

December 8, 1988

Docket No. 50-346  
Serial No. DB-88-063

Distribution  
Docket File  
NRC & Local PDRs  
PDIII-3 r/f  
MVirgilio  
PKreutzer  
ADeAgazio  
OGC

EJordon  
BGrimes  
ACRS (10)  
GPA/PA  
PDIII Gray File

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

SUBJECT: ENVIRONMENTAL ASSESSMENT RELATED TO APPLICATION TO REVISE HIGH  
PRESSURE REACTOR TRIP SETPOINT, ARTS ARMING SETPOINT AND PORV TRIP  
SETPOINT (TAC 66727)

Dear Mr. Shelton:

Enclosed for your information is a copy of an Environmental Assessment and  
Finding of No Significant Impact. This assessment is related to the license  
amendment requested in your application dated February 1, 1988 (Serial No.  
1464) and supplemented by letter dated February 26, 1988 (Serial No. 1496)  
which relates to changing the setpoints for the reactor high pressure trip,  
PORV trip, and ARTS arming. This Environmental Assessment has been forwarded  
to the Office of the Federal Register for publication.

Sincerely,

/s/

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

Enclosure:  
As stated

cc: See next page

Office: LA/PDIII-3  
Surname: PKreutzer  
Date: 11/30/88

PM/PDIII-3  
ADeAgazio/mr  
12/02/88

PD/PDIII-3  
JHannon  
12/02/88

OGC  
Backmann  
12/15/88

DFC  
11/11/88

8812130200 881208  
PDR ADDCK 05000346  
PDC

Mr. Donald C. Shelton  
Toledo Edison Company

cc:

David E. Burke, 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 the Reactor Protection System (RPS) High Pressure Trip Setpoint and Anticipatory Reactor Trip System (ARTS) Threshold Power in accordance with Toledo Edison Company's application dated February 1, 1988 as supplemented by letter dated February 26, 1988.

Specifically, the proposed amendment would:

- (1) raise the ARTS turbine trip arming setpoint from 25% to 45% of full power,
- (2) raise the RPS high pressure trip setpoint from 2300 psig to the original value of 2355 psig,
- (3) raise the minimum Pilot Operated Relief Valve (PORV) trip setpoint to greater than 2435 psig from the existing value of greater than 2390 psig.

### The Need for the Proposed Action

The proposed changes would reduce the likelihood of unplanned reactor trips and reduce unnecessary challenges to safety systems.

### Environmental Impacts of the Proposed Action

The Davis-Besse RPS is designed to initiate a reactor trip when any of its monitored parameters exceeds its setpoint value to ensure fuel cladding and the Reactor Coolant System (RCS) boundary integrity are maintained. Raising the RPS High Pressure Trip Setpoint will not impact the peak pressure postulated during a high pressure trip and will maintain the RCS pressure boundary within its pre-established safety limits.

The Davis-Besse ARTS is designed to automatically trip the reactor and thereby reduce the severity of nuclear steam supply system (NSSS) transients that can result from a Loss of Main Feedwater Pumps and/or Main Turbine trip. Raising the ARTS arming level will reduce the number of unnecessary trips due to loss of the Main Feedwater Pumps or upon Main Turbine trip when secondary plant relief capacity is capable of providing plant runback when these conditions occur.

The Davis-Besse PORV is designed to provide, in conjunction with the Pressurizer Code Safety Valves, protection from overpressurization. Raising the PORV minimum setpoint has no effect on the valve's actual setpoint but provides an adequate margin above the RPS High Pressure Trip Setpoint such that minimization of PORV actuation is maintained.

The Commission has evaluated the environmental impact of the proposed amendment and has determined that neither the probability of accidents nor the post-accident radiological releases would be greater

than previously determined. The proposed amendment does not otherwise affect radiological plant effluents during normal operation. In addition, the proposed amendment does not have any influence upon occupational radiation exposure. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with this proposed amendment.

With regard to potential nonradiological impacts, the proposed amendment does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

The Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the Federal Register on May 3, 1988 (53 FR 15758). No request for hearing or petition for leave to intervene was filed following this notice.

#### Alternatives to the Proposed Action

Since the Commission has concluded that the environmental effects of the proposed action are not significant, any alternative 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 only result in retaining the present potential for unplanned reactor trips and unnecessary challenges to safety systems in accordance with present design.

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 February 1, 1988, and letter dated February 26, 1988, which are available for public inspection at the Commission's Public Document Room, 2120 L 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        th day of        ,  
1988.

FOR THE NUCLEAR REGULATORY COMMISSION

*Timothy G. Colburn*

Timothy G. Colburn, Acting Director  
Project Directorate III-3  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulations