December 2, 1997

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Mr. John K. Wood
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, OH 43449-9760

SUBJECT: AMENDMENT NO. 216 TO FACILITY OPERATING LICENSE NO. NPF-3 - DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1 (TAC NO. M97901)

Dear Mr. Wood:

The Commission has issued the enclosed Amendment No. 216 to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. The amendment revises the Technical Specifications (TSs) in response to your application dated January 20, 1997.

This amendment revises TS Section 3/4.5.2, "Emergency Core Cooling Systems, ECCS Subsystems - $T_{avg} \geq 280°F$," TS Section 3/4.5.3, "Emergency Core Cooling Systems, ECCS Subsystems - $T_{avg} < 280°F$," and TS Section 3/4.7, "Plant Systems." Several surveillance intervals were changed from 18 months to once each refueling interval.

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:

Allen G. Hansen, Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosures: 1. Amendment No. 216 to License No. NPF-3
2. Safety Evaluation

cc w/encls: See next page

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OFFICE	PD33-LA	PD33-PM	SPLB-BC	SRXB-BC	EMEB-BC	OGC
NAME	CBoyle	AHansen	TMarsh	JLyons	RWessman	
DATE	5/14/97	5/15/97	5/22/97	6/19/97	6/24/97	6/30/97

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

December 2, 1997

Mr. John K. Wood
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, OH 43449-9760

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Docket No. 50-346

Enclosures: 1. Amendment No.216 to License No. NPF-3
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cc w/encls: See next page

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180 East Broad Street
Columbus, Ohio 43266-0573

Attorney General
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30 East Broad Street
Columbus, Ohio 43216

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Commissioner of Ottawa County
Port Clinton, Ohio 43252

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. 216
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 January 20, 1997, 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:

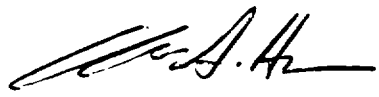
ENCLOSURE 1

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 216, 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 120 days after issuance.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION



Allen G. Hansen, 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: December 2, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 216

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.

Remove	Insert
3/4 5-4	3/4 5-4
3/4 5-5	3/4 5-5
3/4 7-5	3/4 7-5
3/4 7-12b	3/4 7-12b
3/4 7-14	3/4 7-14
3/4 7-15	3/4 7-15

SURVEILLANCE REQUIREMENTS (Continued)

b. At least once each REFUELING INTERVAL, or prior to operation after ECCS piping has been drained by verifying that the ECCS piping is full of water by venting the ECCS pump casings and discharge piping high points.

c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the containment which could be transported to the containment emergency sump and cause restriction of the pump suction during LOCA conditions. This visual inspection shall be performed:

1. For all accessible areas of the containment prior to establishing CONTAINMENT INTEGRITY, and

2. For all areas of containment affected by an entry, at least once daily while work is ongoing and again during the final exit after completion of work (containment closeout) when CONTAINMENT INTEGRITY is established.

d. At least once each REFUELING INTERVAL by:

1. Verifying that the interlocks:

a) Close DH-11 and DH-12 and deenergize the pressurizer heaters, if either DH-11 or DH-12 is open and a simulated reactor coolant system pressure which is greater than the trip setpoint (<438 psig) is applied. The interlock to close DH-11 and/or DH-12 is not required if the valve is closed and 480 V AC power is disconnected from its motor operators.

b) Prevent the opening of DH-11 and DH-12 when a simulated or actual reactor coolant system pressure which is greater than the trip setpoint (<438 psig) is applied.

2. a) A visual inspection of the containment emergency sump which verifies that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or corrosion.

b) Verifying that on a Borated Water Storage Tank (BWST) Low-Low Level interlock trip with the motor operators for the BWST outlet isolation valves and the containment emergency sump recirculation valves energized, the BWST Outlet Valve HV-DH7A (HV-DH7B) automatically close in ≤75 seconds after the operator manually pushes the control switch to open the Containment Emergency Sump Valve HV-DH9A (HV-DH9B) which should be verified to open in ≤75 seconds.

3. Deleted

SURVEILLANCE REQUIREMENTS (Continued)

4. Verifying that a minimum of 290 cubic feet of trisodium phosphate dodecahydrate (TSP) is contained within the TSP storage baskets.

5. Deleted

6. Deleted

e. At least once each REFUELING INTERVAL, by

1. Verifying that each automatic valve in the flow path actuates to its correct position on a safety injection test signal.

2. Verifying that each HPI and LPI pump starts automatically upon receipt of a SFAS test signal.

f. By performing a vacuum leakage rate test of the watertight enclosure for valves DH-11 and DH-12 that assures the motor operators on valves DH-11 and DH-12 will not be flooded for at least 7 days following a LOCA:

1. At least once per 18 months.

2. After each opening of the watertight enclosure.

3. After any maintenance on or modification to the watertight enclosure which could affect its integrity.

The inspection port on the watertight enclosure may be opened without requiring performance of the vacuum leakage rate test, to perform inspections. After use, the inspection port must be verified as closed in its correct position. Provisions of TS 3.0.3 are not applicable during these inspections.

g. By verifying the correct position of each mechanical position stop for valves DH-14A and DH-14B.

1. Within 4 hours following completion of the opening of the valves to their mechanical position stop or following completion of maintenance on the valve when the LPI system is required to be OPERABLE.

2. At least once each REFUELING INTERVAL.

SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per 31 days on a STAGGERED TEST BASIS by:

1. Verifying that each valve (power operated or automatic) in the flow path is in its correct position.

2. Verifying that all manual valves in the auxiliary feedwater pump suction and discharge lines that affect the system's capacity to deliver water to the steam generator are locked in their proper position.

3. Verifying that valves CW 196, CW 197, FW 32, FW 91 and FW 106 are closed.

c. At least once each REFUELING INTERVAL by:

1. Verifying that each automatic valve in the flow path actuates to its correct position on a Steam and Feedwater Rupture Control System actuation test signal.

2. Verifying that each pump starts automatically upon receipt of a Steam and Feedwater Rupture Control System actuation test signal. The provisions of Specification 4.0.4 are not applicable for entry in MODE 3.

3. Verifying that there is a flow path from each auxiliary feedwater pump to both steam generators by pumping water from the Condensate Storage Tank with each pump to both steam generators.

   The flow paths shall be verified by either steam generator level change or Auxiliary Feedwater Safety Grade Flow Indication. Verification of the Auxiliary Feedwater System's flow capacity is not required.

d. The Auxiliary Feed Pump Turbine Steam Generator Level Control System shall be demonstrated OPERABLE by performance of a CHANNEL CHECK at least once per 12 hours, a CHANNEL FUNCTIONAL TEST at least once per 31 days, and a CHANNEL CALIBRATION at least once per 18 months.

e. The Auxiliary Feed Pump Suction Pressure Interlocks shall be demonstrated OPERABLE by performance of a CHANNEL FUNCTIONAL TEST at least once per 31 days, and a CHANNEL CALIBRATION at least once per 18 months.

SURVEILLANCE REQUIREMENTS (Continued)

3. When in MODE 1 at RATED THERMAL POWER equal to or less than 40% or when in MODES 2 or 3, verifying that each valve (manual or power operated) in the Motor Driven Feedwater Pump flow path is able to be positioned locally for delivering flow to the Auxiliary Feedwater System.

(Ability is demonstrated by verifying the presence of handwheels for all manual valves and the presence of either handwheels or available power supply for motor operated valves.)

c. At least once per 92 days and prior to entry into MODE 3 from MODE 4 (if not performed in the past 92 days) by:*

1. Verifying proper operation of each power operated and automatic valve in the Motor Driven Feedwater Pump flow path to the Auxiliary Feedwater System.

2. Verifying the Motor Driven Feedwater Pump starts from the Control Room. **

3. Verifying proper operation of the Motor Driven Feedwater Pump.**

d. At least once each REFUELING INTERVAL by:

1. Verifying that there is a flow path between the Motor Driven Feedwater Pump System and the Auxiliary Feedwater System by pumping water from the Condensate Storage Tanks to the steam generators. The flow path to the steam generators shall be verified prior to entering MODE 3 from MODE 4 by either steam generator level change or Auxiliary Feedwater Safety Grade Flow Indication. Verification of Motor Driven Feedwater Pump System flow capacity is not required.

---

* If the Motor Driven Feedwater Pump cannot be tested within the time period specified, due to being aligned to the Main Feedwater System, the Surveillance Requirement shall be met within 72 hours after the Motor Driven Feedwater Pump has been aligned to the Auxiliary Feedwater System for 1 hour.

** When conducting tests of the Motor Driven Feedwater Pump System in MODE 1 greater than 40% RATED THERMAL POWER which require local manual realignment of valves that make the system inoperable, both auxiliary feedwater pumps and their associated flow paths shall be OPERABLE per Specification 3.7.1.2 during the performance of this surveillance. If one auxiliary feedwater pump or flow path is inoperable, a dedicated individual shall be stationed at the realigned Motor Driven Feedwater Pump System's valves (in communication with the control room) able to restore the valves to normal system OPERABLE status.

3/4.7.3 COMPONENT COOLING WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.3.1 Two independent component cooling water loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one component cooling water loop inoperable, restore the inoperable loop to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.3.1 Each component cooling water loop shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed or otherwise secured in position, is in its correct position.

b. At least once each REFUELING INTERVAL, by:

1. Verifying that each automatic valve in the flow path actuates to its correct position on an SFAS test signal.

2. Verifying that each component cooling water emergency pump starts automatically on an SFAS test signal.

3/4.7.4 SERVICE WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.4.1 Two independent service water loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one service water loop inoperable, restore the inoperable loop to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.4.1 Each service water loop shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed or otherwise secured in position, is in its correct position.

b. At least once each REFUELING INTERVAL, by:

1. Verifying that each automatic valve in the flow path actuates to its correct position on an SFAS test signal.

2. Verifying that each service water emergency pump starts automatically on an SFAS test signal.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 216 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 January 20, 1997, Toledo Edison Company, Centerior Service Company, and The Cleveland Electric Illuminating Company (the licensees), submitted a request for changes to the Davis-Besse Nuclear Power Station (DBNPS), Unit No. 1, Technical Specifications (TSs).

The proposed amendment would revise TS Section 3/4.5.2, "Emergency Core Cooling Systems, ECCS Subsystems - $T_{avg} \geq 280°F$," TS Section 3/4.5.3, "Emergency Core Cooling Systems, ECCS Subsystems - $T_{avg} < 280°F$," and TS Section 3/4.7, "Plant Systems." Several surveillance intervals would be changed from 18 months to once each refueling interval.

2.0 BACKGROUND

Improved reactor fuels allow licensees to consider an increase in the duration of the fuel cycle for their facilities. The staff has reviewed requests for individual plants to modify surveillance intervals to be compatible with a 24-month fuel cycle. The NRC issued Generic Letter (GL) 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," on April 2, 1991, to provide generic guidance to licensees for preparing such license amendment requests.

TSs that specify an 18-month surveillance interval could be changed to state that these surveillances are to be performed once per refueling interval. The notation for surveillance intervals would then be changed to include the definition of a "Refueling Interval" with the existing "R" notation for surveillances that are generally performed during a refueling outage. The frequency for the interval indicated by this notation would also be changed from 18 months to "at least once every 24 months." The provision to extend surveillances by 25 percent of the specified interval would extend the time limit for completing these surveillances from the existing limit of 22.5 months to a maximum of 30 months.

ENCLOSURE 2

Licensees must address instrument drift when proposing an increase in the surveillance interval for calibrating instruments that perform safety functions including providing the capability for safe shutdown. The effect of the increased calibration interval on instrument errors must be addressed because instrument errors caused by drift were considered when determining safety system setpoints and when performing safety analyses.

For other 18-month surveillances, licensees should evaluate the effect on safety of the change in surveillance intervals to accommodate a 24-month fuel cycle. This evaluation should support a conclusion that the effect on safety is small. In addition, licensees should confirm that historical maintenance and surveillance data do not invalidate this conclusion. Licensees should confirm that the performance of surveillances at the bounding surveillance interval limit provided to accommodate a 24-month fuel cycle would not invalidate any assumption in the plant licensing basis. In consideration of these confirmations, the licensees need not quantify the effect of the change in surveillance intervals on the availability of individual systems or components.

3.0 EVALUATION

This license amendment request will extend surveillance testing intervals from every 18 months to each refueling interval. The licensees propose replacing "at least once per 18 months" with "at least once each REFUELING INTERVAL" for the TSs described below.

The proposed changes allow the continued application of TS 4.0.2. This TS allows surveillance intervals to be increased up to 25 percent on a nonroutine basis (30 months) in accordance with the GL. A paragraph was added (Amendment 213, dated February 10, 1997) to TS Bases 4.0.2, consistent with GL 91-04, that ensures that surveillances are performed in an operational mode consistent with safe plant operation. This TS Bases section already included clarification that the allowable tolerance not be used as a convenience to repeatedly schedule the performance of surveillances at the allowable tolerance limit.

The licensees performed the safety assessment for the proposed changes to the surveillance test intervals in accordance with the GL 91-04 criteria stated above. This assessment entailed reviewing historical maintenance and surveillance test data, performing an evaluation to ensure that a 24-month surveillance test interval would not invalidate any assumption in the plant licensing bases, and determining that the effect on safety is small. Only the period since 1985 was reviewed. This is most representative of current operating conditions since many changes occurred after the loss of feedwater event in 1985. This period includes five refueling outages and four operating cycles of test results.

3.1 TS Section 3/4.5.2, "Emergency Core Cooling Systems, ECCS Subsystems - $T_{avg} \geq 280°F$"

TS surveillance requirement (SR) 4.5.2.d.2.a requires that a visual inspection of the containment emergency sump be conducted at least once per 18 months. This inspection must verify that the subsystem suction inlets are not restricted by debris and that the sump components show no evidence of structural distress or corrosion. SR 4.5.2.e requires that, at least once per 18 months, the licensees verify that each automatic valve in the ECCS flow path actuates to its correct position on a safety injection test signal, and verify that each high pressure injection (HPI) and low pressure injection (LPI) pump starts automatically upon receipt of a Safety Features Actuation System (SFAS) test signal. SR 4.5.2.g.2 requires that, at least once per 18 months, the licensees verify the correct position of each mechanical position stop for valves DH-14A and DH-14B.

The function of the ECCS is to mitigate the consequences of breaks of the reactor coolant system (RCS) pressure boundary which result in a loss of reactor coolant greater than the makeup system can handle. The operability of the ECCS subsystems with $T_{avg} \geq 280°F$ ensures that sufficient emergency core cooling will be available in the event of a loss of coolant accident (LOCA) coincident with a loss of one subsystem through any single failure. Each ECCS subsystem also provides long-term core cooling capability during accident recovery.

The staff reviewed the proposed changes and the licensing basis. In addition to the license and TSs, the licensing basis includes the Updated Safety Analysis Report (USAR), Section 6.3, "Emergency Core Cooling System," and Regulatory Guide (RG) 1.82, "Sumps for Emergency Core Cooling and Containment Spray Systems."

The licensees determined that during the period since 1985, which includes five refueling outages and four operating cycles, the results of all surveillance tests were acceptable, with one exception which is included in the following maintenance discussion.

The licensees also reviewed maintenance records related to these surveillance requirements. This review identified failures and degradation, including problems with pumps, valves, and breakers. Each of these concerns was evaluated. Corrective actions included design changes and part and component replacement. The licensees determined that these concerns were not attributable to the fuel cycle length.

The licensees concluded that, based on the results of the maintenance and surveillance review, the change to a 24-month fuel cycle was acceptable. In addition, the licensees concluded that the licensing basis would not be invalidated by increasing the surveillance interval, and that the impact on safety would be small. Further, the licensees determined that it would be acceptable to continue with the application of TS 4.0.2 on a nonroutine basis.

The staff determined that all actions specified in the GL were completed. The effect on safety would be small, historical data does not contradict this conclusion, and no assumptions in the plant licensing basis would be invalidated. Therefore, this change is acceptable.

3.2 TS Section 3/4.5.3, "Emergency Core Cooling Systems, ECCS Subsystems - T_{avg} < 280°F"

With T_{avg} < 280°F, TS 3.5.3 only requires one ECCS subsystem to be operable. The single failure criterion is not considered due to the stable reactivity condition of the reactor and the limited cooling requirements.

TS SR 4.5.3 requires that, "The ECCS subsystems shall be demonstrated OPERABLE per the applicable Surveillance Requirements of 4.5.2." Therefore, the licensing basis, surveillance test result, maintenance record, and TS 4.0.2 reviews for TS Section 3/4.5.2 are also applicable to this section. Regarding TS Section 3/4.5.2 discussed in Section 3.1 above, the licensees concluded that, based on the results of the maintenance and surveillance review, the change to a 24-month fuel cycle was acceptable. In addition, the licensees concluded that the licensing basis would not be invalidated by increasing the surveillance interval, that the impact on safety would be small, and that continued use of TS 4.0.2 on a nonroutine basis would be acceptable.

The staff determined that these conclusions are also applicable to TS Section 3/4.5.3. All actions specified in the GL were completed. The effect on safety would be small, historical data does not contradict this conclusion, and no assumptions in the plant licensing basis would be invalidated. Therefore, this change is acceptable.

3.3 TS Section 3/4.7.1.2, "Plant Systems, Auxiliary Feedwater System"

TS SR 4.7.1.2.1.c requires that each auxiliary feedwater (AFW) train shall be demonstrated operable at least once per 18 months by: (1) verifying each automatic valve actuates to its correct position on a Steam and Feedwater Rupture Control System (SFRCS) actuation test signal; (2) verifying each pump starts automatically upon receipt of an SFRCS test signal; and (3) verifying that there is a flow path from each AFW pump to both steam generators (SGs).

The function of the AFW system is to provide feedwater to the SGs when the main feedwater pumps are not available. The AFW pumps can be used to remove decay heat while shutting the unit down until the decay heat removal system can be placed in service. The AFW system includes two steam turbine-driven pumps, condensate storage tanks, feedwater and steam piping, valves, and associated instrumentation and controls.

The staff reviewed the proposed changes and the licensing basis. In addition to the license and the TSs, the licensing basis includes USAR Section 7.4.1.3, "Steam and Feedwater Line Rupture Control System (SFRCS)," Section 9.2.7, "Auxiliary Feedwater System," and Section 15.2.8, "Loss of Normal Feedwater."

The licensees determined that during the period since 1985, which includes five refueling outages and four operating cycles, the results of all surveillance tests were acceptable. The licensees also reviewed maintenance records related to this SR. This review identified several failures, including problems with pumps, valves, and associated components. Each of these concerns was evaluated. Corrective actions included part and component repair and replacement, personnel training, more frequent inspections, and design changes. The licensees determined that these concerns were not attributable to the fuel cycle length.

The licensees concluded that, based on the results of the maintenance and surveillance review, the change to a 24-month fuel cycle was acceptable. In addition, the licensees concluded that the licensing basis would not be invalidated by increasing the surveillance interval, and that the impact on safety would be small. Further, the licensees determined that it would be acceptable to continue with the application of TS 4.0.2 on a nonroutine basis.

The staff determined that all actions specified in the GL were completed. The effect on safety would be small, historical data does not contradict this conclusion, and no assumptions in the plant licensing basis would be invalidated. Therefore, this change is acceptable.

3.4 TS Section 3/4.7.1.7, "Plant Systems, Motor Driven Feedwater Pump System"

TS SR 4.7.1.7.d requires that the motor driven feedwater pump (MDFP) and flow paths to the AFW system be demonstrated operable at least once per 18 months by: (1) verifying that there is a flow path between the MDFP system and the AFW system by pumping water from the condensate storage tanks to the SGs; (2) verifying proper operation of the MDFP lube oil interlocks; and (3) verifying proper operation of manual valves by shifting the MDFP between the main feedwater system and the AFW system.

The function of the MDFP system is to provide feedwater to the SGs during normal startup and shutdown. The system also provides backup feedwater to the SGs in the event of a loss of both auxiliary and main feedwater. Though the MDFP is nonsafety-related, it does provide a diverse means for supplying feedwater to the SGs, backing up the safety-related AFW system.

The staff reviewed the proposed changes and the licensing basis. In addition to the license and the TSs, the licensing basis includes USAR Section 9.2.8, "Motor Driven Feedwater Pump," and Section 10.4.7.2, "Condensate and Feedwater Systems."

The licensees determined that during the period since 1985, which includes five refueling outages and four operating cycles, the results of all surveillance tests were acceptable. However, the licensees did not review the results of SR 4.7.1.7.d.1, which requires verification that there is a flow path between the MDFP system and the AFW system. They stated that this requirement only verifies the existence of a flow path, and not the verification of automatic valve actuation or MDFP flow rate. The staff has

reviewed this exception and finds it acceptable since the proper performance of the subject components is verified by other SRs. The licensees reviewed maintenance records related to all sections of SR 4.7.1.7.d. No failures or degradations were identified.

The licensees concluded that, based on the results of the maintenance and surveillance review, the change to a 24-month fuel cycle was acceptable. In addition, the licensees concluded that the licensing basis would not be invalidated by increasing the surveillance interval, and that the impact on safety would be small. Further, the licensees determined that it would be acceptable to continue with the application of TS 4.0.2 on a nonroutine basis.

The staff determined that all actions specified in the GL were completed. The effect on safety would be small, historical data does not contradict this conclusion, and no assumptions in the plant licensing basis would be invalidated. Therefore, this change is acceptable.

3.5 TS Section 3/4.7.3, "Plant Systems, Component Cooling Water System"

TS SR 4.7.3.1.b requires that each component cooling water loop shall be demonstrated operable at least once per 18 months, during shutdown, by verifying that each automatic valve in the flow path actuates to its correct position and each component cooling water emergency pump starts automatically on an SFAS test signal.

The component cooling water (CCW) system provides cooling water to reactor auxiliaries and the ECCS components. The CCW components are designed to remove the maximum heat load during normal operation with 85°F service water, and the maximum heat load from ECCS components during accident conditions with service water at ultimate heat sink conditions.

The staff reviewed the proposed changes and the licensing basis. In addition to the license and the TSs, the licensing basis includes USAR Section 9.2.2, "Component Cooling Water System."

The licensees determined that during the period since 1985, which includes five refueling outages and four operating cycles, only one failure occurred during surveillance testing. A CCW valve failed to stroke due to a broken air line. The air line and associated fittings were replaced and retested, with satisfactory results, and no other problems have occurred. The licensees determined that this failure was not attributable to fuel cycle length.

The licensees reviewed maintenance records related to this SR. Two problems were identified, a pump motor performance degradation and a potential valve performance issue. The pump motor was satisfactorily repaired and a valve design modification was successfully implemented. These problems were not related to fuel cycle length.

The licensees concluded that, based on the results of the maintenance and surveillance review, the change to a 24-month fuel cycle was acceptable. In

addition, the licensees concluded that the licensing basis would not be invalidated by increasing the surveillance interval, and that the impact on safety would be small. Further, the licensees determined that it would be acceptable to continue with the application of TS 4.0.2 on a nonroutine basis.

The staff determined that all actions specified in the GL were completed. The effect on safety would be small, historical data does not contradict this conclusion, and no assumptions in the plant licensing basis would be invalidated. Therefore, this change is acceptable.

3.6 TS Section 3/4.7.4, "Plant Systems, Service Water System"

TS SR 4.7.4.1.b requires each service water loop to be demonstrated operable at least once per 18 months, during shutdown, by verifying that each automatic valve in the flow path actuates to its correct position, and each service water emergency pump starts automatically, on an SFAS test signal.

During normal operations, the service water system (SWS) supplies cooling water to the component cooling heat exchangers, the containment air coolers, and the cooling water heat exchangers in the turbine building. During an emergency, the SWS provides redundant cooling to the engineered safety features components. One pump provides adequate cooling during an emergency, though three 100%-capacity pumps are available.

The staff reviewed the proposed changes and the licensing basis. In addition to the license and the TSs, the licensing basis includes USAR Section 9.2.1, "Service Water System."

The licensees determined that during the period since 1985, which includes five refueling outages and four operating cycles, only one failure occurred during surveillance testing. A valve failed to stroke open. The licensees evaluated this failure and determined that it was a valve design issue. The issue was resolved by modifying the valve design. This failure was not related to fuel cycle length.

The licensees also reviewed maintenance records related to this SR. This review identified several failures and two deficiencies, including problems with pumps, valves, and breakers. Each of these concerns was evaluated. Corrective actions included periodic valve exercising and component adjustment, repair, and/or replacement. The licensees determined that these concerns were not attributable to the fuel cycle length.

The licensees concluded that, based on the results of the maintenance and surveillance review, the change to a 24-month fuel cycle was acceptable. In addition, the licensees concluded that the licensing basis would not be invalidated by increasing the surveillance interval, and that the impact on safety would be small. Further, the licensees determined that it would be acceptable to continue with the application of TS 4.0.2 on a nonroutine basis.

The staff determined that all actions specified in the GL were completed. The effect on safety would be small, historical data does not contradict this conclusion, and no assumptions in the plant licensing basis would be invalidated. Therefore, this change is 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 effluent 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 (62 FR 11498). 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: A. Hansen

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