

DO NOT

Docket No. 50-388

Posted

Amdt. 92 to NPF-22

Mr. Harold W. Keiser
Senior Vice President-Nuclear
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Dear Mr. Keiser:

SUBJECT: SUPPRESSION POOL FILTER PUMP AND VALVE ISOLATION LOGIC CHANGES,
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2 (TAC NO. M84231)

The Commission has issued the enclosed Amendment No.92 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station, Unit 2. This amendment is in response to your letter dated August 7, 1992.

This amendment would make a change to the Susquehanna Steam Electric Station (SSES), Unit 2 Technical Specifications that changes the isolation signal for suppression pool cleanup line valves HV-25766 and HV-25768 from reactor vessel low water level 3 (+13") or high drywell pressure to reactor vessel low water level 2 (-38") or high drywell pressure.

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

Enclosures:

- 1. Amendment No. 92 to License No. NPF-22
- 2. Safety Evaluation

cc w/enclosures:
See next page

DISTRIBUTION:

Docket File	MO'Brien(2)	CGrimes, 11E21	JWhite, RGN-I
NRC & Local PDRs	RClark	Tech Branch	
PDI-2 Reading	OGC	ACRS(10)	
SVarga	DHagan, 3206	OPA	
JCalvo	GHill(4), P1-22	OC/LFMB	
CMiller	Wanda Jones, 7103	EWenzinger, RGN-I	

OFC	: PDI-2/ALA	: PDI-2/PM	: OGC	: PDI-2/D	:
NAME	: MO'Brien	: RClark:rb	: <i>OGC</i>	: CMiller	:
DATE	: 10/27/92	: 10/26/92	: 10/12/92	: 10/18/92	:



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

October 29, 1992

Docket No. 50-388

Mr. Harold W. Keiser
Senior Vice President-Nuclear
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Dear Mr. Keiser:

SUBJECT: SUPPRESSION POOL FILTER PUMP AND VALVE ISOLATION LOGIC CHANGES,
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2 (TAC NO. M84231)

The Commission has issued the enclosed Amendment No. 92 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station, Unit 2. This amendment is in response to your letter dated August 7, 1992.

This amendment would make a change to the Susquehanna Steam Electric Station (SSES), Unit 2 Technical Specifications that changes the isolation signal for suppression pool cleanup line valves HV-25766 and HV-25768 from reactor vessel low water level 3 (+13") or high drywell pressure to reactor vessel low water level 2 (-38") or high drywell pressure.

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

Sincerely,

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

Enclosures:

1. Amendment No. 92 to
License No. NPF-22
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Harold W. Keiser
Pennsylvania Power & Light Company

Susquehanna Steam Electric Station,
Units 1 & 2

cc:

Jay Silberg, Esq.
Shaw, Pittman, Potts & Trowbridge
2300 N Street N.W.
Washington, D.C. 20037

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

Bryan A. Snapp, Esq.
Assistant Corporate Counsel
Pennsylvania Power & Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Mr. Harold G. Stanley
Superintendent of Plant
Susquehanna Steam Electric Station
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Mr. J. M. Kenny
Licensing Group Supervisor
Pennsylvania Power & Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Mr. Herbert D. Woodeshick
Special Office of the President
Pennsylvania Power and Light Company
Rural Route 1, Box 1797
Berwick, Pennsylvania 18603

Mr. Scott Barber
Senior Resident Inspector
U. S. Nuclear Regulatory Commission
P.O. Box 35
Berwick, Pennsylvania 18603-0035

Mr. Robert G. Byram
Vice President-Nuclear Operations
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Mr. Thomas M. Gerusky, Director
Bureau of Radiation Protection
Resources
Commonwealth of Pennsylvania
P. O. Box 2063
Harrisburg, Pennsylvania 17120

Mr. Jesse C. Tilton, III
Allegheny Elec. Cooperative, Inc.
212 Locust Street
P.O. Box 1266
Harrisburg, Pennsylvania 17108-1266



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

PENNSYLVANIA POWER & LIGHT COMPANY

ALLEGHENY ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-388

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 92
License No. NPF-22

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
 - A. The application for the amendment filed by the Pennsylvania Power & Light Company, dated August 7, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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 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 set forth in 10 CFR Chapter I;
 - 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.

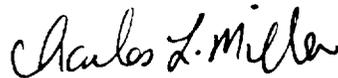
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of the Facility Operating License No. NPF-22 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 92 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. PP&L 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 is to be implemented within 30 days after its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Charles L. Miller, 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 29, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 92

FACILITY OPERATING LICENSE NO. NPF-22

DOCKET NO. 50-388

Replace the following pages of the Appendix A Technical Specifications with enclosed pages. 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 6-21
3/4 6-22

INSERT

3/4 6-21*
3/4 6-22

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>	<u>ISOLATION SIGNAL(S) (a)</u>
<u>Automatic Isolation Valves (Continued)</u>		
<u>Containment Atmosphere Sample</u>		
SV-25734 A,B	N/A	B,Y
SV-25736 A	N/A	B,Y
SV-25736 B	N/A	B,Y
SV-25740 A,B	N/A	B,Y
SV-25742 A,B	N/A	B,Y
SV-25750 A,B	N/A	B,Y
SV-25752 A,B	N/A	B,Y
SV-25774 A,B	N/A	B,Y
SV-25776 A	N/A	B,Y
SV-25776 B	N/A	B,Y
SV-25780 A,B	N/A	B,Y
SV-25782 A,B	N/A	B,Y
<u>Nitrogen Makeup</u>		
SV-25737	N/A	B,Y,R
SV-25738	N/A	B,Y,R
SV-25767	N/A	B,Y,R
SV-25789	N/A	B,Y,R
<u>Reactor Coolant Sample</u>		
HV-243F019	2	B,C
HV-243F020	2	B,C
<u>Liquid Radwaste</u>		
HV-26108 A1,A2	15	B,Z
HV-26116 A1,A2	15	B,Z
<u>RHR - Suppression Pool</u>		
<u>Cooling/Spray (c)</u>		
HV-251F028 A,B	90	X,Z
<u>CS Test (b)(c)</u>		
HV-252F015 A,B	60	X,Z
<u>HPCI Suction (b)(c)</u>		
HV-255F042	90	L, LB

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

Valve Function and Number	Maximum Isolation Time (Seconds)	Isolation Signal(s) ^(a)
AUTOMATIC ISOLATION VALVES (CONTINUED)		
SUPPRESSION POOL CLEANUP^(b)		
HV-25766	35	B,Z
HV-25768	30	B,Z
HPCI VACUUM BREAKER		
HV-255F075	15	LB,Z
HV-255F079	15	LB,Z
RCIC VACUUM BREAKER		
HV-249F062	10	KB,Z
HV-249F084	10	KB,Z
TIP BALL VALVES ^(d)		
C51-J004 A,B,C,D,E	5	A,Z
CONTAINMENT RADIATION DETECTION SYSTEM		
SV-257100 A,B	N/A	(f)
SV-257101 A,B	N/A	(f)
SV-257102 A,B	N/A	(f)
SV-257103 A,B	N/A	(f)
SV-257104	N/A	(f)
SV-257105	N/A	(f)
SV-257106	N/A	(f)
SV-257107	N/A	(f)
b. MANUAL ISOLATION VALVES		
MSIV-LCS Bleed Valve		
HV-239F001 B,F,K,P		
FEEDWATER^(e)		
HV-241F032 A,B		
RWCU RETURN		
HV-24182 A,B		
RCIC INJECTION		
HV-249F013		
2-49-020		



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 92 TO FACILITY OPERATING LICENSE NO. NPF-22

PENNSYLVANIA POWER & LIGHT COMPANY

ALLEGHENY ELECTRIC COOPERATIVE INC.

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

DOCKET NO. 50-388

1.0 INTRODUCTION

By letter dated August 7, 1992, the Pennsylvania Power and Light Company and Allegheny Electric Cooperative, Inc. (the licensees) submitted a request for changes to the Susquehanna Steam Electric Station (SSES), Unit 2, Technical Specifications (TS). The requested changes would revise the SSES, Unit 2, TS to change the isolation signal for suppression pool cleanup line valves HV-25766 and HV-25768 from reactor vessel low water level 3 (+13") or high drywell pressure to reactor vessel low water level 2 (-38") or high drywell pressure.

The suppression pool is used to absorb the energy released during a Loss of Coolant Accident (LOCA) or safety/relief valve (SRV) operation, and to serve as a source of water for the Emergency Core Cooling Systems (ECCS). Since pool water may be introduced into the reactor vessel, the capability to maintain or improve water quality is provided by a cleanup line. This line is utilized to transfer water from the pool to the condenser hotwell where it can be filtered by passing through the condensate demineralizers. The cleanup line may also be used to lower the suppression pool water level.

This change is being proposed by the licensee to increase the likelihood that the cleanup line will remain available (unisolated) for suppression pool level control following plant transients. This is accomplished by increasing the margin between reactor vessel water levels during normal operation and the water level that results in isolation of the cleanup line. The licensee indicates that this change will also reduce operator burden during plant cooldown by eliminating the need to repeatedly reset the isolation logic should additional isolations of the cleanup line occur.

2.0 EVALUATION

The safety functions of the cleanup line are to automatically isolate, following a LOCA inside containment to limit radiological releases, and to provide the capability to manually isolate following a pipe break outside containment to prevent a loss of water from the suppression pool. The safety

function of the suppression pool is to provide a source of water for ECCS and to absorb energy released during a LOCA or SRV operation. The SSES Final Safety Analysis Report (FSAR), Chapters 6 & 15 and the Design Assessment Report were reviewed by the licensee to determine the effect of changing the isolation signal on the transient and accident analysis. The licensee states that applicable containment analyses were not affected because these analyses are already based on a level 2 cleanup line isolation. The licensee further states that the design basis radiological release analysis remains bounded because this analysis is independent of the isolation signal used.

The licensee also indicated that after the construction of SSES was completed, General Electric Company (GE) specified the design requirement for isolation of the cleanup line as reactor vessel low water level 2 or high drywell pressure (Reference: GE Specification No. 22A7239, Nuclear Steam Supply Shutoff System). Since the proposed modification changes the isolation signal from level 3 to level 2, the design requirement remains satisfied and the safety function of automatic isolation following a LOCA is not impacted. In addition, the hardware used for the level 2 signal is identical in design, material, and construction to that used for level 3. Because the modification only changes the automatic isolation signal, manual isolation is unaffected.

As a positive impact on plant operation due to the proposed change, the licensee indicates that the increase in availability of the cleanup line allows the plant operator to reduce pool water levels should they increase over the high level setpoint. Lower pool water levels result in lower loadings to the suppression pool structure and submerged components in the pool during a LOCA or SRV operation.

Based on the above discussion, the licensee's statements in the submittal that the applicable containment analyses in the FSAR will not be affected due to the proposed change in the TS, and also that the design basis radiological release analysis remains bounded, the staff finds the change acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes 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 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 the

amendment involves no significant hazards consideration, and there has been no public comment on such finding (57 FR 40218). Accordingly, the 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 the amendment.

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

Principal Contributor: M. Razzaque

Date: October 29, 1992