Docket No. 50-346

June 14, 1994

Mr. Donald C. Shelton
Senior 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. Shelton:

SUBJECT: AMENDMENT NO. 187 TO FACILITY OPERATING LICENSE NO. NPF-3 (TAC NO. 85289)

The Commission has issued Amendment No. 187 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 December 23, 1992, as supplemented on March 18, 1994.

This amendment revises TS 3/4 3.3.5 and its Bases adding testing requirements for transfer switches used to meet 10 CFR Part 50, Appendix R (Fire Protection) requirements and specifies a new special report requirement for TS 6.9.2.

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 Garmon West, Jr.

Garmon West, Jr., Acting Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 187 to License No. NPF-3
2. Safety Evaluation

cc w/enclosures:
See next page

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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. 187
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 December 23, 1992, as supplemented on March 18, 1994, 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:

cc:

Mary E. O'Reilly
Centerior Energy Corporation
300 Madison Avenue
Toledo, Ohio 43652

Mr. William T. O'Connor, Jr.
Manager - Regulatory Affairs
Toledo Edison Company
Davis-Besse Nuclear Power Station
5501 North State - Route 2
Oak Harbor, Ohio 43449

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
801 Warrenville Road
Lisle, Illinois 60532-4351

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

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

Mr. John K. Wood, Plant Manager
Toledo Edison Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, Ohio 43449

Robert E. Owen, Chief
Bureau of Radiological Health
Services
Ohio Department of Health
Post Office Box 118
Columbus, Ohio 43266-0118

Attorney General
Department of Attorney General
30 East Broad Street
Columbus, Ohio 43216

Mr. James W. Harris, Director
Division of Power Generation
Ohio Department of Industrial
Regulations
P. O. Box 825
Columbus, Ohio 43216

Ohio Environmental Protection Agency
DERR--Compliance Unit
ATTN: Zack A. Clayton
P. O. Box 1049
Columbus, Ohio 43266-0149

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

Mr. James R. Williams
State Liaison to the NRC
Adjutant General's Department
Office of Emergency Management
Agency
2825 West Granville Road
Columbus, Ohio 43235-2712

(a) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 187 , 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 startup from the first refueling outage after approval of this amendment.

FOR THE NUCLEAR REGULATORY COMMISSION

Garmon West, Jr.

Garmon West, Jr., Acting 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: June 14, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 187

FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. 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.

Remove	Insert
3/4 3-43	3/4 3-43
B 3/4 3-3	B 3/4 3-3
6-18	6-18

INSTRUMENTATION

REMOTE SHUTDOWN INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.5.1 The remote shutdown monitoring instrumentation channels shown in Table 3.3-9 shall be OPERABLE with readouts displayed external to the control room.

3.3.3.5.2 The control circuits and transfer switches required for a serious control room or cable spreading room fire shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With the number of OPERABLE remote shutdown monitoring channels less than required by Table 3.3-9, either restore the inoperable channel to OPERABLE status within 30 days, or be in HOT SHUTDOWN within the next 12 hours.

b. With one or more control circuits or transfer switches required for a serious control room or cable spreading room fire inoperable, restore the inoperable circuit(s) or switch(es) to OPERABLE status within 30 days, or prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the circuit(s) or switch(es) to OPERABLE status.

c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.5.1 Each remote shutdown monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3-6.

4.3.3.5.2 At least once per 18 months, verify each control circuit and transfer switch required for a serious control room or cable spreading room fire is capable of performing the intended function.

TABLE 3.3-9

REMOTE SHUTDOWN MONITORING INSTRUMENTATION

INSTRUMENT	READOUT LOCATION	MEASUREMENT RANGE	MINIMUM CHANNELS OPERABLE
1. Reactor Trip Breaker Indication	(a) 480v F&DC CH. 2 Switchgear Room	OPEN-CLOSE	(a) 1 (Trip Breaker A)
	(b) 480v E&DC CH. 1 Switchgear Room		(b) 1 (Trip Breaker B)
	(c) 480v F&DC CH. 2 Switchgear Room		(c) 1 (Trip Breaker C)
	(d) CRDC Cabinet Room		(d) 1 (Trip Breaker D)
2. Reactor Coolant Temperature - Hot Leg	Aux. Shutdown Panel	520-620 °F	1
3. Reactor Coolant System Pressure	Aux. Shutdown Panel	0-3000 psig	1
4. Pressurizer Level	Aux. Shutdown Panel	0-320 inches	1
5. Steam Generator Outlet Steam Pressure	Aux. Shutdown Panel	0-1200 psig	1/steam generator
6. Steam Generator Level Startup Range	Aux. Shutdown Panel	0-250 inches	1/steam generator
7. Control Rod Position Switches	Control Rod Drive Control Cabinets, System Logic Cabinet #4	0, 25, 50, 75 and 100%	1/rod

REMOTE SHUTDOWN INSTRUMENTATION (Continued)

HOT STANDBY of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost.

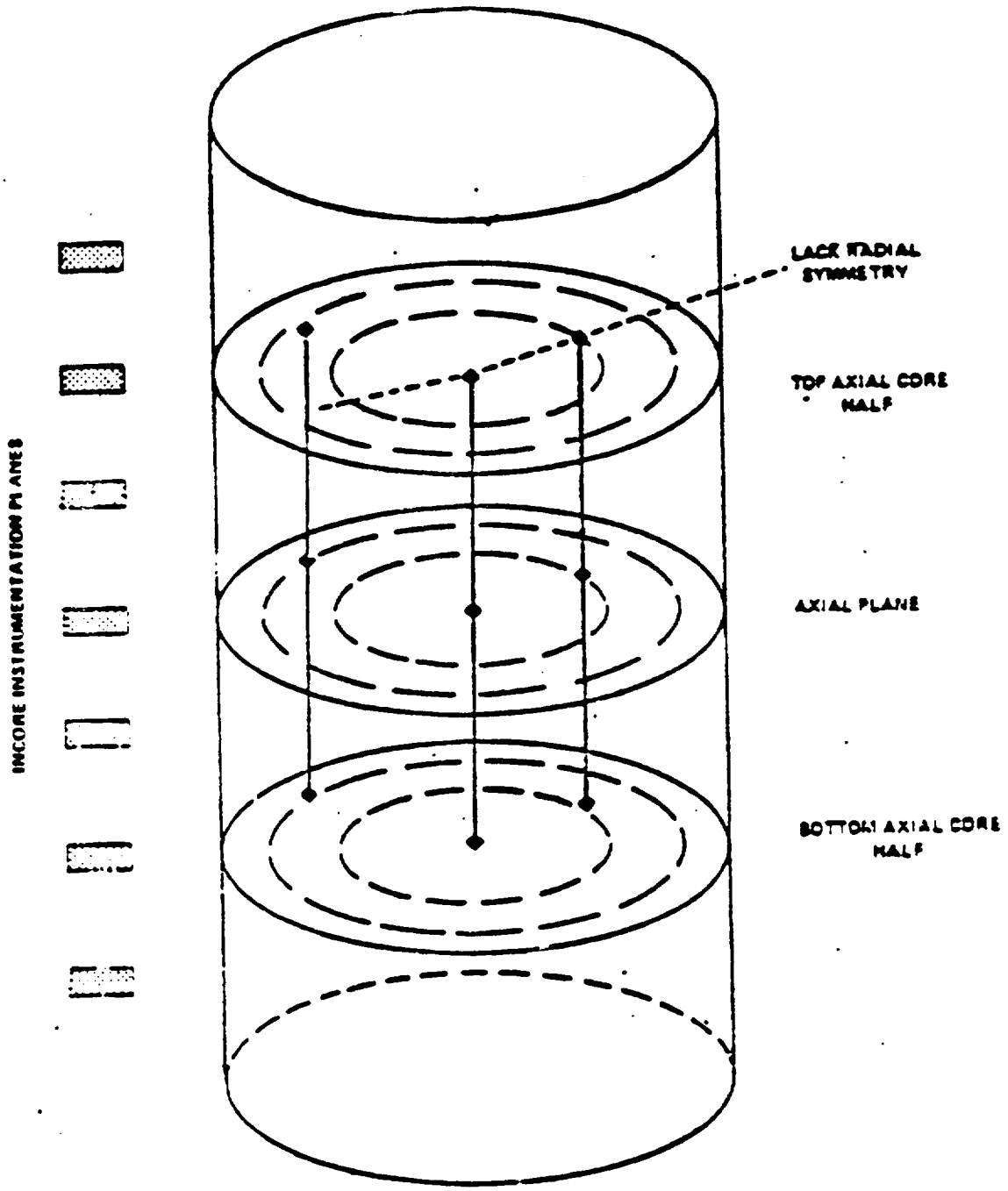
SR 4.3.3.5.2 verifies that each Remote Shutdown System transfer switch and control circuit required for a serious control room or cable spreading room fire performs its intended function. This verification is performed from the remote shutdown panel and locally, as appropriate. This will ensure that if the control room becomes inaccessible, the unit can be safely shutdown from the remote shutdown panel and the local control stations.

3/4.3.3.6 POST-ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the post-accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. The containment Hydrogen Analyzers, although they are considered part of the plant post-accident monitoring instrumentation, have their OPERABILITY requirements located in Specification 3/4.6.4.1, Hydrogen Analyzers.

3/4.3.3.7 CHLORINE DETECTION SYSTEMS - Deleted

3/4.3.3.8 FIRE DETECTION INSTRUMENTATION - Deleted



Basis Figure 3-1 Incore Instrumentation Specification
Acceptable Minimum AXIAL POWER IMBALANCE Arrangement

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 50.4 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 specifications:

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. Deleted

f. Deleted

g. Inoperable Remote Shutdown System control circuit(s) or transfer switch(es) required for a serious control room or cable spreading room fire, Specification 3.3.3.5.2.

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 EVENTS.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

e. Records of changes made to Operating Procedures.

f. Records of radioactive shipments.

g. Records of sealed source and fission detector leak tests and results.

h. Records of annual physical inventory of all sealed source material of record.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of radiation exposure for all individuals entering radiation control areas.

d. Records of gaseous and liquid radioactive material released to the environs.

e. Records of transient of operational cycles for those facility components identified in Table 5.7-1.

f. Records of reactor tests and experiments.

g. Records of training and qualification for current members of the plant staff.

h. Records of in-service inspections performed pursuant to these Technical Specifications.

i. Records of Quality Assurance activities required by the QA Manual.

j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

k. Records of meetings of the SRB and the CNRB.

l. Records for Environmental Qualification which are covered under the provisions of paragraph 6.13.

m. Records of analyses required by the radiological environmental monitoring program that would permit evaluation of the accuracy of the analyses at a later date. This should include procedures effective at specified times and QA records showing that these procedures were followed.

o. Records of the service lives of all safety related hydraulic and mechanical snubbers including the date at which the service life commences and associated installation and maintenance records.

p. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 187 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

By letter dated December 23, 1992, as supplemented on March 18, 1994, Toledo Edison Company requested a revision to the Technical Specifications (TS) for Davis-Besse Nuclear Power Station. The proposed amendment revises TS 3/4.3.3.5 and its Bases adding testing requirements for transfer switches used to meet 10 CFR Part 50, Appendix R (Fire Protection) requirements, and specifies a new special report requirement for TS 6.9.2. The supplemental letter dated March 18, 1994, clarified information regarding physical operation of components; specified compensatory measures that would be put in place if a transfer switch becomes inoperable for greater than 30 days; and provided vendor recommendations for transfer switch testing.

The March 18, 1994, letter provided supplemental information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

Generic Letter 88-12 dated August 2, 1988, provided guidance to all power reactor licensees on the removal of fire protection requirements from TS, and indicated that any specifications related to the capability for safe shutdown following a fire (e.g., Appendix R transfer switches) should not be included in the removal of detailed fire protection requirements from the TS. The NRC staff Safety Evaluation Report dated September 22, 1992, pointed out that the licensee did not have a TS related to safe shutdown following a fire. Following discussions with the NRC staff, the licensee, by letter dated July 28, 1992, committed to include testing of transfer switches used to meet 10 CFR Part 50 Appendix R safe shutdown requirements in the TS. The proposed amendment fulfilled the licensee's commitment of July 28, 1992.

2.1 Proposed Revisions

2.1.1 Limiting Condition for Operation (LCO) 3.3.3.5.

(1) Proposed change: Change the number of the current LCO "3.3.3.5" to LCO "3.3.3.5.1."

Evaluation: This change is an editorial change and is acceptable to the staff.

(2) Proposed change: Add a new LCO 3.3.3.5.2 that would state:

"The control circuits and transfer switches required for a serious control room or cable spreading room fire shall be OPERABLE."

By letter dated March 18, 1994, the licensee clarified that in some instances physical operation of equipment will not be performed to demonstrate that safe shutdown equipment is capable of operation using the associated transfer switches and control circuits. The licensee provided additional information on this topic during the conference call of May 24, 1994. The licensee conveyed that not physically operating a component in the course of performing the test will minimize wear on the component and will maximize flexibility in scheduling and performing the test. Further, the licensee clarified that, at this time, it does not plan to physically operate the following components: Component Cooling Water Pump P43-1, Containment Air Cooler C1-1, Emergency Diesel Generator 1, and Essential Power Busses C1 and E1. Lastly, the licensee reiterated that regardless of whether the component is physically operated, the surveillance test procedure will include clearly definitive acceptance criteria which will ensure demonstration of the operability of the transfer switch/control circuit.

Evaluation: This addition is consistent with the guidance of Generic Letter 88-12, indicating that any specifications related to the capability for safe shutdown following a fire should not be included in the removal of detailed fire protection requirements from the TS. The addition and the licensee's clarification regarding demonstration of operability of transfer switches and control circuits, as specified in Attachment 1 of the licensee's December 23, 1992 submittal and discussed during the conference call of May 24, 1994, are acceptable to the staff.

(3) Proposed change: Change Action "b" to Action "c."

Evaluation: This change is an editorial change and is acceptable to the staff.

(4) Proposed change: Add a new action statement that would state:

"With one or more control circuits or transfer switches required for a serious control room or cable spreading room fire inoperable, restore

the inoperable circuit(s) or switch(es) to OPERABLE status within 30 days, or prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the circuit(s) or switch(es) to OPERABLE status."

Evaluation: The licensee's submittal dated March 18, 1994, pointed out that the mild environment in the plant has resulted in good contact reliability for transfer switches. Further, the licensee conveyed that it anticipates that an inoperable transfer switch or circuit would result in compensatory measures similar to those for an inoperable fire barrier. Specifically, a continuous fire watch would probably be established or, assuming fire detection is available, an hourly fire watch would probably be provided. However, the new action statement for LCO 3.3.3.5.2 would require the licensee to submit a special report to the NRC after 30 days including a description of the corrective action taken for the particular case and the schedule to restore any applicable circuit or switch to operable status. On the basis of the above, the inclusion of this TS requirement is acceptable.

2.1.2 Surveillance Requirement 4.3.3.5.

(1) Proposed change: Change the number of the current Surveillance Requirement (SR) "4.3.3.5" to SR "4.3.3.5.1."

Evaluation: This change is an editorial change and is acceptable to the staff.

(2) Proposed change: Add a new SR 4.3.3.5.2 that would state:

"At least once per 18 months, verify each control circuit and transfer switch required for a serious control room or cable spreading room fire is capable of performing the intended function."

Evaluation: The licensee's submittal dated March 18, 1994, indicated that vendor documentation for transfer switches recommends periodic inspection of transfer switches for broken parts and degraded contacts. This addition is consistent with the guidance of Generic Letter 88-12, indicating that any specifications related to the capability for safe shutdown following a fire should not be included in the removal of detailed fire protection requirements from the TS. This addition is acceptable.

2.1.3 Remote Shutdown Instrumentation, TS Bases 3/4.3.3.5

Proposed change: Add the following statement to TS Bases 3/4.3.3.5:

"SR 4.3.3.5.2 verifies that each Remote Shutdown System transfer switch and control circuit required for a serious control room or cable spreading room fire performs its intended function. This verification

is performed from the remote shutdown panel and locally, as appropriate. This will ensure that if the control room becomes inaccessible, the unit can be safely shutdown from the remote shutdown panel and the local control stations."

Evaluation: This addition to the associated bases is just clarifying and is acceptable to the staff.

2.1.4 Technical Specification 6.9.2

Proposed change: Add the following statement to TS 6.9.2:

"Inoperable Remote Shutdown System control circuit(s) or transfer switch(es) required for a serious control room or cable spreading room fire, Specification 3.3.3.5.2."

Evaluation: This addition is an administrative addition and is acceptable to the staff.

On the basis of the above, the NRC staff finds that the proposed amendment to add TS testing requirements for Appendix R transfer switches and to specify a new special report requirement for TS 6.9.2 are acceptable and meet the relevant requirements of Appendix R to 10 CFR Part 50. As requested in the licensee's letter dated December 23, 1992, the staff finds acceptable that this amendment will be implemented prior to restart from the next refueling outage (starting approximately October 1, 1994).

3.0 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.

4.0 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 (59 FR 10016). 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.

5.0 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: G. West, Jr.

Date: June 14, 1994