

July 18, 1995

Mr. George A. Hunger, Jr.
Director-Licensing, MC 62A-1
PECO Energy Company
Nuclear Group Headquarters
Correspondence Control Desk
P.O. Box No. 195
Wayne, PA 19087-0195

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2 (TAC NOS. M90377, M90378, M90506, AND M90507)

Dear Mr. Hunger:

The Commission has issued the enclosed Amendment No. 98 to Facility Operating License No. NPF-39 and Amendment No. 62 to Facility Operating License No. NPF-85 for the Limerick Generating Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 22, 1994, as supplemented by letter dated July 3, 1995. There are two items in your application not yet reviewed.

These amendments revise TS Surveillance Requirement 4.1.3.1.4a to delete the requirement that the Scram Discharge Volume (SDV) be determined operable by testing the SDV vent and drain valves from a configuration of less than or equal to 50% rod density.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,
Original signed by:
Frank Rinaldi, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-352/50-353

Enclosures:

- 1. Amendment No. 98 to License No. NPF-39
Amendment No. 62 to License No. NPF-85
- 2. Safety Evaluation

cc w/encls:
See next page
DISTRIBUTION:

Docket File	MO'Brien	CGrimes
PUBLIC	FRinaldi	JZimmerman
PDI-2 Reading	JShea	ACRS(4)
SVarga	OGC	OC/LFDCB
JZwolinski	OPA	CAnderson, RGN-I
JStolz	GHill(2)	*Previously Concurred

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DAC for 4/10/95

OFC :PDI-2/LA:PDI-2/PM :PDI-2/PM :SRXB* :SCSB* :OGC* :PDI-2/D :

NAME :MO'Brien:JZimmerman:rb:FRinaldi :RJones :RBarrett: :JStolz :

DATE : 7/12/95 : 7/12/95 : 7/14/95 : 05/05/95:05/19/95:06/15/95:7/14/95:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 18, 1995

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Director-Licensing, MC 62A-1
PECO Energy Company
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Sincerely,

A handwritten signature in cursive script, appearing to read "Frank Rinaldi".

Frank Rinaldi, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-352/50-353

Enclosures:

1. Amendment No. 98 to
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2. Safety Evaluation

cc w/encls:
See next page

Mr. George A. Hunger, Jr.
PECO Energy Company

Limerick Generating Station,
Units 1 & 2

cc:

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Sr. V.P. & General Counsel
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Chairman
Board of Supervisors
of Limerick Township
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Linfield, PA 19468



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

PHILADELPHIA ELECTRIC COMPANY

DOCKET NO. 50-352

LIMERICK GENERATING STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 98
License No. NPF-39

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company (the licensee) dated August 22, 1994, as supplemented by letter dated July 3, 1995, 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-39 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 98, are hereby incorporated into this license. Philadelphia Electric 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 within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Donald A. Bishara
for John F. Stolz, Director
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment: Changes to the
Technical Specifications

Date of Issuance: July 18, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 98

FACILITY OPERATING LICENSE NO. NPF-39

DOCKET NO. 50-352

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 1-5

Insert

3/4 1-5

REACTIVITY CONTROL SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.1.3.1.4 The scram discharge volume shall be determined OPERABLE by demonstrating:

- a. The scram discharge volume drain and vent valves OPERABLE at least once per 24 months, by verifying that the drain and vent valves:
 1. Close within 30 seconds after receipt of a signal for control rods to scram, and
 2. Open when the scram signal is reset.
- b. Proper level sensor response by performance of a CHANNEL FUNCTIONAL TEST of the scram discharge volume scram and control rod block level instrumentation at least once per 92 days.



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

PHILADELPHIA ELECTRIC COMPANY
DOCKET NO. 50-353
LIMERICK GENERATING STATION, UNIT 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 62
License No. NPF-85

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company (the licensee) dated August 22, 1994, as supplemented by letter dated July 3, 1995, 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.

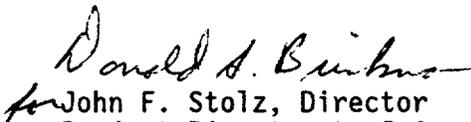
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-85 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 62, are hereby incorporated into this license. Philadelphia Electric 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 within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION


for John F. Stolz, Director
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment: Changes to the
Technical Specifications

Date of Issuance: July 18, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 62

FACILITY OPERATING LICENSE NO. NPF-85

DOCKET NO. 50-353

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 1-5

Insert

3/4 1-5

REACTIVITY CONTROL SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.1.3.1.4 The scram discharge volume shall be determined OPERABLE by demonstrating:

- a. The scram discharge volume drain and vent valves OPERABLE at least once per 24 months, by verifying that the drain and vent valves:
 - 1. Close within 30 seconds after receipt of a signal for control rods to scram, and
 - 2. Open when the scram signal is reset.
- b. Proper level sensor response by performance of a CHANNEL FUNCTIONAL TEST of the scram discharge volume scram and control rod block level instrumentation at least once per 92 days.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 98 AND 62 TO FACILITY OPERATING
LICENSE NOS. NPF-39 AND NPF-85
PHILADELPHIA ELECTRIC COMPANY
LIMERICK GENERATING STATION, UNITS 1 AND 2
DOCKET NOS. 50-352 AND 50-353

1.0 INTRODUCTION

By letter dated August 22, 1994, as supplemented by letter dated July 3, 1995, the Philadelphia Electric Company (the licensee) submitted a request for changes to the Limerick Generating Station, Units 1 and 2, Technical Specifications (TS). The request consists of five items: (1) control rod block instrumentation; (2) standby liquid control; (3) scram discharge volume valve testing; (4) optional method of scram timing; and (5) definition of core alteration. Previously issued Amendment Nos. 87 and 49 addressed items (2) and (5). There are two remaining items to be reviewed in the application. These amendments revise TS Surveillance Requirement (SR) 4.1.3.1.4a to delete the requirement that the Scram Discharge Volume (SDV) be determined operable by testing the SDV vent and drain valves from a configuration of less than or equal to 50% rod density.

2.0 BACKGROUND

The purpose of the SDV is to serve as a collection volume for water displaced by the control rod drive pistons during a scram. During normal plant operation, the SDV is empty and vented to the atmosphere through its open vent and drain valves. When a scram occurs, upon a signal from the Reactor Protection System (RPS), these vent and drain valves close to prevent an uncontrolled release of reactor coolant following a scram. The position of the SDV vent and drain valves is continuously monitored from the main control room. Redundant scram discharge system vent and drain valves are provided to ensure that no single failure can result in an uncontrolled loss of reactor coolant. Redundant solenoid-operated pilot valves are fail-safe (i.e., the SDV isolates) on loss of electric or pneumatic power. The SDV drain discharges to the equipment drain collection tank, and the vent line discharges to dirty radwaste. The vent lines are protected by vacuum breakers. The redundant isolation valves on the vent and drain lines are normally open during power operation and would not prevent draining of those lines in the nonscrammed condition.

3.0 EVALUATION

The licensee has proposed changing TS SR 4.1.3.1.4a to verify SDV vent and drain operability since the requirement induces unnecessary plant transients and potentially challenges safety-related systems and equipment. The licensee proposed amending TS SR 4.1.3.1.4a to read as follows:

4.1.3.1.4 The scram discharge volume shall be determined OPERABLE by demonstrating:

- a. The scram discharge volume drain and vent valves OPERABLE at least once per 24 months, by verifying that the drain and vent valves:

This proposed change would eliminate the current requirement that the SDV be determined OPERABLE by testing the SDV vent and drain valves when the control rods are scram-tested from a normal control rod configuration of less than or equal to 50% rod density at least once-per-24-months. This rod configuration requires the reactor to be in Operational Condition 1 (power operation), or Operational Condition 2 (startup), when the surveillance is performed.

Performance of the 4.1.3.1.4a surveillance during shutdown conditions will still ensure that these safety functions will be met, even though the test conditions of nearly ambient temperature and pressure, and reduced control rod drive (CRD) discharge flow due to the rods being fully inserted prior to the scram signal do not match operating conditions. The maximum SDV pressure during shutdown conditions will be equal to the static pressure head of the reactor pressure vessel water, as opposed to rated pressure during the test at 50% rod density. However, backpressure due to a scram from rated pressure will not significantly affect the ability to meet the 30-second closure criterion because the SDV is vented initially. The peak pressure prior to SDV isolation is, therefore, negligible. The initial test condition of reactor coolant temperature will also be significant to the outcome of the surveillance. The lower coolant temperatures expected during the testing at shutdown conditions will also have negligible impact on the performance of the surveillance. The CRD discharge flow will not affect the SDV vent and drain valve closure rates, since the SDV is of sufficient volume and initially vented such that peak pressure prior to complete isolation of the SDV will not be substantial.

Performing this test, as currently required (i.e., power operation), could result in higher backpressure conditions following the scram, as opposed to performing the test from shutdown conditions. However, the ability of the SDV vent and drain valves to open against reactor pressure is demonstrated after each reactor scram during operation.

Since the initial conditions of pressure, temperature, and CRD discharge flow rate will have no appreciable effect on the vent and drain valve performance, performance of the 4.1.3.1.4a surveillance during shutdown conditions will not affect the validity of the surveillance results. Thus, this proposed TS change will still ensure the safety functions of the SDV vent and drain valves. Based on the staff's review, the proposed change is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a surveillance requirement. The NRC staff has determined that the amendments involve 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (59 FR 55881). Accordingly, the amendments meet 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 amendments.

5.0 CONCLUSION

The Commission 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. Zimmerman

Date: July 18, 1995