February 14, 1

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. M93216 AND M93217)

Dear Mr. Hunger:

The Commission has issued the enclosed Amendment No.¹¹³ to Facility Operating License No. NPF-39 and Amendment No. ⁷⁵ 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 July 28, 1995.

These amendments revise TSs Table 4.3.1.1-1, "Reactor Protection System Instrumentation Surveillance Requirements", to reflect changes the surveillance test frequency requirements for various Reactor Protection System instrumentation.

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

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

Docket Nos. 50-352/353

Enclosures:	1.	Amendment No.113 to
		License No. NPF-39
	2.	Amendment No.75 to
		License No. NPF-85
	3.	Safety Evaluation

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

February 14, 1996

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. M93216 AND M93217)

Dear Mr. Hunger:

The Commission has issued the enclosed Amendment No.113 to Facility Operating License No. NPF-39 and Amendment No. 75 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 July 28, 1995.

These amendments revise TSs Table 4.3.1.1-1, "Reactor Protection System Instrumentation Surveillance Requirements", to reflect changes the surveillance test frequency requirements for various Reactor Protection System instrumentation.

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

Sincerely,

Frank Amalde

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

Docket Nos. 50-352/353

Enclosures: 1. Amendment No. ¹¹³ to License No. NPF-39 2. Amendment No. ⁷⁵ to License No. NPF-85 3. Safety Evaluation

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

cc:

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Regional Administrator U.S. Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, PA 19406

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Chairman Board of Supervisors of Limerick Township 646 West Ridge Pike Linfield, PA 19468 Limerick Generating Station, Units 1 & 2

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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. 113 License No. NPF-39

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - The application for amendment by Philadelphia Electric Company (the Α. licensee) dated July 28, 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:
 - С. 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
 - Ε. 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.

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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. 113, 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, to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

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: February 14, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 113

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FACILITY OPERATING LICENSE NO. NPF-39

DOCKET NO. 50-352

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	<u>Insert</u>
3/4 3-7 3/4 3-8	3/4 3-7 3/4 3-8

TABLE 4.3.1.1-1

.

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

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IMERICK	<u>Func</u>	TIONAL	UNIT	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL <u>CALIBRATION(a)</u>	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
- UNIT 1	1.	Intern a.	nediate Range Monitors: Neutron Flux - High	S(b) S	W W(j)	R R	2 3, 4, 5
		b.	Inoperative	N.A.	W(j)	N.A.	2, 3, 4, 5
	2.	Avera a.	age Power Range Monitor(f): Neutron Flux - Upscale, Setdown	S(b) S	Q Q(j)	SA SA	2 3, 5(k)
		b.	Neutron Flux - Upscale 1) Flow Biased	S,D(g)	Q	W(d)(e),SA	1
3/4			2) High Flow Clamped	S	Q	W(d)(e), SA	1
3-7		c.	Inoperative	N.A.	Q(j)	N.A.	1, 2, 3, 5(k)
		d.	Downscale	S	Q	SA	1
Amendment 41,53	3.	React Pre	tor Vessel Steam Dome essure – High	S	Q	R	· 1, 2(h)
	4.	React Lov	tor Vessel Water Level- v, Level 3	S	Q	R	1, 2
	5.	Main Valve	Steam Line Isolation e - Closure	N.A.	Q	R	1
	6.	DELET	ſED	DELETED	DELETED	DELETED	DELETED
69	7.	Drywe	ell Pressure - High	S	Q	R	1, 2
113	8.	Scran Lev a. b.	n Discharge Volume Water vel – High Level Transmitter Float Switch	S N.A.	Q Q	R R	1, 2, 5(i) 1, 2, 5(i)

TABLE 4.3,1.1-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>Func</u>	TIONAL UNIT	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
9.	Turbine Stop Valve - Closure	N.A.	Q	R	1
10.	Turbine Control Valve Fast Closure, Trip Oil Pressure - Low	N.A.	Q	R	1 (
11.	Reactor Mode Switch Shutdown Position	N.A.	R	N.A.	1, 2, 3, 4, 5
12.	Manual Scram	N.A.	W	N.A.	1, 2, 3, 4, 5

(a) Neutron detectors may be excluded from CHANNEL CALIBRATION.

(b) The IRM and SRM channels shall be determined to overlap for at least 1/2 decades during each startup after entering OPERATIONAL CONDITION 2 and the IRM and APRM channels shall be determined to overlap for a least 1/2 decades during each controlled shutdown, if not performed within the previous 7 days.

(c) DELETED

(d) This calibration shall consist of the adjustment of the APRM channel to conform to the power values calculated by a heat balance during OPERATIONAL CONDITION 1 when THERMAL POWER ≥25% of RATED THERMAL POWER. Adjust the APRM channel if the absolute difference is greater than 2% of RATED THERMAL POWER.

- (e) This calibration shall consist of the adjustment of the APRM flow biased channel to conform to a calibrated flow signal.
- (f) The LPRMs shall be calibrated at least once per 1000 effective full power hours (EFPH) using the TIP system.
- (g) Verify measured core flow (total core flow) to be greater than or equal to established core flow at the existing loop flow (APRM % flow). During the startup test program, data shall be recorded for the parameters listed to provide a basis for establishing the specified relationships. Comparisons of the actual data in accordance with the criteria listed shall commence upon the conclusion of the startup test program.
- (h) This function is not required to be OPERABLE when the reactor pressure vessel head is removed per Specification 3.10.1.
- (i) With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.
- (j) If the RPS shorting links are required to be removed per Specification 3.9.2, they may be reinstalled for up to 2 hours for required surveillance. During this time, CORE ALTERATIONS shall be suspended, and no control rod shall be moved from its existing position.
- (k) Required to be OPERABLE only prior to and during shutdown margin demonstrations as performed per Specification 3.10.3.

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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.75 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 July 28, 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. 75 , 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, to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment: Changes to the Technical Specifications

Date of Issuance: February 14, 1996

- 2 -

ATTACHMENT TO LICENSE AMENDMENT NO. 75

FACILITY OPERATING LICENSE NO. NPF-85

DOCKET NO. 50-353

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	<u>Insert</u>
3/4 3-7 3/4 3-8	3/4 3-7 3/4 3-8

<u>TABLE_4.3.1.1-1</u>

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

IMERICI	FUNCT	TONAL	UNIT	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL <u>CALIBRATION(a)</u>	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
- UNIT	1.	Interm a.	ediate Range Monitors: Neutron Flux - High	S(b) S	W W(j)	R R	2 3, 4, 5
N		b.	Inoperative	N.A.	W(j)	N.A.	2, 3, 4, 5
	2.	Avera a.	ge Power Range Monitor(f): Neutron Flux - Upscale, Setdown	S(b) S	Q Q(j)	SA SA	2 3, 5(k)
		b.	Neutron Flux - Upscale 1) Flow Biased	S,D(g)	Q	W(d)(e),SA	1
3/			2) High Flow Clamped	S	Q	W(d)(e), SA	1
4 3-		c.	Inoperative	N.A.	Q(j)	N.A.	1, 2, 3, 5(k)
7		d.	Downscale	S	Q	SA	1
Amendment No. \$2	3.	React Pre	cor Vessel Steam Dome essure – High	S	Q	R	1, 2(h)
	4.	React Low	cor Vessel Water Level- v, Level 3	S	Q	R	1, 2
	5.	Main Valve	Steam Line Isolation e – Closure	N.A.	Q	R	1
	6.	DELET	TED	DELETED	DELETED	DELETED	DELETED
,75	7.	Drywe	ell Pressure - High	S	Q	R	1, 2
	8.	Scram Lev a. b.	n Discharge Volume Water vel – High Level Transmitter Float Switch	S N.A.	Q Q	R R	1, 2, 5(i) 1, 2, 5(i)

TABLE 4.3.1.1-1 (Continued)

REACTOR PROTECTION	SYSTEM	INSTRUMENTATION	SURVEILLANCE	REQUIREMENTS

FUNC	TIONAL UNIT	CHANNEL <u>CHECK</u>	CHANNEL FUNCTIONAL TEST	CHANNEL <u>CALIBRATION(a)</u>	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED	
UNIT 9.	Turbine Stop Valve - Closure	N.A.	Q	R	1	
∾ 10.	Turbine Control Valve Fast Closure, Trip Oil Pressure - Low	N.A.	Q	R	1	
11.	Reactor Mode Switch Shutdown Position	N.A.	R	N. A.	1, 2, 3, 4, 5	
12.	Manual Scram	N.A.	Ŵ	N.A.	1, 2, 3, 4, 5	

Neutron detectors may be excluded from CHANNEL CALIBRATION. (a)

- The IRM and SRM channels shall be determined to overlap for at least 1/2 decades during each startup after (b) 3/4 entering OPERATIONAL CONDITION 2 and the IRM and APRM channels shall be determined to overlap for a least 1/2 decades during each controlled shutdown, if not performed within the previous 7 days.
- ω -0 DELETED (c)

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(d) This calibration shall consist of the adjustment of the APRM channel to conform to the power values calculated by a heat balance during OPERATIONAL CONDITION 1 when THERMAL POWER ≥25% of RATED THERMAL POWER. Adjust the APRM channel if the absolute difference is greater than 2% of RATED THERMAL POWER.

This calibration shall consist of the adjustment of the APRM flow biased channel to conform to a calibrated flow (e) signal.

(f) The LPRMs shall be calibrated at least once per 1000 effective full power hours (EFPH) using the TIP system.

- Amendment 7,17,48,75 Verify measured core flow (total core flow) to be greater than or equal to established core flow at the existing (q) loop flow (APRM % flow). During the startup test program, data shall be recorded for the parameters listed to provide a basis for establishing the specified relationships. Comparisons of the actual data in accordance with the criteria listed shall commence upon the conclusion of the startup test program.
 - This function is not required to be OPERABLE when the reactor pressure vessel head is removed per Specification (h) 3.10.1.
 - With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.
 - If the RPS shorting links are required to be removed per specification 3.9.2, they may be reinstalled for up to 2 (j) hours for required surveillance. During this time. CORE ALTERATIONS shall be suspended, and no control rod shall be moved from its existing position.
 - Required to be OPERABLE only prior to and during shutdown margin demonstrations as performed per Specification (k) 3.10.3.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 113 AND 75 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 July 28, 1995, the Philadelphia Electric Company (PECO or the licensee) submitted a request for changes to the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TSs). The requested changes would revise TSs Table 4.3.1.1-1, "Reactor Protection System Instrumentation Surveillance Requirements," to reflect changes the surveillance test frequency requirements for various Reactor Protection System (RPS) instrumentation.

2.0 EVALUATION

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The licensee has proposed changes to TS Table 4.3.1.1-1, "Reactor Protection System Instrumentation Surveillance Requirements," that reflect changes to the surveillance test frequency requirements for various Reactor Protection System (RPS) instrumentation, as follows:

- (a) Delete the channel check and functional test for Intermediate Range Monitor (IRM) and Average Power Range Monitor (APRM) prior to startup, in accordance with Improved Standard Technical Specifications (STS), NUREG-1433, issued September 28, 1992.
- (b) Change the required frequency of the APRM functional test from weekly to quarterly for the Neutron Flux Upscale, Setdown function, based on documented plant instrumentation performance and reliability.

The TS change will provide to the licensee the flexibility to maintain the Intermediate Range Monitor (IRM) and the Average Power Range Monitor (APRM) instrumentation surveillance tests at frequencies already shown to be acceptable, while minimizing delays in plant startup due to requirements that are bounded by those imposed during normal operation. Note (c) of Table 4.3.1.1-1 is also being deleted as a result of the proposed changes.

The changes to the surveillance test frequency requirements for various RPS instrumentation, such as IRM and APRM, do not involve a physical change in the configuration, setpoints, or operation of any safety-related instrumentation. Therefore, the changes do not modify the manner in which the associated IRM and APRM instrumentation carry out the scram functions.

The deletion of requirements to perform the channel check and functional test for IRM and APRM prior to startup is in accordance with the Improved STS. The reliability of each tested function is confirmed by the fact that the normal surveillance frequency specified in the TSs for that function, remains unchanged and it is greater than, or equal to the startup surveillance interval associated with that function.

The change to the required frequency of the APRM functional test from weekly to quarterly for the Neutron Flux-Upscale, Setdown function is based on APRM instrumentation reliability confirmed by plant operating experience at LGS Units 1 and 2. The setpoint data was collected for each APRM channel, for RPS and Control Rod Block Upscale Setdown surveillance testing performed since August 1992, until present. The results of the quarterly tests confirmed that the APRM Upscale Setdown function has over 2.5 years of performance in Operational Condition 1 (Power Operation) without any failures, thus being extremely reliable. Also, the proposed TS changes do not affect existing accident analyses or design assumptions, nor do they impact any safety limits of the plant.

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 requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change the surveillance requirements. 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 (60 FR 49944). 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: F. Rinaldi

Date: February 14,1996

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