

MAY 23 1984

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.23 to Facility Operating License No. NPF-14 -  
NPF-14-Susquehanna Steam Electric Station, Unit 1

The Nuclear Regulatory Commission has issued the enclosed Amendment No.23 to Facility Operating License No. NPF-14 for the Susquehanna Steam Electric Station, Unit 1. The amendment is in response to your letters dated October 11, 1983; October 24, 1983; and November 4, 1983. This amendment changes the requirements of Technical Specification 4.7.4.a regarding inservice visual inspection of snubbers, changes to Technical Specification 4.7.1.3 to modify the requirements for determining the spray pond OPERABLE, and changes to Technical Specification Tables 3.3.2-1 and 3.6.3-1 to correct errors of an administrative nature.

A copy of the related safety evaluation support Amendment No.23 to Facility Operating License NPF-14 is enclosed.

Sincerely,

Original signed by:

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

Enclosures:

- 1. Amendment No.23 to NPF-14
- 2. Safety Evaluation

cc w/enclosures:  
See next page

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PDR ADOCK 05000387  
P PDR

3. This amendment is effective as of the date of issuance.

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: **MAY 23 1984**

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Susquehanna, Unit 1 OL Amendment No. 23  
Dated May 23, 1984

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

MAY 23 1984

Docket No. 50-387

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. 23 to Facility Operating License No. NPF-14 -  
Susquehanna Steam Electric Station, Unit 1

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 23 to Facility Operating License No. NPF-14 for the Susquehanna Steam Electric Station, Unit 1. The amendment is in response to your letters dated October 11, 1983; October 24, 1983; and November 4, 1983. This amendment changes the requirements of Technical Specification 4.7.4.a regarding inservice visual inspection of snubbers, changes to Technical Specification 4.7.1.3 to modify the requirements for determining the spray pond OPERABLE, and changes to Technical Specification Tables 3.3.2-1 and 3.6.3-1 to correct errors of an administrative nature.

A copy of the related safety evaluation support Amendment No. 23 to Facility Operating License NPF-14 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. 23 to NPF-14
2. Safety Evaluation

cc w/enclosures:  
See next page

Susquehanna

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Vice President  
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Pennsylvania Power & Light Company  
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Allentown, Pennsylvania 18101

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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. 23  
License No. NPF-14

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
  - A. The applications for amendments filed by the Pennsylvania Power & Light Company, dated October 11, 1983; October 24, 1983; and November 4, 1983 comply 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 Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No.23 , 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.

8406050029 840523  
PDR ADOCK 05000387  
P PDR

3. This amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: **MAY 23 1984**

ATTACHMENT TO LICENSE AMENDMENT NO. 23  
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.

<u>REMOVE</u>	<u>INSERT</u>
3/4 3-11	3/4 3-11
3/4 3-12	3/4 3-12
3/4 6-19	3/4 6-19
3/4 6-20	3/4 6-20
3/4 6-21	3/4 6-21
3/4 6-22	3/4 6-22
3/4 6-23	3/4 6-23
3/4 6-24	3/4 6-24
3/4 7-3	3/4 7-3
3/4 7-4	3/4 7-4
3/4 7-9	3/4 7-9
3/4 7-10	3/4 7-10



TABLE 3.3.2-1  
ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>ISOLATION SIGNAL(s)<sup>(a)</sup></u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (b)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
<u>1. PRIMARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level				
1) Low, Level 3	A	2	1, 2, 3	20
2) Low Low, Level 2	B	2	1, 2, 3	20
3) Low Low Low, Level 1	X	2	1, 2, 3	20
b. Drywell Pressure - High	Y,Z,X	2	1, 2, 3	20
c. Manual Initiation	NA	1	1, 2, 3	24
<u>2. SECONDARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level - Low Low, Level 2	Y (c)	2	1, 2, 3 and *	25
b. Drywell Pressure - High	Y,Z (c)	2	1, 2, 3	25
c. Refuel Floor High Exhaust Duct Radiation - High	**	2	1, 2, 3 and *	25
d. Railroad Access Shaft Exhaust Duct Radiation - High	**	2	1, 2, 3 and *	25
e. Refuel Floor Wall Exhaust Duct Radiation - High	**	2	1, 2, 3 and *	25
f. Manual Initiation	NA	1	1, 2, 3 and *	24

( )

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TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>ISOLATION SIGNAL(S)<sup>(a)</sup></u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (b)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
3. <u>MAIN STEAM LINE ISOLATION</u>				
a. Reactor Vessel Water Level - Low, Low, Level 2	B	2	1, 2, 3	21
b. Main Steam Line Radiation - High	C	2	1, 2, 3	21
c. Main Steam Line Pressure - Low	P	2	1	22
d. Main Steam Line Flow - High	D	2/line	1, 2, 3	20
e. Condenser Vacuum - Low	UA	2	1, 2, 3	21
f. Main Steam Line Tunnel Temperature - High	E	2/line	1, 2, 3	21
g. Main Steam Line Tunnel $\Delta$ Temperature - High	E	2	1, 2, 3	21
h. Manual Initiation	NA	1	1, 2, 3	24
4. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>				
a. RWCS $\Delta$ Flow - High	J	1	1, 2, 3	23
b. RWCS Area Temperature - High	W	3	1, 2, 3	23
c. RWCS Area Ventilation $\Delta$ Temp. - High	W	3	1, 2, 3	23
d. SLCS Initiation	(d)	NA	1, 2, 3	23
e. Reactor Vessel Water Level - Low Low, Level 2	B	2	1, 2, 3	23
f. RWCS $\Delta$ Pressure - High	J	1	1, 2, 3	23
g. Manual Initiation	NA	1	1, 2, 3	24

TABLE 3.6.3-1

PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>	<u>ISOLATION SIGNAL(s)<sup>(a)</sup></u>
a. <u>Automatic Isolation Valves<sup>(b)</sup></u>		
<u>MSIV</u>		
HV-141F022 A,B,C,D	5	B,C,D,E,P,UA
HV-141F028 A,B,C,D	5	B,C,D,E,P,UA
<u>MSL Drain</u>		
HV-141F016	10	B,C,D,E,P,UA
HV-141F019	10	B,C,D,E,P,UA
<u>RCIC Steam Supply</u>		
HV-149F007 <sup>(c)</sup>	20	K
HV-149F008 <sup>(c)</sup>	20	K
HV-149F088	3	K
<u>HPCI Steam Supply</u>		
HV-155F002 <sup>(c)</sup>	50	L
HV-155F003 <sup>(c)</sup>	50	L
HV-155F100	3	L
<u>RHR - Shutdown Cooling Suction<sup>(d)</sup></u>		
HV-151F008	52	M,UB
HV-151F009	52	M,UB
<u>RWCU Suction<sup>(e)</sup></u>		
HV-144F001	30	B,J,W
HV-144F004	30	B,J,W
<u>RHR - Reactor Vessel Head Spray</u>		
HV-151F022	30	M,UB,Z
HV-151F023	20	M,UB,Z

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)<sup>(a)</sup></u>
<u>Automatic Isolation Valves<sup>(b)</sup> (Continued)</u>		
<u>Containment Instrument Gas</u>		
HV-12603	20	X
SV-12605	N/A	X
SV-12651	N/A	X
SV-12661	N/A	Y
SV-12671	N/A	Y
<u>RBCCW</u>		
HV-11313	30	X
HV-11314	30	X
HV-11345	30	X
HV-11346	30	X
<u>Containment Purge</u>		
HV-15703	19	Y, R
HV-15704	19	Y, R
HV-15705	5	Y, R
HV-15711	5	Y, R
HV-15713	30	Y, R
HV-15714	30	Y, R
HV-15721	6	Y, R
HV-15722	30	Y, R
HV-15723	30	Y, R
HV-15724	19	Y, R
HV-15725	19	Y, R
<u>RHR - Drywell Spray<sup>(f)</sup></u>		
HV-151F016 A,B	90	G
<u>RB Chilled Water</u>		
HV-18781 A1,A2,B1,B2	40	X
HV-18782 A1,A2,B1,B2	6	X
HV-18791 A1,A2,B1,B2	15-	Y
HV-18792 A1,A2,B1,B2	4	Y

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)<sup>(a)</sup></u>
<u>Automatic Isolation Valves<sup>(b)</sup> (Continued)</u>		
<u>Containment Atmosphere Sample</u>		
SV-15734 A,B	N/A	Y
SV-15736 A,B	N/A	Y
SV-15737	N/A	Y,R
SV-15740 A,B	N/A	Y
SV-15742 A,B	N/A	Y
SV-15750 A,B	N/A	Y
SV-15752 A,B	N/A	Y
SV-15767	N/A	Y,R
SV-15774 A,B	N/A	Y
SV-15776 A,B	N/A	Y
SV-15780 A,B	N/A	Y
SV-15782 A,B	N/A	Y
<u>Reactor Coolant Sample</u>		
HV-143F019	2	B,C
HV-143F020	2	B,C
<u>Liquid Radwaste</u>		
HV-16108 A1,A2	15	Z
HV-16116 A1,A2	15	Z
<u>RHR - Suppression Pool</u>		
<u>Cooling/Spray<sup>(f)</sup></u>		
HV-151F011 A,B	23	G
HV-151F028 A,B	90	G
<u>CS Test<sup>(e)(f)</sup></u>		
HV-152F015 A,B	60	G
<u>HPCI Suction<sup>(e)(f)</sup></u>		
HV-155F042	90	L

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)<sup>(a)</sup></u>
<u>Automatic Isolation Valves<sup>(b)</sup> (Continued)</u>		
<u>Suppression Pool Cleanup</u>		
HV-15766	30	Y
HV-15768	30	Y
<u>HPCI Vacuum Breaker</u>		
HV-155F075	15	FB
HV-155F079	15	FB
<u>RCIC Vacuum Breaker</u>		
HV-149F062	10	FA
HV-149F084	10	FA
<u>TIP Ball Valves (g)</u>		
5 valves	5	Z
b. <u>Manual Isolation Valves<sup>(h)</sup></u>		
<u>MSIV-LCS Bleed Valve</u>		
HV-139F001 B,F,K,P		
<u>Feedwater<sup>(i)</sup></u>		
HV-141F032 A,B		
<u>RWCU Return</u>		
HV-144F042		
HV-144F104		
<u>RCIC Injection</u>		
HV-149F013 <sup>(c)</sup>		
1-49-020		

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

VALVE FUNCTION AND NUMBER

Manual Isolation Valves<sup>(h)</sup> (Continued)

RCIC Suction<sup>(e)(f)</sup>

HV-149F031

RCIC Turbine Exhaust

HV-149F059

RCIC Vacuum Pump Discharge

HV-149F060

HPCI Injection

HV-155F006<sup>(c)</sup>  
1-55-038

RHR - Shutdown Cooling Return/

LPCI Injection<sup>(c)</sup>

HV-151F015 A,B

RHR - Suppression Pool Suction<sup>(e)(f)</sup>

HV-151F004 A,B,C,D

RHR Heat Exchanger Vent

HV-151F103 A,B

CS Injection<sup>(c)</sup>

HV-152F005 A,B  
HV-152F037 A,B

CS Suction<sup>(e)(f)</sup>

HV-152F001 A,B

Containment Instrument Gas

SV-12654 A,B

TABLE 3.6.3-1 (Continued)  
PRIMARY CONTAINMENT ISOLATION VALVES

VALVE FUNCTION AND NUMBER

Manual Isolation Valves<sup>(h)</sup> (Continued)

SLC

HV-148F006

Breathing Air

1-25-209

1-25-210

Demineralized Water

1-41-017

1-41-018

ILRT

1-57-193

1-57-195

HPCI Turbine Exhaust

HV-155F066

RHR - Shutdown Cooling Return/  
LPCI Injection - Pressure Equalizing Valve

HV-151F122 A,B

c. Other Valves

Feedwater

141F010 A,B

RHR - Shutdown Cooling Suction

PSV-151F126

RHR - Shutdown Cooling Return/  
LPCI Injection

HV-151F050 A,B

RHR-Minimum Recirculation Flow

HV-151F007 A,B



PLANT SYSTEMS

ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

---

3.7.1.3 The spray pond shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, 5 and \*.

ACTION:

- a. With the groundwater level at any spray pond area observation well greater than or equal to 663' MSL, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the high groundwater level and the plans for restoring the level to within the limit.
- b. With the spray pond otherwise inoperable:
  1. In OPERATIONAL CONDITION 1, 2 or 3, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
  2. In OPERATIONAL CONDITION 4 or 5, declare the RHRSW system and the emergency service water system inoperable and take the ACTION required by Specifications 3.7.1.1 and 3.7.1.2.
  3. In Operational Condition \*, declare the emergency service water system inoperable and take the ACTION required by Specification 3.7.1.2. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.7.1.3 The spray pond shall be determined OPERABLE by verifying:

- a. The average water temperature, which shall be the arithmetical average of the spray pond water temperature at the surface, mid and bottom levels, to be less than or equal to 81°F at least once per 24 hours.
- b. The water level at the overflow weir is greater than or equal to 678' 1" mean Sea Level USGS (MSL), at least once per 12 hours.
- c. The groundwater level at observation wells 1, 3, 4, 5, 6, and 1113 to be less than 663' MSL at least once per 31 days.

\*When handling irradiated fuel in the secondary containment.

## PLANT SYSTEMS

### 3/4.7.2 CONTROL ROOM EMERGENCY OUTSIDE AIR SUPPLY SYSTEM

#### LIMITING CONDITION FOR OPERATION

---

3.7.2 Two independent control room emergency outside air supply system subsystems shall be OPERABLE with each subsystem consisting of:

- a. One makeup fan, and
- b. One filter train.

APPLICABILITY: All OPERATIONAL CONDITIONS and \*.

#### ACTION:

- a. In OPERATIONAL CONDITION 1, 2 or 3 with one control room emergency outside air supply subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. In OPERATIONAL CONDITION 4, 5 or \*:
  1. With one control room emergency outside air supply subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days or initiate and maintain operation of the OPERABLE subsystem in the pressurization mode of operation.
  2. With both control room emergency outside air supply subsystems inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel.
- c. The provisions of Specification 3.0.3 are not applicable in Operational Condition \*.

#### SURVEILLANCE REQUIREMENTS

---

4.7.2 Each control room emergency outside air supply subsystem shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates for at least 10 hours with the heaters OPERABLE.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the subsystem by:

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\*When irradiated fuel is being handled in the secondary containment.

PLANT SYSTEMS

3/4.7.4 SNUBBERS

LIMITING CONDITION FOR OPERATION

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3.7.4 All snubbers listed in Table 3.7.4-1 shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3 and OPERATIONAL CONDITIONS 4 and 5 for snubbers located on systems required OPERABLE in those OPERATIONAL CONDITIONS.

ACTION:

With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.4.c on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

---

4.7.4 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5.

a. Visual Inspections

The first inservice visual inspection of snubbers shall be performed after 4 months but within 10 months of commencing POWER OPERATION and shall include all snubbers listed in Table 3.7.4-1. If all snubbers of each type are found OPERABLE during the first inservice visual inspection, the second inservice visual inspection shall be performed at the first refueling outage. Otherwise, subsequent visual inspections shall be performed in accordance with the following schedule:

<u>No. Inoperable Snubbers per Inspection Period</u>	<u>Subsequent Visual Inspection Period*#</u>
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3,4	124 days ± 25%
5,6,7	62 days ± 25%
8 or more	31 days ± 25%

The snubbers may be categorized into two groups: Those accessible and those inaccessible during reactor operation. Each group may be inspected independently in accordance with the above schedule.

\*The inspection interval shall not be lengthened more than one step at a time.  
#The provisions of Specification 4.0.2 are not applicable.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

---

#### b. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) that attachments to the foundation or supporting structure are secure, and (3) in those locations where snubber movement can be manually induced without disconnecting the snubber, that the snubber has freedom of movement and is not frozen up. Snubbers which appear inoperable as a result of these visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible, and (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Surveillance Requirements 4.7.4.d.

#### c. Functional Tests

During the first refueling shutdown and at least once per 18 months thereafter during shutdown, a representative sample of at least that number of snubbers which follows the expression  $35 \left(1 + \frac{c}{2}\right)$ , where  $c = 4$ , is the allowable number of snubbers not meeting the acceptance criteria selected by the operator, shall be functionally tested either in-place or in a bench test. For each number of snubbers above  $c$  which does not meet the functional test acceptance criteria of Specifications 4.7.4.d., an additional sample selected according to the expression  $35 \left(1 + \frac{c}{2}\right) \left(\frac{2}{c+1}\right)^2 (a - c)$  shall be functionally tested, where  $a$  is the total number of snubbers found inoperable during the functional testing of the representative sample.

Functional testing shall continue according to the expression  $b \left[35 \left(1 + \frac{c}{2}\right) \left(\frac{2}{c+1}\right)^2\right]$  where  $b$  is the number of snubbers found inoperable in the previous re-sample, until no additional inoperable snubbers are found within a sample or until all snubbers in Table 3.7.4-1 have been functionally tested.

The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity of snubbers. At least 25% of the snubbers in the representative sample shall include snubbers from the following three categories:

1. The first snubber away from each reactor vessel nozzle.
2. Each snubber within 5 feet of heavy equipment, valve, pump, turbine, motor, etc.
3. Each snubber within 10 feet of the discharge from a safety relief valve.

SAFETY EVALUATION  
AMENDMENT NO. 23 TO NPF-14  
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1  
DOCKET NO. 50-387

Introduction

The licensee in letters dated October 11, 1983; October 24, 1983; and November 4, 1983, proposed changes to the Technical Specifications of the operating license for Susquehanna Steam Electric Station, Unit 1 which are as follows:

- (1) Change the requirements of Technical Specification 4.7.4.a from "If less than two snubbers are found inoperable during the first inservice visual inspection, the second inservice visual inspection shall be performed 12 months  $\pm$ 25% from the date of the first inspection.", to read "If all snubbers of each type are found OPERABLE during the first inservice visual inspection, the second inservice visual inspection shall be performed at the first refueling outage."
- (2) Change Technical Specification 4.7.1.3 requirements for determining the spray pond OPERABLE. Changes include average water temperature of the spray pond to less than or equal to 81°F, water level at the overflow weir to be greater than or equal to 678'1", and monitoring water level at the overflow weir at least once per 12 hours.
- (3) Change Technical Specification Tables 3.3.2-1 and 3.6.3-1 to reinstate isolation signal "X" on Trip Function 1.b., Drywell Pressure-High, in Table 3.3.2-1, deleting RHR-Shutdown Cooling Return/LPCI Injection Valves HV-151F122 A and B from the Automatic Isolation section of Table 3.6.3-1 and adding them to the Manual Isolation section of the same table, and correcting typographical errors in the description and isolation signals of the Suppression Pool Cooling/Spray Valves HV-151F011 A and B.

Evaluation

(1) Technical Specification 4.7.4.a

The snubbers at Susquehanna Unit 1 experienced a long period during construction and startup testing in which they were exposed to many potential failure mechanisms. The first inspection of the snubbers revealed zero failures after they had been subjected to more strenuous testing than they would be subjected to during normal operation. The Standard Technical Specification regarding snubbers has been revised to include similar inspection requirements as proposed by the licensee. The Technical Specifications for Susquehanna Unit 2 and other recently licensed boiling water reactor facilities have snubber inspection requirements similar to those proposed by the licensee. The staff finds the proposed change acceptable.

(2) Technical Specification 4.7.1.3

A safety evaluation addressing the changes to spray pond average water temperature, water level, and water level monitoring requirements to determine the spray pond OPERABLE, is contained in Sections 2.4.4 and 9.2.3 of Supplement 6 to the Safety Evaluation Report Relating to the Susquehanna Steam Electric Station, Units 1 and 2. In summary, the staff concluded that the ultimate heat sink's thermal performance, with the changes proposed by the licensee, would comply with Regulatory Guide 1.27 and meet the requirements of General Design Criteria 44. The licensee's revised analysis of the pond's thermal performance completely ignores the effects of wind speed, which is a substantial conservatism, and still shows generally satisfactory performance. The staff finds the proposed changes to Technical Specification 4.7.1.3 acceptable.

(3) Technical Specification Tables 3.3.2-1 and 3.6.3-1

The proposed change to Technical Specification Table 3.3.2-1 would add isolation signal "X" on Trip Function 1.b. Drywell Pressure-High. The addition of isolation signal "X" on Trip Function 1.b. was originally approved by the NRC staff with the issuance of Amendment 4 to Operating License NPF-14. With the issuance of Amendment 6 to Operating License NPF-14, the isolation signal "X" on Trip Function 1.b. was inadvertently dropped from the table. The staff concludes the addition of isolation signal "X" to Trip Function 1.b. is acceptable and corrects an administrative error.

Technical Specification 3.6.3 addresses the operability of the primary containment isolation valves and Table 3.6.3-1 of Technical Specification 3.6.3, lists the primary containment isolation valves by valve number and function, and lists their respective maximum isolation times and isolation signals. The licensee proposed a specification change to delete RHR-Shutdown Cooling Valves HV-151F122 A and B from the Automatic Isolation section of Table 3.6.3-1 and add them to the Manual Isolation section of the same table. This proposed specification change corrects an administrative error. The present system design does not include this provision for automatic isolation and was never intended to include this requirement. The present design with the RHR-Shutdown Cooling valves not isolating on a High Drywell Pressure signal (i.e., isolation signal "Z") is consistent with all the recently licensed BWRs and with the GE Standard Technical Specifications. In addition, Table 3.3.2-1, Isolation Actuation Instrumentation, of the licensee's Technical Specification does not require the RHR-System Shutdown Cooling Mode Isolation to include an isolation on High Drywell Pressure. The licensee also proposed to add "-Pressure Equalizing Valve" to the valve title for valves HV-151F122 A and B to clarify the functional description of these valves. The staff has reviewed the proposed changes and finds them acceptable.

The licensee also proposed a specification change to the isolation signals of the Suppression Pool Cooling/Spray Valves HV-151F011 A and B from isolation signals "B" and "C" (i.e., Reactor Vessel Water Level-Low (Level 2) and Main Stream Line High Radiation, respectively) to isolation signal "G" (i.e., Drywell Pressure-High or Reactor Vessel Water Level-Low (Level 1)). The proposed change corrects a typographical error. The present system design provides for isolation signal "G" and was not intended to provide for isolation signals "B" and "C." The present design with isolation signal "G" is consistent with GE Standard Technical Specifications. The licensee also proposed a change to the title for valves HV-151F011 A and B from "RHR-Suppression Pooling Cooling/Spray" to "RHR-Suppression Pool Cooling/Spray." This proposed change also corrects a typographical error. The staff has reviewed these proposed changes and finds them acceptable.

### Environmental Consideration

We have determined that this amendment does not authorize a change in effluent types or total amount nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that this amendment involves action which is insignificant from the standpoint of environmental impact, and, pursuant to 10 CFR Section 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not 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: **MAY 23 1984**