

July 27, 1994

Mr. John P. Stetz  
Vice President - Nuclear, Davis-Besse  
Centerior Service Company  
c/o Toledo Edison Company  
Davis-Besse Nuclear Power Station  
5501 North State Route 2  
Oak Harbor, Ohio 43449

Dear Mr. Stetz:

SUBJECT: AMENDMENT NO. 190 TO FACILITY OPERATING LICENSE NO. NPF-3  
(TAC NO. M89391)

The Commission has issued Amendment No. 190 to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. The amendment revises the Technical Specifications in response to your application dated February 17, 1993.

This amendment increases the TS trip setpoint and its associated allowable value for containment high-radiation specified in TS Table 3.3-4 from "<2 x Background at RATED THERMAL POWER" to "<4 x Background at RATED THERMAL POWER."

A copy of the Safety Evaluation is also enclosed. Notice of issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Original signed by Robert J. Stransky

Robert J. Stransky, Project Manager  
Project Directorate III-3  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 190 to License No. NPF-3
- 2. Safety Evaluation

cc w/enclosures:

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\*See Previous Concurrence

OFFICE	LA:PDIII-3	APM:PDIII-3*	PM:PDIII-3	D:PDIII-3*	PRPB*	OTSB*	OGC*
NAME	MRushbrook	GWest:dy	RStransky	JHannon	Cunningham	CGrimes	RBachman
DATE	7/17/94	06/06/94	7/27/94	06/08/94	06/21/94	06/30/94	07/06/94

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Mr. John P. Stetz  
Toledo Edison Company

Davis-Besse Nuclear Power Station  
Unit No. 1

cc:

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

TOLEDO EDISON COMPANY

CENTERIOR SERVICE 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. 190  
License No. NPF-3

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Toledo Edison Company, Centerior Service Company, and the Cleveland Electric Illuminating Company (the licensees) dated February 17, 1993, 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:

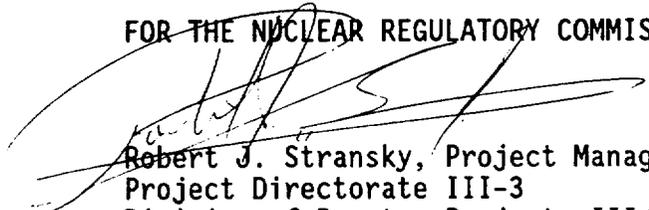
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P PDR

(a) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 190, 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 and shall be implemented not later than 90 days after issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Stransky, Project Manager  
Project Directorate III-3  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of issuance: July 27, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 190

FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

Replace the following page of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by amendment number and contains vertical lines indicating the area of change.

Remove

3/4 3-13

Insert

3/4 3-13

TABLE 3.3-4

SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
<b>INSTRUMENT STRINGS</b>		
a. Containment Radiation	$< 4 \times$ Background at RATED THERMAL POWER	$< 4 \times$ Background at RATED THERMAL POWER
b. Containment Pressure - High	$\leq 18.4$ psia	$\leq 18.52$ psia <sup>1</sup>
c. Containment Pressure - High-High	$\leq 38.4$ psia	$\leq 38.52$ psia <sup>1</sup>
d. RCS Pressure - Low	$\geq 1620.75$ psig	$\geq 1615.75$ psig <sup>1</sup>
e. RCS Pressure - Low-Low	$\geq 420.75$ psig	$\geq 415.75$ psig <sup>1</sup>
f. BWST Level	$\geq 89.5$ and $\leq 100.5$ in. H <sub>2</sub> O	$\geq 88.3$ and $\leq 101.7$ in. H <sub>2</sub> O <sup>1</sup>
<b>SEQUENCE LOGIC CHANNELS</b>		
a. Essential Bus Feeder Breaker Trip (90%)	$\geq 3744$ volts for $\leq 7.8$ sec	$\geq 3558$ volts $\leq 7.8$ sec
b. Diesel Generator Start, Load Shed on Essential Bus (59%)	$\geq 2071$ and $\leq 2450$ volts for $0.5 \pm 0.1$ sec	$\geq 2071$ and $\leq 2450$ volts for $0.5 \pm 0.1$ sec <sup>1</sup>
<b>INTERLOCK CHANNELS</b>		
a. Decay Heat Isolation Valve and Pressurizer Heater	$< 438$ psig	$< 443$ psig <sup>1</sup>

<sup>1</sup> Allowable Value for CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION.

\* Referenced to the centerline of DHT and DHTC.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 190 TO FACILITY OPERATING LICENSE NO. NPF-3  
TOLEDO EDISON COMPANY  
CENTERIOR SERVICE COMPANY  
AND  
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY  
DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1  
DOCKET NO. 50-346

1.0 INTRODUCTION

In a letter to the Nuclear Regulatory Commission dated February 17, 1993, Centerior Energy, the licensee for the Davis-Besse Nuclear Power Station (DBNPS), requested a revision to Operating License NPF-3 by incorporating revised setpoints and allowable-values to Technical Specifications (TS) for process instruments of the safety features actuation system, steam and feedwater rupture control system, and the containment radiation monitoring system.

As a part of the Design Bases Reconstitution Program at DBNPS, the licensee has revised existing setpoint-calculations. The revised calculations address instrument loop uncertainties that may not have been included in the original calculations. The revised calculations included new values for the setpoint and the allowable-value, therefore, a revision to the TS to incorporate the new setpoints and allowable-values was necessary.

The TS-specified trip setpoint for high radiation in the containment is being revised from its present value of "<2 x Background at RATED THERMAL POWER" to a new value of "<4 x Background at RATED THERMAL POWER." The increased trip setting provides an additional margin to accommodate normal background radiation changes in the containment.

## 2.0 PROPOSED TS-CHANGE

Table 3.3-4, Safety Features Actuation System Instrumentation Trip Setpoints

Functional Unit - a, Containment Radiation: Change TRIP SETPOINT from "<2 x Background at RATED THERMAL POWER" to "<4 x Background at RATED THERMAL POWER," and ALLOWABLE VALUE from "<2 x Background at RATED THERMAL POWER" to "<4 x Background at RATED THERMAL POWER#."

## 3.0 EVALUATION

The staff noted that the request to change the containment radiation high setpoint was due to a reevaluation of the analysis for determining the trip setpoint. The selection of trip setpoints is such that adequate protection is provided when all sensor and processing time delays are taken into account. To allow for calibration tolerances, instrument uncertainties, and instrument drift, trip setpoint allowable values are conservatively adjusted with respect to the analytical limits. Operation with a trip setpoint less conservative than the nominal trip setpoint, but within its allowable value, is acceptable, provided that the difference between the nominal trip setpoint and the allowable value is equal to or greater than the drift allowable assumed for each trip in the transient and accident analysis. A channel is inoperable if its actual trip setpoint is not within its allowable value.

Based on the information provided, the staff concludes that in order to provide adequate protection the setpoint needs to be changed. Taking into consideration all sensor and processing time delays, calibration tolerances, instrument uncertainties and instrument drift, the staff concludes that a change of the setpoint and allowable value from "<2 x Background at RATED THERMAL POWER" to "<4 x Background at RATED THERMAL POWER" is warranted.

Based on the above evaluation, the staff concludes that the proposed TS change is consistent with the containment isolation actuation setpoint criteria of NUREG-0737, TMI Action Plan, Item II.E.4.2 for ensuring appropriate isolation on high-radiation and is, therefore, acceptable.

## 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Ohio State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 5.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (58 FR 34096). Accordingly, the 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 the amendment.

## 6.0 CONCLUSION

The staff has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: S. V. Athavale

Date: July 27, 1994