



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

FEB 07 1985

Docket Nos.: 50-387/50-388

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 Nos. 30 and 6 to Facility Operating  
License Nos. NPF-14 and NPF-22 - Susquehanna Steam  
Electric Station, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment Nos. 30 and 6 to Facility Operating License Nos. NPF-14 and NPF-22 for the Susquehanna Steam Electric Station, Units 1 and 2 respectively. The amendments are in response to your letters dated September 19, 1984 and January 3, 1985. These amendments change the SSES Unit 1 and Unit 2 Technical Specification Table 3.8.4.2-1 by revising the list of motor operated valves in the Emergency Service Water (ESW) system to support corrective action described in your final report dated September 22, 1984.

A copy of the related safety evaluation supporting Amendment Nos. 30 and 6 to Facility Operating License Nos. NPF-14 and NPF-22 is enclosed.

Sincerely,

A handwritten signature in cursive script, appearing to read "A. Schwencer".

A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures:

1. Amendment No. 30 to NPF-14
2. Amendment No. 6 to NPF-22
3. Safety Evaluation

cc w/enclosures:  
See next page

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PDR ADOCK 05000387  
P PDR

FEB 07 1985

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Vice President  
Engineering and Construction - Nuclear  
Pennsylvania Power & Light Company  
2 North Ninth Street  
Allentown, Pennsylvania 18101

Dear Mr. Curtis:

SUBJECT: Amendment Nos. 30 and 6 to Facility Operating  
License Nos. NPF-14 and NPF-22 - Susquehanna Steam  
Electric Station, Units 1 and 2

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A copy of the related safety evaluation supporting Amendment Nos. 30 and 6 to Facility Operating License Nos. NPF-14 and NPF-22 is enclosed.

Sincerely,

Original signed by:

A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures:

- 1. Amendment No. 30 to NPF-14
- 2. Amendment No. 6 to NPF-22
- 3. Safety Evaluation

cc w/enclosures:  
See next page

LB#2/DL  
M. Compagnone: dh  
1/22/85

LB#2/DL  
E. Hyton  
1/22/85

*MC*  
*Permitted on*  
*1/24/85*  
*to internal*  
*issuance*  
*Done*  
*1/5 MC*

OEL  
JG  
1/24/85

*Permitted on*  
*1/22/85*  
*to internal*  
*issuance*

B#2/DL  
ASchwencer  
1/22/85

ADL/DL  
JMNovak  
1/5/85

Susquehanna

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Vice President  
Engineering and Construction  
Pennsylvania Power & Light Company  
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Allentown, Pennsylvania 18101

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Allentown, Pennsylvania 18101

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Allentown, Pennsylvania 18101

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Resident Inspector  
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San Francisco, California 94119

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Harrisburg, Pennsylvania 17120

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Project Manager  
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San Jose, California 95125

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Harrisburg, PA 17108-1266

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

FEB 07 1985

Issuance of Amendment No. 30 to Facility Operating Licence No NPF-14  
Susquehanna Steam Electric Station, Unit 1

Issuance of Amendment No. 6 to Facility Operating License No. NPF-22  
Susquehanna Steam Electric Station, Unit 2

DISTRIBUTION

Docket File 50-387  
NRC PDR  
Local PDR  
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TBarnhart (8)  
RJacobs, Resident Inspector  
EMcPeck, SSPB  
DKasum, NMSS



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

PENNSYLVANIA POWER & LIGHT COMPANY  
ALLEGHENY ELECTRIC COOPERATIVE, INC.  
DOCKET NO. 50-387  
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 30  
License No. NPF-14

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 19, 1984 and supplemented on January 3, 1985, 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;
  - 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-14 is hereby amended to read as follows:

(2) Technical Specification and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 30, 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.

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P PDR

3. This amendment is effective upon start-up following the first refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: FEB 07 1985

- 3. This amendment is effective upon start-up following the first refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: FEB 07 1985

LB#2/DL  
MCompagnone:dh  
1/24/85

LB#2/DL  
EHylton  
1/24/85

*Conditional on additional check for comments & partitions to interview AS*  
OELD  
JGoldberg  
1/24/85  
LB#2/DL  
ASchwencer  
1/24/85

AD/R/DL  
TNovak  
2/5/85

*Date MC  
2/5/85*



ATTACHMENT TO LICENSE AMENDMENT NO. 30  
FACILITY OPERATING LICENSE NO. NPF-14  
DOCKET NO. 50-387

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 8-29  
3/4 8-30

INSERT

3/4 8-29  
3/4 8-30

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-08693A	ESW
HV-08693B	ESW
HV-11210A	RHRSW
HV-11210B	RHRSW
HV-11215A	RHRSW
HV-11215B	RHRSW
HV-15766	Cont. Isol.
HV-15768	Cont. Isol.
HV-12603	Cont. Isol.
HV-11345	Cont. Isol.
HV-11313	Cont. Isol.
HV-11346	Cont. Isol.
HV-11314	Cont. Isol.
HV-E11-1F009	RHR
HV-E11-1F040	RHR
HV-G33-1F001	RWCU
HV-E11-1F103A	RHR
HV-E11-1F075A	RHRSW
HV-E11-1F048A	RHR
HV-E11-1F006C	RHR

TABLE 3.8.4.2-1 (Continued)

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION

<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>
HV-E11-1F004C	RHR
HV-E11-1F015A	RHR
HV-E11-1F024A	RHR
HV-E21-1F015A	CS
HV-E41-1F002	HPCI
HV-B21-1F016	NSSS
HV-E11-1F022	RHR
HV-E11-1F010A	RHR
HV-E11-1F011A	RHR
HV-E11-1F004A	RHR
HV-E11-1F006A	RHR
HV-E11-1F027A	RHR
HV-E11-1F007A	RHR
HV-E11-1F104A	RHR
HV-E11-1F026A	RHR
HV-E11-1F028A	RHR
HV-E11-1F047A	RHR
HV-E11-1F073A	RHR
HV-E11-1F003A	RHR
HV-E11-1F017A	RHR
HV-E21-1F001A	CS
HV-E21-1F031A	CS
HV-E21-1F004A	CS
HV-E21-1F005A	CS
HV-E11-1F021A	RHR
HV-E11-1F016A	RHR
HV-15112	RHR
HV-E51-1F007	RCIC
HV-E51-1F084	RCIC
HV-E11-1F027B	RHR
HV-E11-1F048B	RHR
HV-E11-1F015B	RHR
HV-E11-1F006B	RHR
HV-E11-1F021B	RHR
HV-E11-1F010B	RHR
HV-E11-1F011B	RHR
HV-E11-1F004B	RHR
HV-E11-1F007B	RHR
HV-E11-1F104B	RHR
HV-E11-1F026B	RHR

TABLE 3.8.4.2-1 (Continued)

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION

<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>
HV-E11-1F004C	RHR
HV-E11-1F015A	RHR
HV-E11-1F024A	RHR
HV-E21-1F015A	CS
HV-E41-1F002	HPCI
HV-B21-1F016	NSSS
HV-E11-1F022	RHR
HV-E11-1F010A	RHR
HV-E11-1F011A	RHR
HV-E11-1F004A	RHR
HV-E11-1F006A	RHR
HV-E11-1F027A	RHR
HV-E11-1F007A	RHR
HV-E11-1F104A	RHR
HV-E11-1F026A	RHR
HV-E11-1F028A	RHR
HV-E11-1F047A	RHR
HV-E11-1F073A	RHR
HV-E11-1F003A	RHR
HV-E11-1F017A	RHR
HV-E21-1F001A	CS
HV-E21-1F031A	CS
HV-E21-1F004A	CS
HV-E21-1F005A	CS
HV-E11-1F021A	RHR
HV-E11-1F016A	RHR
HV-15112	RHR
HV-E51-1F007	RCIC
HV-E51-1F084	RCIC
HV-E11-1F027B	RHR
HV-E11-1F048B	RHR
HV-E11-1F015B	RHR
HV-E11-1F006B	RHR
HV-E11-1F021B	RHR
HV-E11-1F010B	RHR
HV-E11-1F011B	RHR
HV-E11-1F004B	RHR
HV-E11-1F007B	RHR
HV-E11-1F104B	RHR
HV-E11-1F026B	RHR



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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. 6  
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 19, 1984 and supplemented on January 3, 1985 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;
  - 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 Specification and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 6, 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 amendment is effective upon Unit 1 start-up following the Unit 1 first refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: FEB 07 1985

3. This amendment is effective upon Unit 1 start-up following the Unit 1 first refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: FEB 07 1985

*[Signature]*  
LB#2/DL  
McCampbell one:dh  
1/27/85

LB#2/DL  
EKyKton  
1/27/85

*[Signature]*  
OELD  
JGoldberg  
1/25/85  
*Additional check for public comments to be made before issuance*  
1/25/85

LB#2/DL  
Schwencer  
1/ /85

*[Signature]*  
AD/L/DL  
TMNovak  
2/3/85

ATTACHMENT TO LICENSE AMENDMENT NO. 6  
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	RHRSW
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-08693A	ESW
HV-08693B	ESW
HV-21210A	ESW
HV-21210B	RHRSW
HV-21215A	RHRSW
HV-21215B	RHRSW
HV-25766	RHRSW
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







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

SAFETY EVALUATION  
AMENDMENT NOS. 30 and 6 TO NPF-14 and NPF-22  
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1 AND UNIT 2  
DOCKET NOS. 50-387 AND 50-388

Introduction

The licensee proposed changes to the Technical Specifications of the operating license for the Susquehanna Steam Electric Station, Units 1 and 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)). As an interim fix for the water hammer problem the licensee installed motor operators into four normally manually-operated valves. These valves are identified as HV-01101 A, B, C, and D. At this time the licensee is proposing to implement a permanent acceptable fix for the ESW system water hammer problem. This permanent fix includes removing the motor operators from HV-01101 A, B, C and D which will be converted to locked-open manually operated valves.

In addition, two 8-inch motor-operated butterfly valves (HV-08693 A and B) will be added in 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 are included in both Unit 1 and Unit 2 Technical Specification Table 3.8.4.2-1.

Evaluation

The licensee's proposed changes to the technical specifications will remove the four previously motor-operated valves, HV-01101 A, B, C, D, from the Unit 2 Technical Specification Table 3.8.4.2-1 and HV-08693 A and B will be added to Table 3.8.4.2-1, Motor-Operated Valves Thermal Overload Protection, for both the Unit 1 and Unit 2 Technical Specifications.

The Unit 2 modifications which have been submitted as a separate proposed amendment include 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 Unit 2 modifications are unique to Unit 2 and do not have to be added to the Unit 1 Technical Specifications.

The licensee states that removal of the motor operators from the ESW pump discharge valves (HV-01101 A, B, C and D) without the installation of the motor-operated valves on the ESW return lines from the Unit 2 DX units has been analyzed and found acceptable. The NRC staff agrees with this position as the placement of the HV-08693 A and B valves allow an effective method of resolving the ESW water hammer problem until the modification for Unit 2 are made during the Unit 2 first refueling outage.

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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 and Pressure Vessel Code.

The NRC staff finds these modifications acceptable from a Technical Specification standpoint. Additionally these modifications are acceptable with regard to system analysis and installation.

Our review shows that the proposed changes to the technical specifications are appropriate and that these changes do not reduce the safety of the plant and are, therefore, 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 impact statement or 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: **FEB 07 1985**