 to delete reference to the Makeup System as containing valves which receive a Safety Features Actuation Signal (SFAS) and,
- (2) revise TS Section 3/4.6.3, Table 3.6-2 to delete containment isolation valve MU 33 (Penetration 19) from Section A of the table and add valves MU 6422 (Penetration 19) and MU 6421 (Penetration 50) to Section C of the table. (Valve MU 33 is redesignated as MU 6422).

The Need for the Proposed Action:

The proposed changes are needed to support facility modifications which are planned to enhance the capability for feed and bleed cooling of the Davis-Besse Nuclear Power Station. The enhancement would involve using the high discharge-head makeup pumps to provide redundant trains of feed to the reactor core from the Borated Water Storage Tank, through the High Pressure Injection (HPI) lines.

Environmental Impacts of the Proposed Action:

The Davis-Besse containment vessel isolation system is designed in accordance to the requirements of General Design Criteria (GDC) 54, 55, 56, and 57 of Appendix A to 10 CFR 50. Isolation valves are provided in lines penetrating the containment vessel to ensure that an uncontrolled release of radioactive material cannot occur in the event of a design basis accident. Valves in those lines which do not serve accident consequence limiting systems are closed automatically or maintained locked closed. The specific line penetrations involved in the proposed amendment provide a flowpath for an engineered safety feature, i.e., HPI, and do not have isolation valve closure requirements since their design function would be to open in the event of a Loss-of-Coolant-Accident (LOCA) to provide for reactor core cooling or containment depressurization.

The makeup system is not designated an engineered safety feature as its present functions are to maintain Reactor Coolant System inventory during operation, to provide reactor coolant pump seal injection, and to

continuously purify the reactor coolant. Therefore, an automatic isolation valve is provided upstream of a check valve in the makeup line before it joins with one HPI line. In the event of a LOCA, the Safety Features Actuation System (SFAS) will isolate certain lines including the makeup line. The planned system modification would delete this SFAS signal to the valve in the makeup line, but would retain remote manual capability in the event isolation is required. A second path from the makeup system to a different HPI line would also be installed to provide a redundant flow path. This new line also would be provided with a remote manual isolation valve.

Containment isolation capability is maintained through manual action by the operators, and the arrangement of the system is such that failure of the makeup system does not affect the operation of the HPI system. Normal operation of the systems is unaffected by the proposed changes.

The Commission has evaluated the environmental impact of the proposed amendment and has determined that post-accident radiological releases would not be greater than previously determined. Neither does the proposed amendment otherwise affect radiological plant effluents during normal operation. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with this proposed amendment.

With regard to potential non-radiological impacts, the proposed amendment involves a change in surveillance requirements. It does not affect non-radiological plant effluents and has no other environmental impact.

Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed amendment.

Alternatives to the Proposed Action:

Since the Commission has concluded that the environmental effects of the proposed action are not significant, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce the environmental impacts attributable to this facility and would result in reduced reliability of feed and bleed cooling capability in the event of off-design basis complete loss of feedwater event.

Alternative Use of Resources:

This action does not involve the use of resources not previously considered in the Final Environmental Statement related to operation of the Davis-Besse facility.

Agencies and Persons Consulted:

The Commission's staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed amendment.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated October 27, 1987, which is 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 Bancroft Avenue, Toledo, Ohio 43606.

Dated at Rockville, Maryland, this 13th day of May 1988.

FOR THE NUCLEAR REGULATORY COMMISSION



Albert W. De Agazio, Acting Director
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects