

February 14, 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: AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. NPF-58
(TAC NO. M81819)

The Commission has issued the enclosed Amendment No. 55 to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant, Unit No. 1. This amendment revises the Technical Specifications in response to your application dated September 23, 1991.

This amendment allows an alternate method for verifying whether a control rod drive pump is operating.

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, Senior Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 55 to License No. NPF-58
2. Safety Evaluation

cc w/enclosures:
See next page

LA/PD3-3 MRushbrook 1/13/94	JBH PM/PD3-3 JHopkins/sw 1/13/94 JBH 2-10-94	JBH for PD/PD3-3 JHannon 1/13/94	Ref BC/SRXB RJones 1/15/94	OGC-WF1 1/12/94 Done, JBH.
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 14, 1994

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

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Sincerely,

A handwritten signature in dark ink, appearing to read "Jon B. Hopkins".

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

Enclosures:

1. Amendment No. 55 to License No. NPF-58
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Robert A. Stratman
Centerior Service Company

cc:

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U.S. Nuclear Regulatory Commission
Parmlly at Center Road
Perry, Ohio 44081

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
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Lake County Administration Bldg.
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Perry, Ohio 44081

James R. Williams, Chief of Staff
Ohio Emergency Management Agency
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Worthington, Ohio 43085

Perry Nuclear Power Plant
Unit Nos. 1 and 2

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

The Honorable Lawrence Logan
Mayor, Village of Perry
4203 Harper Street
Perry, Ohio 44081

The Honorable Robert V. Orosz
Mayor, Village of North Perry
North Perry Village Hall
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North Perry Village, Ohio 44081

Attorney General
Department of Attorney General
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Columbus, Ohio 43216

Radiological Health Program
Ohio Department of Health
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Columbus, Ohio 43266-0118

Ohio Environmental Protection Agency
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Columbus, Ohio 43266-0149

Mr. Thomas Haas, Chairman
Perry Township Board of Trustees
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David P. Igyarto, General Manager
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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. 55
License No. NPF-58

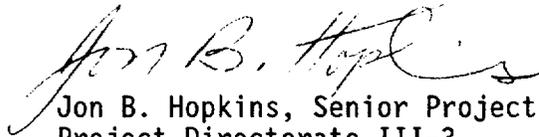
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by The Cleveland Electric Illuminating Company, Centerior Service Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and Toledo Edison Company (the licensees) dated September 23, 1991, 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. 55 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/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of issuance: February 14, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 55

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. The overleaf page is provided to maintain document completeness.

Remove

3/4 1-8

Insert

3/4 1-8

REACTIVITY CONTROL SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

b. With a "slow" control rod(s) not satisfying ACTION a.1, above:

1. Declare the "slow" control rod(s) inoperable, and
2. Perform the Surveillance Requirements of Specification 4.1.3.2.c at least once per 60 days when operation is continued with three or more "slow" control rods declared inoperable.

Otherwise, be in at least HOT SHUTDOWN within 12 hours.

c. With the maximum scram insertion time of one or more control rods exceeding the maximum scram insertion time limits of Specification 3.1.3.2 as determined by Specification 4.1.3.2.c, operation may continue provided that:

1. "Slow" control rods, i.e., those which exceed the limits of Specification 3.1.3.2, do not make up more than 20% of the 10% sample of control rods tested.
2. Each of these "slow" control rods satisfies ACTION a.1.
3. The eight adjacent control rods surrounding each "slow" control rod are:
 - a) Demonstrated through measurement within 12 hours to satisfy the maximum scram insertion time limits of Specification 3.1.3.2, and
 - b) OPERABLE
4. The total number of "slow" control rods, as determined by Specification 4.1.3.2.c, when added to the total number of ACTION a.3, as determined by Specification 4.1.3.2.a and b, does not exceed 7.

Otherwise, be in at least HOT SHUTDOWN within 12 hours.

d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.1.3.2 The maximum scram insertion time of the control rods shall be demonstrated through measurement with reactor coolant pressure greater than or equal to 950 psig and, during single control rod scram time tests, the control rod drive pumps isolated from the accumulators:

- a. For all control rods prior to THERMAL POWER exceeding 40% of RATED THERMAL POWER following CORE ALTERATIONS or after a reactor shutdown that is greater than 120 days,
- b. For specifically affected individual control rods* following maintenance on or modification to the control rod or control rod drive system which could affect the scram insertion time of those specific control rods, and
- c. For at least 10% of the control rods, on a rotating basis, at least once per 120 days of POWER OPERATION.

*The provisions of Specification 4.0.4 are not applicable for entry into OPERATIONAL CONDITION 2 provided this surveillance is completed prior to entry into OPERATIONAL CONDITION 1.

REACTIVITY CONTROL SYSTEMS

CONTROL ROD SCRAM ACCUMULATORS

LIMITING CONDITION FOR OPERATION

3.1.3.3 All control rod scram accumulators shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 5*.

ACTION:

- a. In OPERATIONAL CONDITIONS 1 or 2:
 1. With one control rod scram accumulator inoperable, within 8 hours:
 - a) Restore the inoperable accumulator to OPERABLE status, or
 - b) Declare the control rod associated with the inoperable accumulator inoperable.Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.
 2. With more than one control rod scram accumulator inoperable, declare the associated control rods inoperable and:
 - a) If the control rod associated with any inoperable scram accumulator is withdrawn, immediately verify that at least one control rod drive pump is operating by inserting at least one withdrawn control rod at least one notch, or by verifying that control rod charging water header pressure is ≥ 1520 psig. If no control rod drive pump is operating:
 - (1) If reactor pressure is ≥ 900 psig, restart at least one control rod drive pump within 20 minutes or place the reactor mode switch in the Shutdown position.
 - (2) If reactor pressure is < 900 psig, place the reactor mode switch in the Shutdown position.
 - b) Insert the inoperable control rods and disarm the associated directional control valves either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves.Otherwise, be in at least HOT SHUTDOWN within 12 hours.
- b. In OPERATIONAL CONDITION 5*:
 1. With one withdrawn control rod with its associated scram accumulator inoperable, insert the affected control rod and disarm the associated directional control valves within one hour, either:
 - a) Electrically, or
 - b) Hydraulically by closing the drive water and exhaust water isolation valves.

*At least the accumulator associated with each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 55 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 September 23, 1991, Cleveland Electric Illuminating Company (the licensee) requested a revision to the Technical Specifications (TS) for the Perry Nuclear Power Plant, Unit No. 1. The proposed amendment would revise TS 3.1.3.3 "Control Rod Scram Accumulators," to allow an alternate method for verifying that a control rod drive (CRD) pump is operating. Such verification is required with more than one control rod scram accumulator inoperable. The existing Perry TS requires that at least one control rod be inserted at least one notch as a verification that a CRD pump is operating. The proposed change would allow alternate verification that a CRD pump is running by direct indication of the control rod charging water header pressure.

2.0 EVALUATION

The CRD pumps supply water to the hydraulic control units (HCUs) for insertion and withdrawal of control rods, charging of the scram accumulators, and the cooling of the control rod drive mechanisms. There is one HCU per control rod. The control rod scram accumulators are located on the HCUs and ensure that the control rods scram at any reactor pressure within the required scram insertion times of TS 3.1.3.2. The operating CRD pump provides water at approximately 1720 psig to the charging water header. A check valve in each accumulator charging line prevents the loss of pressure for a limited time, when supply pressure from the CRD pump is lost. Check valve integrity is verified each refueling outage.

Perry has had an occurrence where power was lost to the Rod Control and Information System. Upon this loss of power, control rods cannot be moved (except by scram) and accumulator status indication is lost. Under current TS, operators would have an inappropriately short time to fix the problem because of the inability to insert a control rod one notch to verify an operating CRD pump. The proposed alternate CRD pump operating verification method would avoid the above TS problem and result in a more appropriate amount of time to fix the plant problem. Charging water header pressure in excess of 1520 psig is acceptable as an alternate verification method, because if a CRD pump is not operating, CRD system pressure decreases rapidly due to cooling water flow discharging to the reactor vessel. However, the primary and preferred verification method is by inserting a control rod one notch.

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The NRC staff has reviewed the licensee's proposed alternate method to verify an operating CRD pump, and based on the above, finds it 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. 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 (56 FR 57705). 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: J. Hopkins

Date: February 14, 1994