

July 15, 1994

Docket No. 50-440

Mr. Robert A. Stratman
Vice President Nuclear - Perry
Centerior Service Company
P. O. Box 97, S270
Perry, Ohio 44081

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Dear Mr. Stratman:

SUBJECT: ISSUANCE OF EMERGENCY AMENDMENT NO. 63 TO FACILITY OPERATING LICENSE NO. NPF-58 (TAC NO. M89870)

The Commission has issued the enclosed Amendment No. 63 to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant (PNPP), Unit No. 1. This amendment consists of changes to the Technical Specifications (TS) in response to your application dated July 14, 1994.

This amendment adds the following statement, "The provisions of Specification 3.0.4 are not applicable from the effective date of this amendment until the completion of Operating Cycle 5." as a footnote to the APPLICABILITY statement for TS 3.6.1.4. This specification requires that two independent main steam isolation valve (MSIV) leakage control system (LCS) subsystems shall be OPERABLE in order to change modes to OPERATIONAL CONDITIONS 1, 2, or 3. By adding the TS 3.0.4 statement, PNPP can resume power operations with the inboard MSIV LCS inoperable in accordance with the existing action statement.

A copy of the Safety Evaluation is also enclosed. A Notice of Issuance and Final Determination of No Significant Hazards Consideration and Opportunity for Hearing will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Original signed by Jon B. Hopkins
Jon B. Hopkins, Sr. Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV
Office of Nuclear Reactor

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P PDR

Regulation
Enclosures:

1. Amendment No. 63 to License No. NPF-58
2. Safety Evaluation

cc w/enclosures:

See next page *See previous concurrence

PD3-3:LA MRushbrook 7/15/94	PD3-3:APM LGundrum/Lg 7/15/94	PD3-3:PM JHopkins 7/15/94	SCSB RBarrett 7/15/94	SPLB CMcCracken 7/15/94	OGC* EHoller 7/15/94	AD:RIII* JZwolinski 7/15/94
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Handwritten initials and date: 7/15/94

Mr. Robert A. Stratman
Centerior Service Company

cc:

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

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

DOCKET NO. 50-440

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 63
License No. NPF-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by The Cleveland Electric Illuminating Company, Centerior Service Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and Toledo Edison Company (the licensees) dated July 14, 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-58 is hereby amended to read as follows:

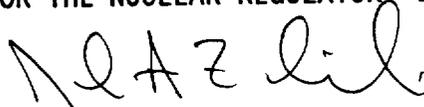
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(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 63 are hereby incorporated into this license. The Cleveland Electric Illuminating Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective immediately.

FOR THE NUCLEAR REGULATORY COMMISSION



John A. Zwolinski, Assistant Director
for Region III Reactors
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of issuance: July 15, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 63

FACILITY OPERATING LICENSE NO. NPF-58

DOCKET NO. 50-440

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 6-8

Insert

3/4 6-8

CONTAINMENT SYSTEMS

MSIV LEAKAGE CONTROL SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.4 Two independent MSIV leakage control system (LCS) subsystems shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1*, 2*, and 3*.

ACTION:

With one MSIV leakage control system subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.4 Each MSIV leakage control system subsystem shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
 1. Blower OPERABILITY by starting the blower(s) from the control room and operating the blower(s) for at least 15 minutes.
 2. Inboard heater OPERABILITY by demonstrating electrical continuity of the heating element circuitry by verifying the inboard heater draws $8.28 \pm 10\%$ amperes per phase.
- b. During each COLD SHUTDOWN, if not performed within the previous 92 days, by cycling each motor operated valve, including the main steam stop valves, through at least one complete cycle of full travel.
- c. At least once per 18 months by:
 1. Performance of a functional test which includes simulated actuation of the subsystem throughout its operating sequence, and verifying that each automatic valve actuates to its correct position, and the blower(s) start(s).
 2. Verifying that the blower(s) develop(s) at least the below required vacuum at the rated capacity:
 - a) Inboard system, 15" H₂O at ≥ 100 scfm.
 - b) Outboard system, 15" H₂O at ≥ 200 scfm.
- d. By verifying the inboard flow and inboard and outboard pressure instrumentation to be OPERABLE by performance of a:
 1. CHANNEL FUNCTIONAL TEST at least once per 31 days, and
 2. CHANNEL CALIBRATION at least once per 18 months.

*The provisions of Specification 3.0.4 are not applicable from the effective date of this amendment until the completion of Operating Cycle 5.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 63 TO FACILITY OPERATING LICENSE NO. NPF-58
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.
PERRY NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-440

1.0 INTRODUCTION

By letter dated July 14, 1994, the Cleveland Electric Illuminating Company, et al. (licensees), proposed a change to the Technical Specifications (TSs) for the Perry Nuclear Power Plant (PNPP), Unit No. 1 on an emergency basis. This amendment allows the licensee to change from OPERATIONAL CONDITION 4 to OPERATIONAL CONDITION 2 or 3 or between OPERATIONAL CONDITIONS 1, 2, and 3 with one main steam isolation valve (MSIV) leakage control system (LCS) subsystem inoperable. This amendment adds a footnote to the APPLICABILITY statement for TS 3.6.1.4. The footnote states, "The provisions of Specification 3.0.4 are not applicable from the effective date of this amendment until the completion of Operating Cycle 5." This is slightly different from the wording originally requested by the licensee, which was "The provisions of Technical Specification 3.0.4 are not applicable during Cycle 5 operation." The revised wording clarification was agreed to by both the licensee and the NRC staff during a telephone call on July 15, 1994.

2.0 EVALUATION

The NRC staff has reviewed the change to the TS 3.6.1.4 regarding the addition of the exception to TS 3.0.4 for the duration of Operating Cycle 5. The current requirement requires two independent MSIV LCS subsystems for OPERATIONAL CONDITIONS 1, 2, and 3. The ACTION statement allows one inoperable MSIV LCS subsystem for 30 days, if the subsystem becomes inoperable after entering the applicability statement. Without a stated exception to TS 3.0.4, both MSIV LCS subsystems must be OPERABLE prior to entering OPERATIONAL CONDITIONS 1, 2, or 3. One LCS subsystem processes the leakage between the MSIVs. The second LCS subsystem processes leakage downstream of the outboard MSIV.

As a result of an extensive review of the MSIV containment isolation leakage criteria and postulated accident scenarios, the licensee identified a potential pathway for unfiltered leakage. To meet the design requirement to have all MSIV leakage filtered through the LCS, a modification was installed during the current outage to cap the pipe that connected the piping between the two MSIVs to the main condenser. The piping served to drain moisture that can condense during power operation at less than 50% power, and be carried downstream toward the turbine. However, there are drain connections downstream of the outboard MSIVs which will drain condensate to the condenser during power operation. Therefore, no damage to the turbine will result from

any condensed water. Also, MSIV performance will not be affected by the accumulated condensation. The modification to cap the line to the condenser was the best solution available without an extensive analysis including system walk downs and modifications to justify that the condenser can serve as a filter and to ensure that the extensive piping runs to the condenser are designed and supported to withstand a design basis earthquake.

The LCS is isolated during power operation. The function of the LCS is to provide a pathway to ensure leakage is filtered only after a postulated recirculation line break loss-of-coolant accident (LOCA). However, the licensee recently postulated that at power levels less than 50 percent, the inboard LCS subsystem will isolate post-accident due to the accumulated condensation. Therefore, the inboard LCS is considered inoperable for power levels less than 50 percent. There would be no affect on the other LCS subsystem since the leakage past the second MSIV would be within TS limits and therefore, significant quantities of condensation would not be produced. The licensee also evaluated the effects of moisture carry-over on the LCS blowers and blow-down effects on the annulus. They determined design parameters for blower operation and annulus pressurization would not be affected if the LCS control circuitry was not changed. Additionally, the LCS is only necessary to mitigate the recirculation line break LOCA based on analyses that assume extremely conservative source term assumptions of Regulatory Guide 1.3. Actual emergency core cooling system (ECCS) analyses were performed in accordance with 10 CFR Appendix K that show that no fuel damage would occur as the result of this postulated accident.

The licensee requested the exception from the requirements from TS 3.0.4 because once power is increased above 50 percent, both LCS subsystems will be operable. The ACTION statement for TS 3.6.1.4 allows 30 days to restore an inoperable LCS subsystem, if a subsystem was discovered to be inoperable while the plant operated in OPERATIONAL CONDITIONS 1, 2, and 3. A change from OPERATIONAL CONDITION 4 to 50 percent power can be accomplished in less than 30 days.

By making the recent modification, the licensee has eliminated an unanalyzed path for secondary containment bypass leakage. The condensation that accumulates at low power levels can be handled by drains downstream of the MSIVs. The length and requirement of the TS ACTION statement remains the same resulting in plant shutdown, if the inoperable LCS can not be restored within 30 days. Therefore, based on the above, the NRC staff finds the change to be acceptable.

3.0 EMERGENCY CIRCUMSTANCES

An extensive review of the MSIV containment isolation leakage criteria and postulated accident scenarios was performed by the licensee to ensure a modification to provide air to the outboard MSIV actuators, initiated and installed in the current refueling outage, had no documented effect on the plant design basis. As a result of that review, the licensee identified a potential pathway for unfiltered leakage that was part of the original design

eliminate the unfiltered leakage pathway while concurrently performing and documenting the potential impact of that modification. Recently, the licensee identified that the modification could affect the operability of one of the MSIV LCS subsystems, and requested the emergency TS change on July 14, 1994. The staff has concluded that an emergency situation exists in that failure to act in a timely way will prevent resumption of operation and that the licensee could not avoid this emergency situation.

4.0 BASIS FOR FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration. The NRC staff has reviewed the licensee's analysis against the standards of 10 CFR 50.92(c). The staff's review is presented below.

The amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated because the ACTION statement for one inoperable LCS subsystem remains the same, and MSIV performance is not affected by the accumulated condensation.

This change does not create the possibility of a new or different kind of accident from any accident previously evaluated because the downstream drains will remove the condensation that accumulates at low power levels, and MSIV performance will not be affected by the condensation.

This change does not involve a significant reduction in a margin of safety. Allowing entry into the ACTION statement when leaving OPERATIONAL CONDITION 4 (and entering OPERATIONAL CONDITION 1, 2, or 3) does not significantly reduce the margin of safety, since the duration allowed for remaining in the ACTION statement is not increased.

Based on this review, the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff has determined that the amendment request involves no significant hazards consideration.

5.0 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.

6.0 ENVIRONMENTAL CONSIDERATION

The 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 surveillance requirements. The NRC 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 made a final no significant hazards consideration finding with respect to this amendment. 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.

7.0 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: Jon Hopkins

Date: July 15, 1994