

SEP 04 1985

Mr. Norman W. Curtis  
Vice President  
Engineering and Construction Nuclear  
Pennsylvania Power & Light Company  
2 North Ninth Street  
Allentown, Pennsylvania 18101

Dear Mr. Curtis:

SUBJECT: AMENDMENT NO.15 TO FACILITY OPERATING LICENSE NO. NPF-22 -  
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 15 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station, Unit 2. The amendment is in response to your letter dated September 25, 1984 as supplemented on November 12, 1984. This amendment adds two motor operated valves to the Emergency Service Water (ESW) System.

A copy of the related safety evaluation supporting Amendment No. 15 to Facility Operating License NPF-22 is enclosed.

Sincerely,

*Original signed by*  
Walter R. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures:

1. Amendment No. 15 to NPF-22
2. Safety Evaluation

cc: See next page

DL:LB#2  
EHY:con:  
8/12/85

DL:LB#2  
MCampagnone  
8/16/85

DL:LB#2  
J. O. Shong  
8/26/85

DL:LB#2  
W. Butler  
8/12/85

DL:LB#2  
TH Kovak  
8/30/85

8509090307 850904  
PDR ADOCK 05000388  
P PDR

3. This amendment is effective as of ninety (90) days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

Walter K. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: **SEP 04 1985**

LB#2/DL/BC  
N. Campione:cl  
08/27/85

LB#2/DE/LA  
E. Hyton  
08/27/85

LB#2/DL/BC  
W. Butler  
08/27/85

OEED  
S. G. Gbag  
08/26/85

AB/LDL  
T. Ryak  
08/30/85

DISTRIBUTION

Docket File

NRC PDR

Local PDR

PRC System

LB#2 Reading

NSIC

EHylton

MCampagnone

OELD

ELJordan

BGrimes

JPartlow

TBarnhart(4)

LJHarmon

CMiles, OPA

JSaltzman, SAB

JRutberg

AToalston

WMiller, LFMB



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

SEP 04 1985

Docket No.: 50-388

Mr. Norman W. Curtis  
Vice President  
Engineering and Construction Nuclear  
Pennsylvania Power & Light Company  
2 North Ninth Street  
Allentown, Pennsylvania 18101

Dear Mr. Curtis:

SUBJECT: AMENDMENT NO.15 TO FACILITY OPERATING LICENSE NO. NPF-22 -  
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

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A copy of the related safety evaluation supporting Amendment No. 15 to Facility Operating License NPF-22 is enclosed.

Sincerely,

A handwritten signature in cursive script, reading "Walter R. Butler", is positioned above the typed name.

Walter R. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures:

1. Amendment No.15to NPF-22
2. Safety Evaluation

cc: See next page

Mr. Norman W. Curtis  
Pennsylvania Power & Light Company

Susquehanna Steam Electric Station  
Units 1 & 2

cc:  
Jay Silberg, Esq.  
Shaw, Pittman, Potts, & Trowbridge  
1800 M Street, N. W.  
Washington, D.C. 20036

Edward M. Nagel, Esq.  
General Counsel and Secretary  
Pennsylvania Power & Light Company  
2 North Ninth Street  
Allentown, Pennsylvania 18101

Robert W. Alder, Esquire  
Office of Attorney General  
P.O. Box 2357  
Harrisburg, Pennsylvania 17120

Mr. William E. Barberich  
Manager-Nuclear Licensing  
Pennsylvania Power & Light Company  
2 North Ninth Street  
Allentown, Pennsylvania 18101

Mr. William Matson  
Allegheny Elec. Cooperative, Inc.  
212 Locust Street  
P. O. Box 1266  
Harrisburg, Pennsylvania 17108-1266

Mr. R. Jacobs  
Resident Inspector  
P.O. Box 52  
Shickshinny, Pennsylvania 18655

Mr. Anthony J. Pietrofitta,  
General Manager  
Power Production Engineering  
and Construction  
Atlantic Electric  
1199 Black Horse Pike  
Pleasantville, New Jersey 08232

Mr. R. J. Benich  
Services Project Manager  
General Electric Company  
1000 First Avenue  
King of Prussia, Pennsylvania 19406

Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

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

Susquehanna

cc: Governor's Office of State Planning & Development  
Attn: Coordinator, State Clearinghouse  
P O. Box 1323  
Harrisburg, Pennsylvania 17120

Mr. Bruce Thomas, President  
Board of Supervisors  
R. D. #1  
Berwick, Pennsylvania 18603

U. S. Environmental Protection Agency  
Attn: EIS Coordinator  
Region III Office  
Curtis Building  
6th and Walnut Streets  
Philadelphia, Pennsylvania 19106



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. 15  
License No. NPF-22

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
  - A. The application for an amendment filed by the Pennsylvania Power & Light Company, dated September 25, 1984 as supplemented on November 12, 1984 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:

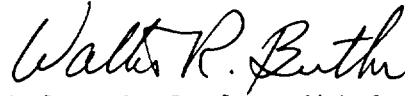
(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 15, 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.

8509090310 850904  
PDR ADOCK 05000388  
PDR

3. This amendment is effective as of ninety (90) days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Walter R. Butler".

Walter R. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: **SEP 04 1985**

ATTACHMENT TO LICENSE AMENDMENT NO. 15  
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 pages are identified by Amendment number and contain vertical lines indicating the area of change.

REMOVE

3/4 8-31  
3/4 8-32

INSERT

3/4 8-31  
3/4 8-32

TABLE 3.8.4.2-1

MOTOR-OPERATED VALVES THERMAL OVERLOAD PROTECTION

<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>
HV-01222A	RHRSW
HV-01222B	RHRSW
HV-01224A1	RHRSW
HV-01224B1	RHRSW
HV-01224A2	RHRSW
HV-01224B2	RHRSW
HV-01112A	ESW
HV-01112B	ESW
HV-01122A	ESW
HV-01122B	ESW
HV-01112C	ESW
HV-01112D	ESW
HV-01122C	ESW
HV-01122D	ESW
HV-01110A	ESW
HV-01110B	ESW
HV-01120A	ESW
HV-01120B	ESW
HV-01110C	ESW
HV-01110D	ESW
HV-01120C	ESW
HV-01120D	ESW
HV-21144A	ESW
HV-21144B	ESW
HV-08693A	ESW
HV-08693B	ESW
HV-21210A	RHRSW
HV-21210B	RHRSW
HV-21215A	RHRSW
HV-21215B	RHRSW
HV-25766	Cont. Isol.
HV-25768	Cont. Isol.
HV-22603	Cont. Isol.
HV-21345	Cont. Isol.
HV-21313	Cont. Isol.
HV-21346	Cont. Isol.
HV-21314	Cont. Isol.
HV-E11-2F009	RHR
HV-E11-2F040	RHR
HV-G33-2F001	RWCU
HV-E11-2F103A	RHR
HV-E11-2F075A	RHRSW
HV-E11-2F048A	RHR
HV-E11-2F006C	RHR

TABLE 3.8.4.2-1 (Continued)

MOTOR-OPERATED VALVES THERMAL OVERLOAD PROTECTION

<u>VALVE NUMBER .</u>	<u>SYSTEM(S) AFFECTED</u>
HV-E11-2F004C	RHR
HV-E11-2F015A	RHR
HV-E11-2F024A	RHR
HV-E21-2F015A	CS
HV-E41-2F002	HPCI
HV-B21-2F016	NSSS
HV-E11-2F022	RHR
HV-E11-2F010A	RHR
HV-E11-2F011A	RHR
HV-E11-2F004A	RHR
HV-E11-2F006A	RHR
HV-E11-2F027A	RHR
HV-E11-2F007A	RHR
HV-E11-2F104A	RHR
HV-E11-2F026A	RHR
HV-E11-2F028A	RHR
HV-E11-2F047A	RHR
HV-E11-2F073A	RHR
HV-E11-2F003A	RHR
HV-E11-2F017A	RHR
HV-E21-2F001A	CS
HV-E21-2F031A	CS
HV-E21-2F004A	CS
HV-E21-2F005A	CS
HV-E11-2F021A	RHR
HV-E11-2F016A	RHR
HV-25112	RHR
HV-E51-2F007	RCIC
HV-E51-2F084	RCIC
HV-E11-2F027B	RHR
HV-E11-2F048B	RHR
HV-E11-2F015B	RHR
HV-E11-2F006B	RHR
HV-E11-2F021B	RHR
HV-E11-2F010B	RHR
HV-E11-2F011B	RHR
HV-E11-2F004B	RHR
HV-E11-2F007B	RHR
HV-E11-2F104B	RHR
HV-E11-2F026B	RHR



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

SAFETY EVALUATION

AMENDMENT NO. 15 TO NPF-22

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

DOCKET NO. 50-388

Introduction

The licensee proposed changes to the Technical Specifications of the operating license for Susquehanna Steam Electric Station, Unit 2. These changes are as a result of the licensee's submittal, final report on a deficiency involving water hammer in the Emergency Service Water (ESW) system dated September 22, 1983 (N.W. Curtis (PP&L) to T.E. Murley (NRC)). On February 7, 1985, the NRC issued license amendments 30 and 6 to Units 1 and 2, respectively. Contained in these amendments was the approval for installation of two 8-inch motor-operated butterfly valves (HV-08693 A and B) which were added to the Unit 1 reactor building in the ESW return lines from the control structure chillers. Since these 8 inch butterfly valves are used in support of the common control structure chillers, they were included in both the Unit 1 and Unit 2 Technical Specifications. Contained in the safety evaluation of amendments 30 and 6 is the statement that additional Unit 2 modifications have been submitted as a separate proposed amendment. This amendment addresses the additional changes which are unique to Unit 2.

Evaluation

The proposed modification consists of the installation of the two 4-inch motor-operated butterfly valves (HV-21144 A and B) in the ESW return lines from the direct-expansion (DX) units. The installation of these valves will complete the plant modifications necessary to mitigate the ESW water hammer problem for Unit 2. This modification is unique to Unit 2 as Unit 1 does not have DX units.

The valves to be installed in the ESW system have environmentally qualified limitorque motor operators. The licensee has stated that the piping was analyzed for the addition of the valves and operators and was appropriately supported. The installation of these valves will be in accordance with Section XI of the ASME Boiler Pressure Vessel Code.

The NRC staff finds these modifications acceptable as they support a corrective action requested by the staff and are in accordance with NRC regulations. The staff has discussed with the licensee the licensee's intended methods of installation and finds that since the licensee will be installing the valves in accordance with Section XI of the ASME Boiler and Pressure Vessel Code that this is an acceptable method to the staff as it meets NRC requirements.

The licensee has proposed to add these valves to Technical Specification Table 3.8.4.2-1, Motor-Operated Valves Thermal Overload Protection. This addition to the Technical Specifications is acceptable as these new motor operated valves

have a thermal overload protection capability and will be subject to the requirements of Table 3.8.4.2-1 of the Technical Specifications.

Our review of the proposed change shows that the licensee's request is an improvement in safety as it reduces the likelihood of water hammer in the ESW system. The staff therefore finds these changes acceptable.

#### Environmental Consideration

This amendment involves a change in 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 assessment need be prepared in connection with the issuance of this amendment.

#### Conclusion

We have 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, 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 security or to the health and safety of the public.

Dated: **SEP 04 1985**