

September 4, 1990

Docket No. 50-352

DISTRIBUTION w/enclosures:

Mr. George A. Hunger, Jr.  
Director-Licensing, MC 5-2A-5  
Philadelphia Electric Company  
Nuclear Group Headquarters  
Correspondence Control Desk  
P.O. Box No. 195  
Wayne, Pennsylvania 19087-0195

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RClark	DHagan	
GSuh	Wanda Jones	
MO'Brien		

Dear Mr. Hunger:

SUBJECT: SUPPRESSION POOL LEVEL INDICATION (TSCR 90-06-1), LIMERICK  
GENERATING STATION, UNIT 1 (TAC NO. 77101)

The Commission has issued the enclosed Amendment No. 44 to Facility Operating License No. NPF-39 for the Limerick Generating Station, Unit 1. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated July 11, 1990.

This amendment modifies the TSs to reflect a planned modification to install new suppression pool water level indication at the Remote Shutdown Panel (RSP) to support safe shutdown of the plant in the event of a fire.

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  
Richard J. Clark

Richard J. Clark, Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

- Amendment No. 44 to License No. NPF-39
- Safety Evaluation

cc w/enclosures:  
See next page

DOCUMENT NAME: TAC NO. 77101

PDI-2/D  
MC'Brien  
9/14/90

PDI-2/D  
RClark  
08/20/90

OGC  
8/28/90  
PDI-2/D  
WButler  
9/14/90

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

September 4, 1990

Docket No. 50-352

Mr. George A. Hunger, Jr.  
Director-Licensing, MC 5-2A-5  
Philadelphia Electric Company  
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P.O. Box No. 195  
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Dear Mr. Hunger:

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Sincerely,

A handwritten signature in black ink that reads "Richard J. Clark".

Richard J. Clark, Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 44 to  
License No. NPF-39
2. Safety Evaluation

cc w/enclosures:

See next page

Mr. George A. Hunger, Jr.  
Philadelphia Electric Company

Limerick Generating Station  
Units 1 & 2

cc:

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

PHILADELPHIA ELECTRIC COMPANY

DOCKET NO. 50-352

LIMERICK GENERATING STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 44  
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 July 11, 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-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. 44, are hereby incorporated into this license. Philadelphia Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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3. This license amendment is effective October 1, 1990.

FOR THE NUCLEAR REGULATORY COMMISSION



Walter R. Butler, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: September 4, 1990

3. This license amendment is effective October 1, 1990.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

Walter R. Butler, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: September 4, 1990

PDI-2/D  
M. Brien  
9/4/90

PDI-2/PM  
R. Clark  
08/20/90

OGC  
8/28/90  
PDI-2/D  
W. Butler  
9/14/90

ATTACHMENT TO LICENSE AMENDMENT NO. 44

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 page is identified by Amendment number and contains vertical lines indicating the area of change. Overleaf page is provided to maintain document completeness.\*

Remove

3/4 6-27  
3/4 6-28

Insert

3/4 6-27\*  
3/4 6-28

TABLE 3.6.3-1 (Continued)

## PART A - PRIMARY CONTAINMENT ISOLATION VALVES

PENETRATION NUMBER	FUNCTION	INBOARD ISOLATION BARRIER	OUTBOARD ISOLATION BARRIER	MAX. ISOL. TIME. IF APP. (SEC)(26)	ISOL. SIGNAL(S), IF APP. (20)	NOTES	P&ID
204A(B)	RHR PUMP TEST LINE AND CONTAINMENT COOLING		HV51-125A(B)	180		4,22,29	51
205A(B)	SUPPRESSION POOL SPRAY		HV51-1F027A(B)	45	C,G	11	51
206A(B,C,D)	CS PUMP SUCTION		HV52-1F001A (B,C,D)	160		4,22,29	52
207A(B)	CS PUMP TEST AND FLUSH		HV52-1F015A(B)	23	C,G	5,22	52
208B	CS PUMP MINIMUM RECIRC		HV52-1F031B	45	LFCH	5,22,29	52
209	HPCI PUMP SUCTION		HV55-1F042	160	L,LA	4,22	55
210	HPCI TURBINE EXHAUST		HV55-1F072	120		4,22,29	55
212	HPCI PUMP TEST AND FLUSH		HV55-1F071	40	B,H	4,22	55
214	RCIC PUMP SUCTION		HV49-1F031	60		4,22,29	49
215	RCIC TURBINE EXHAUST		HV49-1F060	80		4,22,29	49
216	RCIC MINIMUM FLOW		HV49-1F019	8	LFRC	5,22	49

LIMERICK - UNIT 1

3/4 6-27

Amendment No. 2, 33

NRT 3 0 1989



TABLE 3.6.3-1 (Continued)

## PART A - PRIMARY CONTAINMENT ISOLATION VALVES

PENETRATION NUMBER	FUNCTION	INBOARD ISOLATION BARRIER	OUTBOARD ISOLATION BARRIER	MAX. ISOL. TIME. IF APP. (SEC) (26)	ISOL. SIGNAL(S), IF APP. (20)	NOTES	P&ID
217	RCIC VACUUM PUMP DISCH	HV49-1F002	49-1F028(CK)	60 NA		5,29	49
218	INSTRUMENT GAS TO VACUUM RELIEF VALVES	59-1001(CK)	HV59-135	NA 7	C,H,S		59
219A	INSTRUMENTATION - SUPPRESSION POOL LEVEL	--	HV55-121 HV55-126	45 45		10 10	55 55
219B	INSTRUMENTATION - SUPPRESSION POOL LEVEL	--	HV55-120	45		10	55
220A	H2/O2 SAMPLE RETURN	SV57-191(X-62)	SV57-190(X-62) HV57-116(X-62) SV57-150(X-62) SV57-159(X-62)	5 5 30** 5 5	B,H,R,S B,H,R,S B,H,R,S B,H,R,S B,H,R,S	11 11 11 11 11	57
220B	INSTRUMENTATION - SUPPRESSION POOL PRESSURE SUPPRESSION POOL LEVEL	--	SV57-101	5		10	57
221A	WETWELL H2/O2 SAMPLE	SV57-181	SV57-141 SV57-184	5 5 5	B,H,R,S B,H,R,S B,H,R,S	11 11 11	57
221B	WETWELL H2/O2 SAMPLE	SV57-183	SV57-186	5 5	B,H,R,S B,H,R,S	11 11	57



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NO. NPF-39

PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION, UNIT 1

DOCKET NO. 50-352

1.0 INTRODUCTION

By letter dated July 11, 1990, Philadelphia Electric Company (the licensee) requested an amendment to Facility Operating License No. NPF-39 for the Limerick Generating Station, Unit 1. The proposed amendment would modify the Technical Specifications (TS) for Limerick Generating Station, Unit 1 (LGS-1) to reflect a planned modification to install new suppression pool water level indication at the Remote Shutdown Panel (RSP) to support safe shutdown in the event of a fire. This modification is planned to be performed during the next (third) refueling outage for LGS, Unit 1, currently scheduled to begin in September 1990, based on a commitment in LGS Unit 1 Licensee Event Report (LER) No. 1-89-023, "Lack of Protected Suppression Pool Level and Temperature Indication in the Event of a Fire," dated May 5, 1989, and results in the need to add a new containment isolation valve to the appropriate TS Section. The planned modification will require changing the existing primary containment isolation valve arrangement for the Suppression Pool Level Monitoring System (SPLMS). Two new motor-operated valves will be installed. One of the new valves will be tagged HV-55-121 and will be used to isolate the existing electrical Division 2 SPLMS instrumentation and process lines. Existing motor-operated valve HV-55-121 will be retagged 55-1092 and left in place with the capability for manual operation. The power and control cables associated with this valve will be terminated at the new valve HV-55-121. The other new valve will be tagged HV-55-126 and will be used to isolate the new electrical Division 1 SPLMS level transmitter and its process line. Both new valves HV-55-121 and HV-55-126 will be primary containment isolation valves. Thus, these valves need to be added to the table of isolation valves in the TS that must be operable.

The proposed change is to TS Table 3.6.3-1, "Part A - Primary Containment Isolation Valves," TS page 3/4 6-28, to add the new outboard primary containment isolation valve, HV-55-126, to this table for penetration number 219A. TS Table 3.6.3-1 currently lists outboard primary containment isolation valve, HV-55-121, for penetration number 219A. Therefore, no change is required to this table for the new valve HV-55-121 since all requirements specified in TS Table 3.6.3-1 for existing valve HV-55-121 (to be converted to a non-containment isolation manual valve 55-1092) are applicable to the new valve.

## 2.0 EVALUATION

The proposed TS change results from a planned modification to install a new electrical Division 1 SPLMS instrumentation loop. This new level instrumentation loop, in conjunction with the existing electrical Division 2 SPLMS instrumentation loop, will ensure that suppression pool water level indication is available to support safe shutdown of the plant in the event of a fire. The original function of the SPLMS, as described in the FSAR, will remain unchanged. This planned modification does not involve any physical change to the existing channels of suppression pool water level instrumentation that are relied on for Emergency Core Cooling System (ECCS) actuation, post-accident monitoring, or remote shutdown capability (in accordance with GDC 19 of 10 CFR 50, Appendix A).

This planned modification will not add any new electrical interfaces with systems not related to suppression pool water level monitoring. This planned modification will not adversely affect the operation of any safety-related plant equipment, and will not introduce any new failure mode for the existing systems associated with fire protection safe shutdown methods A, B, C, D, and R.

The design of this planned modification meets the existing design criteria for the SPLMS, the primary containment isolation system for instrument lines, and the CAC system, and meets the existing seismic and dynamic qualification requirements for the components of these systems.

The new level instrumentation loop will be powered from an electrical Division 1, Class 1E source, and therefore, its design conforms to applicable criteria for physical separation, redundancy, and divisionalization.

The proposed change to add the new valve to TS Table 3.6.3-1 (the list of primary containment isolation valves) is 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. 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. 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 nor environmental assessment need be prepared in connection with the issuance of this amendment.

#### 4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (55 FR 30306) on July 25, 1990 and consulted with the Commonwealth of Pennsylvania. No public comments were received and the Commonwealth of Pennsylvania did not have any comments.

The staff has concluded, based on the consideration 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 the security nor to the health and safety of the public.

Principal Contributor: D. Clark

Dated: September 4, 1990