

March 14, 1991

Docket No. 50-440

Mr. Michael D. Lyster, Vice President  
Nuclear - Perry  
The Cleveland Electric Illuminating  
Company  
10 Center Road  
Perry, Ohio 44081

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WandaJones	JCalvo
ACRS(10)	GPA/PA
ARM/LFMB	

Dear Mr. Lyster:

SUBJECT: AMENDMENT NO. 37 TO FACILITY OPERATING LICENSE NO. NPF-58,  
DIVISION 3 DIESEL GENERATOR LOCKOUT FEATURE (TAC NO. 76761)

The Commission has issued the enclosed Amendment No. 37 to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant, Unit No. 1. This amendment revises the Technical Specifications (TSs) in response to your application dated March 30, 1990.

This amendment revises TS 4.8.1.1.2.f.14.b to add a control room "pull-to-lockout" feature to the list of Division 3 Emergency Diesel Generator (EDG) lockout features requiring verification. The change will require verification that the newly installed lockout feature prevents Division 3 EDG starting only when lockout of that EDG is required.

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:**

James R. Hall, Sr. Project Manager  
Project Directorate III-3  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

**Enclosures:**

1. Amendment No. 37 to License No. NPF-58
2. Safety Evaluation

cc w/enclosures:  
See next page

\*See previous concurrence

Office:	LA/PDIII-3	PM/PDIII-3
Surname:	PKreutzer	JRHall:rc
Date:	3/12/91	3/12/91

*rc*

PD/PDIII-3
JHannon
3/14/91

OGC-WF1
CBarth
10/16/90

*JFol*  
*11*

*CP-1*

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*rc*

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JHannon
3/14/91

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CBarth
10/16/90

Mr. Michael D. Lyster  
The Cleveland Electric  
Illuminating Company

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Parmlly at Center Road  
Perry, Ohio 44081

Regional Administrator, Region III  
U.S. Nuclear Regulatory Commission  
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Glen Ellyn, Illinois 60137

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Mentor, Ohio 44060

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Jefferson, Ohio 44047

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Illuminating Company  
Perry Nuclear Power Plant  
P. O. Box 97 E-210  
Perry, Ohio 44081

Perry Nuclear Power Plant  
Unit 1

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  
4778 Lockwood Road  
North Perry Village, Ohio 44081

Attorney General  
Department of Attorney General  
30 East Broad Street  
Columbus, Ohio 43216

Radiological Health Program  
Ohio Department of Health  
1224 Kinnear Road  
Columbus, Ohio 43212

Ohio Environmental Protection  
Agency  
DERR--Compliance Unit  
PO Box 1049  
1800 Watermark Drive  
ATTN: Zack A. Clayton  
Columbus, Ohio 43266-0149

Mr. Phillip S. Haskell, Chairman  
Perry Township Board of Trustees  
Box 65  
4171 Main Street  
Perry, Ohio 44081

State of Ohio  
Public Utilities Commission  
180 East Broad Street  
Columbus, Ohio 43266-0573



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

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. 37  
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 30, 1990 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. 37 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 no later than startup from the third refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION



James R. Hall, Sr. 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: March 14, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 37

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 8-9

Insert

3/4 8-9

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- to standby operation, and (2) automatically energizes the emergency loads with offsite power.
12. Verifying that each fuel transfer pump transfers fuel from the fuel storage tank to the day tank of each diesel.
  13. Verifying that the automatic load sequence timers are OPERABLE with the interval between each load block within  $\pm 10\%$  of its design interval for diesel generators Div 1 and Div 2.
  14. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:
    - a. For diesel generators Div 1 and Div 2:
      - 1) Control room switch in pull-to-lock (with local/remote switch in remote).
      - 2) Local/remote switch in local
      - 3) Barring device engaged
      - 4) Inop/Normal switch in inop
    - b. For diesel generator Div 3:
      - 1) Emergency run/stop switch in stop
      - 2) Maintenance/auto/test switch in maintenance
      - 3) Control room switch in pull-to-lock position
    - g. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting all three diesel generators simultaneously, during shutdown, and verifying that all three diesel generators accelerate to at least 441 rpm for diesel generators Div 1 and Div 2 and 882 rpm for diesel generator Div 3 in less than or equal to 10 seconds.
    - h. At least once per 10 years by:
      1. Draining each fuel oil storage tank, removing the accumulated sediment and cleaning the tank using a sodium hypochlorite or equivalent solution, and
      2. Performing a pressure test of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code in accordance with ASME Code Section 11 Article IWD-5000.

4.8.1.1.3 Reports - All diesel generator failures, valid or non-valid, shall be reported to the Commission pursuant to Specification 6.9.2 within 30 days. Reports of diesel generator failures shall include the information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests of any diesel generator is greater than or equal to seven, the report shall be supplemented to include the additional information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977.

TABLE 4.8.1.1.2-1

DIESEL GENERATOR TEST SCHEDULE

<u>Number of Failures in Last 20 Valid Tests*</u>	<u>Number of Failures in Last 100 Valid Tests*</u>	<u>Test Frequency</u>
≤ 1	≤ 4	Once per 31 days
≥ 2	≥ 5	Once per 7 days**

\*Criteria for determining number of failures and number of valid tests shall be in accordance with Regulatory Position C.2.e of Regulatory Guide 1.108, but determined on a per diesel generator basis.

For the purposes of determining the required test frequency, the previous test failure count may be reduced to zero if a complete diesel overhaul# to like-new condition is completed, provided that the overhaul including appropriate post-maintenance operation and testing, is specifically approved by the manufacturer and if acceptable reliability has been demonstrated. The reliability criterion shall be the successful completion of 14 consecutive tests in a single series. Ten of these tests shall be in accordance with the routine Surveillance Requirement 4.8.1.1.a.4 and 4.8.1.1.2.a.5, four tests, in accordance with the 184-day testing requirement of Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.a.5. If this criterion is not satisfied during the first series of tests, any alternate criterion to be used to transvalue the failure count to zero requires NRC approval.

\*\*The test frequency shall be maintained until seven consecutive failure free demands have been performed and the number of failures in the last 20 valid demands has been reduced to less than or equal to one.

#A one-time waiver to the requirement for performance of a complete diesel generator overhaul to like-new condition has been granted in order to rezero four control air related diesel generator failures (valid failures Nos. 3 through 6 which occurred on 8/11/86, 2/27/87, 3/17/87 and 10/15/87 respectively).



TABLE 4.8.1.1.2-1

DIESEL GENERATOR TEST SCHEDULE

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 37 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 30, 1990, the Cleveland Electric Illuminating Company, et al. (the licensees), requested a change to the Technical Specifications (TSs) for the Perry Nuclear Power Plant (PNPP), Unit 1. The proposed change adds Surveillance Requirement 4.8.1.1.2.f.14.b.3, to require verification at least once per 18 months that the newly installed Division 3 Emergency Diesel Generator (EDG) pull-to-lockout feature will prevent diesel starting only when lockout of that EDG is required.

2.0 EVALUATION

The change reflects the addition of a lockout feature in the auto/emergency start circuitry of the Division 3 Emergency Diesel Generator to block an automatic engine start signal. The "pull-to-lock" feature is designed to prevent an automatic start of the Division 3 EDG during maintenance or repair work of the engine, which could cause injury to the personnel doing the work. The Division 1 and Division 2 EDGs already have similar provisions and capabilities for the protection of personnel. The proposed TS will provide an additional requirement to assure that the EDG start circuitry will operate as designed to prevent the Division 3 EDG from starting only when lockout of that EDG is required. The addition of this feature does not compromise the redundancy, independence, and reliability of the safety-related electrical divisions. Use of the "pull-to-lockout" control switch feature will be administratively controlled by procedures and will be annunciated in the control room. Based on the above, the NRC staff finds the proposed TS change for PNPP, Unit 1, acceptable.

3.0 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

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issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. 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.

#### 4.0 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, and (2) such activities will be conducted in compliance with the Commission's regulations and 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: S. N. Saba, NRR

Dated: March 14, 1991