

October 16, 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: LICENSE AMENDMENT ON HIGH PRESSURE COOLANT INJECTION (HPCI) SYSTEM  
RESPONSE TIMES, LIMERICK GENERATING STATION, UNITS 1 AND 2 (TAC NOS.  
M92429 AND M92430)

Dear Mr. Hunger:

The Commission has issued the enclosed Amendment No.102 to Facility Operating License No. NPF-39 and Amendment No. 66 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 (TS) in response to your application dated May 19, 1995.

These amendments revise TS Table 3.3.3-3 by changing the HPCI system response times to reflect a system response time of less than or equal to 60 seconds instead of the previous response time of less than or equal to 30 seconds.

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

Sincerely,

/s/

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

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PDR ADOCK 05000352  
P PDR

Docket Nos. 50-352/50-353

- Enclosures: 1. Amendment No. 102 to License No. NPF-39  
Amendment No. 66 to License No. NPF-85
- 2. Safety Evaluation

cc w/encls: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 16, 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: LICENSE AMENDMENT ON HIGH PRESSURE COOLANT INJECTION (HPCI) SYSTEM RESPONSE TIMES, LIMERICK GENERATING STATION, UNITS 1 AND 2 (TAC NOS. M92429 AND M92430)

Dear Mr. Hunger:

The Commission has issued the enclosed Amendment No. 102 to Facility Operating License No. NPF-39 and Amendment No. 66 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 (TS) in response to your application dated May 19, 1995.

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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. 102 to  
License No. NPF-39  
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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

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Board of Supervisors  
of Limerick Township  
646 West Ridge Pike  
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. 102  
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 May 19, 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. 102, 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 of issuance.

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: October 16, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 102

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 3-39

Insert

3/4 3-39

TABLE 3.3.3-3

EMERGENCY CORE COOLING SYSTEM RESPONSE TIMES

<u>ECCS</u>	<u>RESPONSE TIME (Seconds)</u>
1. CORE SPRAY SYSTEM	≤ 27
2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM	≤ 40
3. AUTOMATIC DEPRESSURIZATION SYSTEM	N.A.
4. HIGH PRESSURE COOLANT INJECTION SYSTEM	≤ 60
5. LOSS OF POWER	N.A.



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. 66  
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 May 19, 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. 66, 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 of issuance.

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: October 16, 1995

ATTACHMENT TO LICENSE AMENDMENT NO.66

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 3-39

Insert

3/4 3-39

TABLE 3.3.3-3

EMERGENCY CORE COOLING SYSTEM RESPONSE TIMES

<u>ECCS</u>	<u>RESPONSE TIME (Seconds)</u>
1. CORE SPRAY SYSTEM	≤ 27
2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM	≤ 40
3. AUTOMATIC DEPRESSURIZATION SYSTEM	N.A.
4. HIGH PRESSURE COOLANT INJECTION SYSTEM	≤ 60
5. LOSS OF POWER	N.A.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 102 AND 66 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 May 19, 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 requested changes would revise TS Table 3.3.3-3 to reflect a new high pressure coolant injection (HPCI) system response time of less than or equal to 60 seconds.

2.0 EVALUATION

The HPCI system is a high-pressure reactor coolant makeup system that will start independent of an AC power supply. The system is capable of providing sufficient water to the reactor vessel to maintain fuel clad temperatures below acceptable post-accident limits. The system is signaled to start on high drywell pressure or reactor vessel low water level. The response time in TS Table 3.3.3-3 is the maximum allowable time from the initiating signal to the time when rated flow is available and the injection valve is wide open. In the licensee's current TS and Updated Final Safety Analysis Report, the acceptable HPCI response time is approximately 30 seconds. The licensee is requesting to change the acceptable response time to less than or equal to 60 seconds. The change is requested for operational flexibility. The licensee justified its request based on the latest emergency core cooling system (ECCS) loss-of-coolant accident (LOCA) analysis which confirmed that the HPCI response time of 60 seconds does not affect the licensing basis peak cladding temperature, which is below 2200°F. The ECCS LOCA analysis is contained in NEDC-32170P, Revision 1, "Maximum Extended Load Line Limit and ARTS Improvement Program Analyses for Limerick Generating Station Units 1 and 2," July 1993, which was forwarded to the NRC in an August 27, 1993, letter. The analysis was performed using the GE SAFER/GESTR-LOCA methodology approved by the NRC in a June 1, 1984, letter from C. O. Thomas, NRC, to J. F. Quirk, GE, "Acceptance for Referencing of Licensing Topical Report NEDE-23785, Revision 1, Volume III(P), The GESTR-LOCA and SAFER Models for Evaluation of Loss-of-Coolant Accident." The analysis was performed to demonstrate conformance with 10 CFR 50.46 and Appendix K of 10 CFR Part 50.

In addition to re-evaluating the LOCA analysis, the licensee analyzed other transients (including loss of feedwater flow). The licensee concluded that the applicable design bases will not be adversely affected.

Because the licensee's analysis demonstrates conformance with 10 CFR 50.46 and 10 CFR Part 50, Appendix K, the staff finds the proposed change to TS Table 3.3.3-3 to increase the HPCI response time from  $\leq 30$  seconds to  $\leq 60$  seconds 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 requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 35084). 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: S. Dembek

Date: October 16, 1995