

October 15, 1993

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. 51 TO FACILITY OPERATING LICENSE NO. NPF-58  
(TAC NO. M83051)

The Commission has issued the enclosed Amendment No. 51 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 March 16, 1992.

This amendment revises Technical Specification Table 3.3.7.4-1, "Remote Shutdown System Controls," by removing the line item for controls to the Reactor Core Isolation Cooling (RCIC) pump discharge valve for the lube oil cooler.

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 Robert J. Stransky

Robert J. Stransky, Project Manager  
Project Directorate III-3  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 51 to License No. NPF-58
2. Safety Evaluation

cc w/enclosures:  
See next page

LA/PD3-3/DRPW  
MRushbrook  
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PM/PD3-3/DRPW  
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OGC-WF1  
R. Ballman  
9/30/93

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P PDR

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Mr. Robert A. Stratman  
Centerior Service Company

cc:

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

Regional Administrator, Region III  
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Perry Nuclear Power Plant  
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Perry, Ohio 44081

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

Mr. Thomas Haas, Chairman  
Perry Township Board of Trustees  
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Perry, Ohio 44081

State of Ohio  
Public Utilities Commission  
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David P. Igyarto, General Manager  
Cleveland Electric Illuminating Company  
Perry Nuclear Power Plant  
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Perry, Ohio 44081



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. 51  
License No. NPF-58

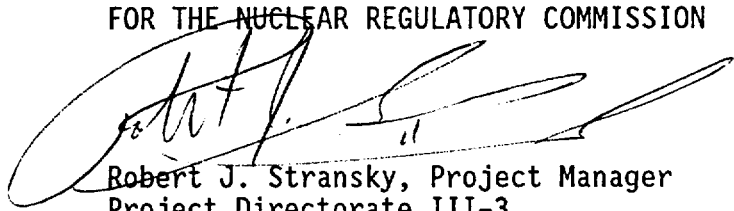
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by The Cleveland Electric Illuminating Company, Centerior Service Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and Toledo Edison Company (the licensees) dated March 16, 1992, 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. 51 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.

FOR THE NUCLEAR REGULATORY COMMISSION

A large, stylized handwritten signature in black ink, likely belonging to Robert J. Stransky, is written over the typed name and title.

Robert J. Stransky, 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: October 15, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 51

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. Overleaf pages are provided to maintain document completeness.

Remove

3/4 3-75

Insert

3/4 3-75

**TABLE 3.3.7.4-1 (Continued)**  
**REMOTE SHUTDOWN SYSTEM CONTROLS**

<b>CONTROL</b>	<b>MINIMUM CHANNELS OPERABLE</b>	
	<b>Division 1</b>	<b>Division 2</b>
ESW Pump	1	1
ESW Pump Discharge Valve	1	1
RHR HX's ESW Inlet/Outlet Valves	2 <sup>(a)</sup>	2 <sup>(a)</sup>
RHR HX's Inlet/Outlet/Bypass Valves	3 <sup>(a)</sup>	3 <sup>(a)</sup>
RHR Pump	1	1
RHR to Containment Shutoff Valve	1	1
RHR Pump Suppression Pool Suction Valve	1	1
LPCI Injection Valve	1	1
RHR A Shutdown Cooling Suction Valve	1	NA
RHR Upper Pool Cooling Isolation Valve	1	1
RHR Head Spray Isolation Valve	1	NA
RHR HX's Dump Valve	1	1
Containment Spray First Shutoff	1	1
Shutdown Cooling to Feedwater Shutoff	1	1
RHR Test Valve to Suppression Pool	1	1
Shutdown Cooling Outboard Isolation Valve	1	NA
RHR A to Radwaste Second Isolation Valve	1	NA
Steam Condensing Shutoff Valve to RCIC	1	1
RHR HX's Steam Shutoff Valve	1	1
RHR Pump Minimum Flow Valve	1	1
ECC Pump	1	1
RCIC Turbine Gland Seal Compressor	1	NA
RHR & RCIC Steam Supply Outboard Isolation Valve	1	NA
RCIC Second Test Valve to CST	1	NA
RCIC Turbine Trip	1	NA
RCIC Steam Shutoff Valve	1	NA
RCIC First Test Valve to CST	1	NA
RCIC Pump CST Suction Valve	1	NA
RCIC Injection Valve	1	NA
RCIC Pump Suppression Pool Suction Isolation Valve	1	NA
RCIC Turbine Trip Throttle Valve	1	NA
RCIC Pump Minimum Flow Valve	1	NA
RCIC Turbine Exhaust Shutoff Valve	1	NA
RCIC Exhaust Vacuum Breaker Outboard Isolation Valve	1	NA
RCIC Exhaust Vacuum Breaker Inboard Isolation Valve	NA	1*
RHR B Shutdown Cooling Suction Valve	NA	1*
Shutdown Cooling Inboard Suction Isolation Valve	NA	1*
RHR & RCIC Steam Supply Inboard Isolation Valve	NA	1*
RHR & RCIC Steam Supply Warmup Isolation Valve	NA	1*
Safety Relief Valves	3 <sup>(a)</sup>	3 <sup>(a)</sup>
Control Room to Shutdown Panel Transfer Switches	14	2*
APRM Power Supply Breakers	1** <sup>(b)</sup>	1** <sup>(b)</sup>
Inboard Main Steam Isolation Valve	NA	2 <sup>(c)*</sup>
Diesel Generator Room Fan 1A Temperature Controller	1	NA
Suppression Pool Cleanup Isolation Valve	1	NA

(a) 1 per valve

(b) One breaker constitutes one channel for ATWS Division 1 and Division 2.

(c) One switch for Solenoid "A" per 4 valves, one switch for Solenoid "B" per 4 valves.

\* These Division 2 controls are physically located on the Division 1 panel.

\*\* These breakers are physically located on ATWS Distribution Panels 1R14-S014 and 1R14-S015.

**TABLE 4.3.7.4-1****REMOTE SHUTDOWN SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS**

<b><u>INSTRUMENT</u></b>	<b><u>CHANNEL CHECK</u></b>	<b><u>CHANNEL CALIBRATION</u></b>
1. Reactor Vessel Pressure	M	R
2. Reactor Vessel Water Level	M	R
3. Safety/Relief Valve Position	M	NA
4. Suppression Pool Water Level	M	R
5. Suppression Pool Water Temperature	M	R
6. Drywell Pressure	M	R
7. Drywell Temperature	M	R
8. RHR System Flow	M	R
9. Emergency Service Water Flow to RHR Heat Exchanger	M	R
10. Emergency Service Water Flow to Emergency Closed Cooling Heat Exchanger	M	R
11. RCIC System Flow	M	R
12. RCIC Turbine Speed	M	R
13. Emergency Closed Cooling System Flow	M	R
14. Inboard MSIV Position	M	NA



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 51 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 16, 1992, Centerior Energy (the licensee) requested a change to the Perry Nuclear Power Plant, Unit 1, Technical Specifications (TSs). Specifically, the licensee proposed to revise Table 3.3.7.4-1, "Remote Shutdown System Controls." The proposed change would remove the line item (in Table 3.3.7.4-1) for the controls to the Reactor Core Isolation Cooling (RCIC) pump discharge to lube oil cooler valve.

2.0 EVALUATION

The proposed change has been requested in order to implement a design change which would convert RCIC valve 1E51-F046 from a normally closed (NC) motor operated valve (MOV) to a locked open (LO) manually operated valve. The MOV will be disabled electrically from the motor control center, Control Room and Remote Shutdown Panel. The valve will be locked in the normally open position and may be closed for maintenance purposes by the actuator handwheel only.

The current design requires the valve to open automatically from its NC position on a RCIC system initiation signal to supply cooling water to the RCIC lube oil cooler. This design is a carry-over from a previous BWR design where the cooling water from the RCIC pump discharge was routed through the lube oil cooler and then to the RCIC barometric condenser. The cooling water was sprayed into the barometric condenser and was then routed to the Main Condenser through the barometric condenser drain. In the previous BWR design, this valve needed to be closed after RCIC system operation to prevent draining water from the Condensate Storage Tank to the Main Condenser. New BWR designs, such as those utilized at Perry do not utilize a Barometric Condenser. The lube oil cooler outlet is returned to the RCIC pump suction line, making this a closed loop operation. In this design, there is no concern of a water drainage problem to the Main Condenser, thus there is no need for this valve to close after RCIC system operation. Therefore, valve 1E51-F046 can be changed to a manually operated open valve without adversely affecting system performance. This design change was approved by General Electric, the Nuclear Steam Supply System (NSSS) supplier for Perry.



If the TS amendment is approved, the valve will be locked in the normally open position and cooling water to the RCIC lube oil cooler will always be available whenever RCIC pump 1E51-C0001 runs. By converting the valve from a NC MOV to a LO manual valve, the valve will always be open to allow cooling water to the lube oil cooler. There is no need for the valve to close when the RCIC system is not running because this is a closed loop design. By leaving the valve in the normally open position the operability of the RCIC system is enhanced as it removes one active component from the system and replaces it with a passive valve. RCIC system operation from the Control Room and from the Remote Shutdown Panel as required by General Design Criteria 19 (USAR section 3.1.2.2.10) will not be affected because this will be a LO manual valve which requires no remote operation.

Implementation of this design change will reduce periodic preventive maintenance costs, and will eliminate costly diagnostic testing and Equipment Qualification inspection work. Elimination of this Direct Current (DC) MOV will also reduce the load on the station battery.

Based on the above evaluation, the staff concludes that removal of the line item for the controls to the RCIC pump discharge to lube oil cooler valve from PNPP Unit 1 TS 3/4.3.7.4, Table 3.3.7.4-1, "Remote Shutdown System Controls" is acceptable. The basis for the staff acceptance of the proposed modification are: (1) This change will improve system reliability and thereby enhance plant safety by removing one active component from the RCIC system by replacing it with a passive valve, and (2) this design change will also reduce station battery loads.

### 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 involves a change to 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 a change to 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 (57 FR 28206). 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: M. Razzaque

Date: October 15, 1993