May 26, 1994

Docket No. 50-440

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

Dear Mr. Stratman:

SUBJECT: AMENDMENT NO. 60 TO FACILITY OPERATING LICENSE NO. NPF-58 (TAC NO. M85977)

The Commission has issued the enclosed Amendment No. 60 to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant, Unit No. 1. This amendment consists of changes to the Technical Specifications in response to your application dated March 1, 1993.

This amendment provides specific actions to take if primary containment leakage limits are exceeded and cannot be restored. Additional changes to reflect clarifications in the containment leakage rate specification are included as discussed in the safety evaluation.

The request for revising as-found integrated primary containment leakage rate acceptance criterion and an exemption to 10 CFR 50, Appendix J, are being considered separately.

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

Enclosures:
1. Amendment No. 60 to License No. NPF-58
2. Safety Evaluation

cc w/enclosures:
See next page

* See previous concurrence

OFFICE	LA:PDIII-3	Asst.PM: PDIII-3	PM: PDIII-3	PD: PDIII-3*	BC:SCSB*	BC:OTSB #94-93	OGC
NAME	MRushbrook	LGundrum:dy	JHopkins	JHannon	RBarrett	CGrimes	EHOLLER
DATE	5/16/94	5/16/94	5/16/94	4/26/94	4/26/94	5/12/94	5/19/94

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5-26-94 SBH

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

May 26, 1994

Docket No. 50-440

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Vice President Nuclear - Perry
Centerior Service Company
P. O. Box 97, S270
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See next page

Mr. Robert A. Stratman
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The Honorable Lawrence Logan
Mayor, Village of Perry
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Perry, Ohio 44081

The Honorable Robert V. Orosz
Mayor, Village of North Perry
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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. 60
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 March 1, 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.

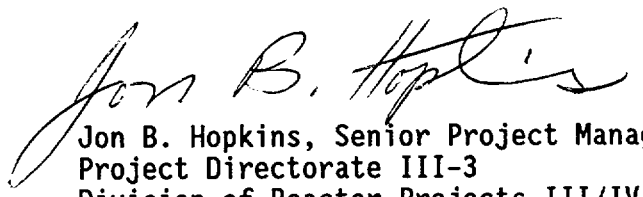
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-58 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 60 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 as of its date of issuance and shall be implemented not later than 90 days after issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Jon B. Hopkins, Senior 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: May 26, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 60

FACILITY OPERATING LICENSE NO. NPF-58

DOCKET NO. 50-440

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 6-3	3/4 6-3
3/4 6-4	3/4 6-4
3/4 10-1	3/4 10-1

LIMITING CONDITION FOR OPERATION

3.6.1.2 Primary containment leakage rates shall be limited to:

a. An overall integrated leakage rate of less than or equal to 0.75 L_a, where L_a is 0.20 percent by weight of the primary containment air per 24 hours at P_a.

b. A combined leakage rate of less than or equal to 0.60 L_a for all penetrations and all valves, except for main steam line isolation valves and valves which are hydrostatically leak tested, subject to Type B and C tests when pressurized to P_a.

c. Less than or equal to 25 scf per hour for any one main steam line through the isolation valves when tested at P_a.

d. A combined leakage rate of less than or equal to 0.0504 L_a for all penetrations that are secondary containment bypass leakage paths when pressurized to the required test pressure.

e. A combined leakage rate of less than or equal to 1 gpm times the total number of containment isolation valves in hydrostatically tested lines which penetrate the primary containment, when tested at greater than or equal to 1.10 P_a.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, AND 3, with the reactor coolant system temperature greater than 200 °F.

ACTION:

With:

a. The measured overall integrated primary containment leakage rate exceeding 0.75 L_a, or

b. The measured combined leakage rate for all penetrations and all valves except for main steam line isolation valves and valves which are hydrostatically leak tested, subject to Type B and C tests exceeding 0.60 L_a, or

c. The measured leakage rate exceeding 25 scf per hour for any one main steam line through the isolation valves, or

d. The combined leakage rate for all penetrations that are secondary containment bypass leakage paths exceeding 0.0504 L_a, or

e. The measured combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment exceeding 1 gpm times the total number of such valves:

Restore the leakage rate to less than or equal to the above limit(s) within 1 hour or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.2 The primary containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR Part 50 using the methods and provisions of ANSI N45.4-1972 and BN-TOP-1; test results shall also be reported based on the Mass Point Methodology described in ANSI/ANS N56.8-1981:

a. Three Type A Overall Integrated Containment Leakage Rate tests shall be conducted at 40 $\pm$ 10 month intervals during shutdown at P_a during each 10-year service period. The third test of each set shall be conducted during the shutdown for the 10-year plant inservice inspection.

b. If any periodic Type A test fails to meet 0.75 L_a, the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission. If two consecutive Type A tests fail to meet 0.75 L_a, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet 0.75 L_a, at which time the above test schedule may be resumed.

c. The accuracy of each Type A test shall be verified by a supplemental test which:

3/4.10 SPECIAL TEST EXCEPTIONS

3/4.10.1 PRIMARY CONTAINMENT INTEGRITY/DRYWELL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.10.1 The provisions of Specifications 3.6.1.1.1, 3.6.1.3, 3.6.2.1, 3.6.2.3, 3.6.5.1, 3.6.5.2, 3.9.1 and 3.9.3 and Table 1.2 may be suspended to permit the reactor pressure vessel closure head and the drywell head to be removed and the drywell air lock door to be open when the reactor mode switch is in the Startup position during low power PHYSICS TESTS with THERMAL POWER less than 1% of RATED THERMAL POWER and reactor coolant temperature less than 200°F.

APPLICABILITY: OPERATIONAL CONDITIONS 2 and 5, during low power PHYSICS TESTS or shutdown margin demonstrations.

ACTION:

With THERMAL POWER greater than or equal to 1% of RATED THERMAL POWER or with the reactor coolant temperature greater than or equal to 200°F, immediately place the reactor mode switch in the Shutdown position.

SURVEILLANCE REQUIREMENTS

4.10.1 The THERMAL POWER and reactor coolant temperature shall be verified to be within the limits at least once per hour during low power PHYSICS TESTS or shutdown margin demonstrations.

SPECIAL TEST EXCEPTIONS

3/4.10.2 ROD PATTERN CONTROL SYSTEM

LIMITING CONDITION FOR OPERATION

3.10.2 The sequence constraints imposed on control rod groups by the rod pattern control system (RPCS) per Specification 3.1.4.2 may be suspended by means of the individual rod position bypass switches for the following tests:

a. Shutdown margin demonstrations, Specification 4.1.1.

b. Control rod scram insertion times, Specification 4.1.3.2.

c. Control rod friction measurements.

d. Startup Test Program with the THERMAL POWER less than the RPCS low power setpoint.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

With the requirements of the above specification not satisfied, verify that the RPCS is OPERABLE per Specification 3.1.4.2.

SURVEILLANCE REQUIREMENTS

4.10.2 When the sequence constraints imposed on control rod groups by the RPCS are bypassed, verify:

a. Within 8 hours prior to bypassing any sequence constraint and at least once per 12 hours while any sequence constraint is bypassed, that movement of the control rods between 75% ROD DENSITY to the RPCS low power setpoint is limited to the established control rod sequence for the specified test, and

b. Conformance with this specification and test procedures by a second licensed operator or other technically qualified member of the unit technical staff.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 60 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 March 1, 1993, the Cleveland Electric Illuminating Company, et al. (licensees), proposed changes to the Technical Specifications (TSs) for the Perry Nuclear Power Plant, Unit No. 1. This request included two changes involving some of the same TS sections. TS changes to include the as-found integrated primary containment leakage rate acceptance criterion and an exemption to 10 CFR 50 Appendix J are being considered separate from this safety evaluation. This amendment addresses the following changes to TS 3.6.1.2 on primary containment leakage rates: removing the Special Test Exception allowed by 3.10.1; relocating the requirement that the reactor coolant system temperature be greater than 200 °F; changing the action statement to specify the actions to be taken if TS 3.6.1.2 Limiting Conditions for Operation (LCO) cannot be restored within one hour; clarifying 3.6.1.2a by adding the definition of L_a; and clarifying 3.6.1.2e by adding that the test pressure is greater than or equal to 1.10 P_a. This amendment also removes the reference to TS 3.6.1.2 from TS 3.10.1. These changes are requested to assure TS 3.6.1.2 will directly address excessive containment leakage with reactor coolant system temperature above 200 °F. As a result, TS 3.0.3 will not be relied on for appropriate actions if excessive leakage occurs. These changes and the LCO clarifications will reduce the possibility of TS misinterpretations.

2.0 EVALUATION

The following changes to TS 3.6.1.2 are evaluated: removing the reference to a special test exception; relocating the requirement for RCS temperature to be greater than 200 °F; revising TS 3.6.1.2's actions to take if primary leakage rates cannot be restored; clarifying the definition of L_a; and clarifying that testing is performed at greater than or equal to 1.10 P_a for containment isolation valves in hydrostatically tested lines. Additionally, TS 3.10.1 is changed to eliminate the reference to TS 3.6.1.2. The evaluation addresses each change.

The first change, TS 3.6.1.2 Applicability, deletes the asterisk associated with Mode 2. This allows removal of the special test exception during Mode 2 granted by TS 3.10.1 which permits the reactor pressure vessel closure head and the drywell head to be removed and the drywell air lock door to be open

when the reactor mode switch is in the Startup position during low power physics testing with thermal power less than 1% of rated thermal power and reactor coolant temperature less than 200 °F. The need for this test exception was required during initial plant start up only and is no longer applicable. Therefore, the change requested is administrative.

The second change relocates the provision to restore the primary containment leakage if the reactor coolant temperature is greater than 200 °F from the ACTION statement to the APPLICABILITY statement. This change does not lessen the current requirements of the specification and is consistent with current plant interpretations of the specifications as written. However, the licensee's submittal (PY-CEI/NRR-1732 L) for Improved Technical Specifications Conversion Package is more restrictive in that the APPLICABILITY statement is for MODES 1, 2 and 3 independent of reactor coolant temperature. Since the proposed revision provides additional clarity and is not less restrictive than the current specification, the change is acceptable. However, this does not imply that this change will be allowed to meet the intent of the requirements of the Improved Standard Technical Specifications.

The third change provides the licensee with clear guidance on what actions to take if primary containment leakage limits are not maintained in Modes 1, 2 and 3 when reactor coolant temperature is greater than 200 °F. At the time of the change request, the action statement required leakage to be restored within limits but did not specify a time frame to reduce the leakage or actions to take if the limits could not be restored. The proposed action statement allows 1 hour to restore primary containment leakage limits or requires placing the unit in HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the following 24 hours. This change is consistent with TS 3.6.1.1.1 on primary containment integrity and TS 3.0.3 which allow time for an orderly shutdown if the unit is not maintained within regulatory requirements.

The fourth change clarifies LCO 3.6.1.2a to ensure that "0.20 percent by weight of the primary containment air per 24 hours at P_a" is specified for L_a and not for 0.75 L_a.

The fifth change clarifies LCO 3.6.1.2e by adding that testing to determine leakage rates for containment isolation valves in hydrostatically tested lines shall be at greater than or equal to 1.10 Pa. This change is consistent with 10 CFR 50 Appendix J, III.C.2(b) which states, "Valves, which are sealed with fluid from a seal system shall be pressurized with that fluid to a pressure not less than 1.10 P_a."

The sixth change deletes the reference to TS 3.6.1.2 from TS 3.10.1. The change is an administrative change only, made because the two specifications no longer overlap and the reference is therefore unnecessary.

The NRC staff has reviewed the proposed changes to the TS regarding primary containment leakage. Based on the above, the NRC staff finds the proposed changes to be acceptable.

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 the 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding (59 FR 14896). Accordingly, this 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 this 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: Linda Gundrum
Date: May 26, 1994