5 15, 1995

Mr. Robert G. Byram Senior Vice President .ear Pennsylvania Power and-eight Company 2 North Ninth Street Allentown, PA 18101

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

(TAC NOS. M91873 & M91874)

Dear Mr. Byram:

The Commission has issued the enclosed Amendment No. 149 to Facility Operating License No. NPF-14 and Amendment No. 119 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station (SSES), Units 1 and 2. These amendments are in response to your letter dated March 15, 1995, as supplemented by letter dated August 4,1995.

These amendments modify the SSES Technical Specification Table 3.6.3-1, Primary Containment Isolation Valves, concerning the scope of Type C testing on specified emergency core cooling system and reactor core isolation cooling containment isolation valves. Specifically, the subject valves on systems which terminate below the minimum water level of the suppression pool, will no longer require Type C testing but would instead be tested using requirements of the American Society of Mechanical Engineers' Section XI Code.

In your March 15, 1995, letter, you requested that the Commission grant an exemption to 10 CFR Part 50, Appendix J, Section II.H.4, to support this change in testing. Your August 4, 1995, letter amended the application to delete the request for exemption and reference to an exemption in the technical specification change. The staff has determined that the proposed change does not require an exemption from this regulation.

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

Chester Poslusny, Senior Project Manager

Project Directorate I-2

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

9508180121 950815 PDR ADOCK 05000387

Docket Nos. 50-387/50-388

Amendment No. 149 to Enclosures: 1.

License No. NPF-14

Amendment No. 119 to

License No. NPF-22

Safety Evaluation

cc w/encls: See next page

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Docket File MO'Brien **PUBLIC CPoslusny** 

PDI-2 Reading OGC

GHill(4)

**CBerlinger** JStolz

**CGrimes RWessman** ACRS(4)

JWhite, RGN-I **JPulsipher** 

\*Previously Concurred

:RDI-2/D: :\*0GC OFC :PDI-2/LA :SCSB\* :EMEB\*

NAME :MO'Brien :CPo#lusny:rb:CBerlinger:RWessman : EHoller

BAC FOR :08/01/95 :08/02/95 :8/04/95

DOCUMENT NAME: SU91873.AMD



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 15, 1995

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

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

(TAC NOS. M91873 & M91874)

Dear Mr. Byram:

The Commission has issued the enclosed Amendment No.  $^{149}$  to Facility Operating License No. NPF-14 and Amendment No.  $^{119}$  to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station (SSES), Units 1 and 2. These amendments are in response to your letter dated March 15, 1995, as supplemented by letter dated August 4,1995.

These amendments modify the SSES Technical Specification Table 3.6.3-1, Primary Containment Isolation Valves, concerning the scope of Type C testing on specified emergency core cooling system and reactor core isolation cooling containment isolation valves. Specifically, the subject valves on systems which terminate below the minimum water level of the suppression pool, will no longer require Type C testing but would instead be tested using requirements of the American Society of Mechanical Engineers' Section XI Code.

In your March 15, 1995, letter, you requested that the Commission grant an exemption to 10 CFR Part 50, Appendix J, Section II.H.4, to support this change in testing. Your August 4, 1995, letter amended the application to delete the request for exemption and reference to an exemption in the technical specification change. The staff has determined that the proposed change does not require an exemption from this regulation.

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

Sincerely.

Chester Poslusny, Senior Project Manager

Project Directorate I-2

Chester Pestusy

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket Nos. 50-387/50-388

Enclosures: 1. Amendment No. 149 to

License No. NPF-14

2. Amendment No. 119 to

License No. NPF-22

3. Safety Evaluation

cc w/encls: See next page

Mr. Robert G. Byram
Pennsylvania Power & Light Company

Susquehanna Steam Electric Station, Units 1 & 2

cc:

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Mr. Jesse C. Tilton, III Allegheny Elec. Cooperative, Inc. 212 Locust Street P.O. Box 1266 Harrisburg, Pennsylvania 17108-1266 Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, Pennsylvania 19406

Mr. Harold G. Stanley Vice President-Nuclear Operations Susquehanna Steam Electric Station Pennsylvania Power and Light Company Box 467 Berwick, Pennsylvania 18603

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George T. Jones Vice President-Nuclear Engineering Pennsylvania Power and Light Company 2 North Ninth Street Allentown, Pennsylvania 18101

Dr. Judith Johnsrud National Energy Committee Sierra Club 433 Orlando Avenue State College, PA 16803

Chairman Board of Supervisors 738 East Third Street Berwick, PA 18603



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

#### 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. 149 License No. NPF-14

- 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 March 15, 1995, as supplemented by letter dated August 4, 1995, 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-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. 149 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

John F. Stolz, 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: August 15, 1995

#### ATTACHMENT TO LICENSE AMENDMENT NO. 149

#### 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	<u>INSERT</u>
3/4 6-21	3/4 6-21
3/4 6-23	3/4 6-23
3/4 6-25	3/4 6-25
3/4 6-26	3/4 6-26
3/4 6-28	3/4 6-28

#### PRIMARY CONTAINMENT ISOLATION VALVES

Valve Function and Number	PRIMARY CONTAINMENT ISOLATION VALVES  Valve Function and Number Maximum Isolation Isolation Signal(		
-	Time (Seconds)		
Automatic Isolation Valves (Continued)			
CONTAINMENT ATMOSPHERE SAMPLE			
SV-15734 A,B	N/A	B,Y	
SV-15736 A	N/A	B,Y	
SV-15736 B	N/A	B,Y	
SV-15740 A,B	N/A	B,Y	
SV-15742 A,B	N/A	B,Y	
SV-15750 A,B	N/A	B,Y	
SV-15752 A,B	N/A	B,Y	
SV-15774 A,B	N/A	B,Y	
SV-15776 A	N/A	B,Y	
SV-15776 B	N/A	B,Y	
SV-15780 A,B	N/A	B,Y	
SV-15782 A,B	N/A	B,Y	
NITROGEN MAKEUP			
SV-15737	N/A	B,Y,R	
SV-15738	N/A	B,Y,R	
SV-15767	N/A	B,Y,R	
SV-15789	N/A	B,Y,R	
REACTOR COOLANT SAMPLE			
HV-143F019	2	B,C	
HV-143F020	2	B,C	
LIQUID RADWASTE			
HV-16108 A1,A2	15	B,Z	
HV-16116 A1,A2	15	B,Z	
RHR - Suppression Pool			
Cooling/Spray <sup>(c)</sup>			
HV-151 <b>F028</b> A,B	90	×,z	
CS TEST			
HV-152F015 A,B	60	x,z	
HPCI Suction (f)(c)			
HV-155F042	90	L,LB	

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### Valve Function and Number

Manual Isolation Valves (Continued)

RCIC SUCTION (F)(c)

HV-149F031

RCIC TURBINE EXHAUST (b)

HV-149F059

RCIC VACUUM PUMP DISCHARGE (b)

HV-149F060

**HPCI** INJECTION

HV-155F006 1-55-038

RHR - SHUTDOWN COOLING RETURN/

LPCI INJECTION

HV-151F015 A,B

RHR - Suppression Pool Suction (f)(c)

HV-151F004 A,B,C,D

RHR HEAT EXCHANGER VENT(c)

HV-151F103 A.B

CS INJECTION

HV-152F005 A,B

HV-152F037 A,B

CS SUCTION (f)(c)

HV-152F001 A,B

**CONTAINMENT INSTRUMENT GAS** 

SV-12654 A,B

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### Valve Function and Number

#### Other Valves (Continued)

RHR-MINIMUM RECIRCULATION FLOW

HV-151F007 A,B

RHR - RELIEF VALVE DISCHARGE(C)

PSV-151F055 A,B

PSV-15106 A,B

PSV-151F097

**CS INJECTION** 

HV-152F006 A,B

CS MINIMUM RECIRCULATION FLOW (1)(c)

HV-152F031 A.B

#### **CONTAINMENT INSTRUMENT GAS**

1-26-072

1-26-074

1-26-152

1-26-154

1-26-164

#### RECIRCULATION PUMP SEAL WATER

143F013 A,B

XV-143F017 A,B

TIP SHEAR VALVES (d)

C51-J004 A,B,C,D,E

SLCS(b)

148F007

HPCI TURBINE EXHAUST (b)

155F049

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### Valve Function and Number

Other Valves (Continued)

HPCI MINIMUM RECIRCULATION FLOW (F)(C)

HV-155F012 155F046

RCIC TURBINE EXHAUST (b)

149F040

RCIC MINIMUM RECIRCULATION FLOW (f)(c)

FV-149F019 149F021

RCIC VACUUM PUMP DISCHARGE (b)

149F028

d. Excess Flow Check Valves

**HPCI** 

XV-155F024 A,B,C,D

**CORE SPRAY** 

XV-152F018 A,B

RHR

XV-15109 A,B,C,D

RCIC

XV-149F044 A,B,C,D

RWCU

XV-14411 A,B,C,D

XV-144F046

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### NOTATION

- (a) See Specification 3.3.2, Table 3.3.2-1, for isolation signal(s) that operates each automatic isolation valve. All power operated isolation valves may be opened or closed remote-manually.
- (b) Isolation barrier remains water filled or a water seal remains in the line post-LOCA. Isolation valve is tested with water. Isolation valve leakage is not included in 0.60 La total Type B and C tests.
- (c) Redundant isolation boundary for this valve is provided by the closed system whose integrity is verified by Type A test.
- (d) Automatic isolation signal causes TIP to retract; ball valve closes when probe is fully retracted.
- (e) Power assisted check valve.
- (f) Containment Isolation Valve(s) are not Type C tested. Containment by-pass leakage is prevented since the line terminates below the minimum water level in the Suppression Chamber. Refer to Specification 4.0.5.



## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

#### 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. 119 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 March 15, 1995, as supplemented by letter dated. August 4, 1995, 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. 119 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

John F. Stolz, 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: August 15, 1995

## ATTACHMENT TO LICENSE AMENDMENT NO.119

## 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	<u>INSERT</u>
3/4 6-21	3/4 6-21
3/4 6-23	3/4 6-23
3/4 6-24	3/4 6-24
3/4 6-25	3/4 6-25
3/4 6-26	3/4 6-26
3/4 6-28	3/4 6-28

#### PRIMARY CONTAINMENT ISOLATION VALVES

Valve Function and Number	Maximum Isolation Time (Seconds)	isolation Signal(s) <sup>(a)</sup>
Automatic Isolation Valves (Continued)		<u> </u>
CONTAINMENT ATMOSPHERE SAMPLE		
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
NITROGEN MAKEUP		
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
REACTOR COOLANT SAMPLE		
HV-243F019	2	B,C
HV-243F020	2	B,C
LIQUID RADWASTE		
HV-26108 A1,A2	15	B,Z
HV-26116 A1,A2	15	B,Z
RHR - SUPPRESSION POOL		
Cooling/Spray <sup>(c)</sup>		
HV-251F0 <b>28</b> A,B	90	x,z
CS Test (glic)		
HV-252F015 A,B	60	x,z
HPCI Suction (g)(c)		
HV-255F042	90	L,LB

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### Valve Function and Number

#### Manual Isolation Valves (Continued)

RCIC SUCTION (g)(c)

HV-249F031

RCIC TURBINE EXHAUST(b)

HV-249F059

RCIC VACUUM PUMP DISCHARGE(b)

HV-249F060

**HPCI INJECTION** 

HV-255F006 2-55-038

**RHR - SHUTDOWN COOLING RETURN/** 

LPCI INJECTION

HV-251F015 A,B

RHR - Suppression Pool Suction (g)(c)

HV-251F004 A.B.C.D

RHR HEAT EXCHANGER VENT(c)

HV-251F103 A,B

**CS INJECTION** 

HV-252F005 A,B

HV-252F037 A,B

CS SUCTION (9)(c)

HV-252F001 A,B

**CONTAINMENT INSTRUMENT GAS** 

SV-22654 A,B

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### Valve Function and Number

#### Manual Isolation Valves (Continued)

SLCS(b)

HV-248F006

**DEMINERALIZED WATER** 

2-41-017

2-41-018

ILRT

2-57-199

2-57-200

HPCI TURBINE EXHAUST (b)

HV-255F066

RHR - SHUTDOWN COOLING RETURN/

LPCI INJECTION

HV-251F122 A,B

RHR - SUPPRESSION POOL

COOLING/SPRAY(C)

HV-251F011 A,B

C. OTHER VALVES

**FEEDWATER** 

241F010

A,B

RHR - SHUTDOWN COOLING SUCTION (b)

PSV-251F126

RHR - SHUTDOWN COOLING RETURN/

LPCI INJECTION

HV-251F050 A,B

RHR-MINIMUM RECIRCULATION FLOW (g) (c)

HV-251F007 A,B

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### Valve Function and Number

#### Other Valves (Continued)

#### RHR - RELIEF VALVE DISCHARGE(C)

PSV-251F055 A,B PSV-25106 A,B

PSV-251F097

#### **CS INJECTION**

HV-252F006 A.B

#### CS MINIMUM RECIRCULATION FLOW (g)(c)

HV-252F031 A,B

#### **CONTAINMENT INSTRUMENT GAS**

2-26-164

2-26-072

2-26-074

2-26-152

2-26-154

#### RECIRCULATION PUMP SEAL WATER

243F013 A.B

XV-243F017 A,B

#### TIP SHEAR VALVES (d)

C51-J004 A,B,C,D,E

SLCS(b)

248F007

#### HPCI TURBINE EXHAUST (b)

255F049

## HPCI MINIMUM RECIRCULATION FLOW (g)(c)

HV-255F012 255F046

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### Valve Function and Number

Other Valves (Continued)

RCIC TURBINE EXHAUST (b)

249F040

RCIC MINIMUM RECIRCULATION FLOW (g)(c)

FV-249F019 249F021

RCIC VACUUM PUMP DISCHARGE(b)

249F028

d. EXCESS FLOW CHECK VALVES

**HPCI** 

XV-255F024 A,B,C,D

CORE SPRAY

XV-252F018 A,B

RHR

XV-25109 A,B,C,D

**RCIC** 

XV-249F044 A,B,C,D

**RWCU** 

XV-24411 A,B,C,D

XV-244F046

#### PRIMARY CONTAINMENT ISOLATION VALVES

#### NOTATION

- (a) See Specification 3.3.2, Table 3.3.2-1, for isolation signal(s) that operates each automatic isolation valve. All power-operated isolation valves may be opened or closed remote-manually.
- (b) Isolation barrier remains water filled or a water seal remains in the line post-LOCA. Isolation valve is tested with water. Isolation valve leakage is not included in 0.60 La total Type B and C tests.
- (c) Redundant isolation boundary for this valve is provided by the closed system whose integrity is verified by Type A test.
- (d) Automatic isolation signal causes TIP to retract; ball valve closes when probe is fully retracted.
- (e) Power assisted check valve.
- (f) Solenoid valves not capable of being opened due to the absence of permanently installed electrical power.
- (g) Containment Isolation Valve(s) are not Type C tested. Containment by-pass leakage is prevented since the line terminates below the minimum water level in the Suppression Chamber. Refer to Specification 4.0.5.

Footnote (f) was added to this page by Amendment 72, 3/28/95.

Footnote (f) was deleted by Amendment 111, 6/31/95, but the amendment included an incorrect implementation date. A letter was issued February 21, 1995 correcting the implementation date. Because of delayed implementation of plant hardware changes, footnote (f) still remains in effect until the startup from the 7th refueling outage scheduled for the fall of 1995.



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO.149 TO FACILITY OPERATING LICENSE NO. NPF-14 AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE NO. NPF-22

PENNSYLVANIA POWER & LIGHT COMPANY

ALLEGHENY ELECTRIC COOPERATIVE, INC.

SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

**DOCKET NOS. 50-387 AND 388** 

#### 1.0 INTRODUCTION

By letter dated March 15, 1995, as supplemented by letter dated August 4, 1995, the Pennsylvania Power and Light Company (PP&L, the licensee) submitted a request for changes to the Susquehanna Steam Electric Station (SSES), Units 1 and 2, Technical Specifications (TS). The requested changes would modify the SSES Technical Specification Table 3.6.3-1, Primary Containment Isolation Valves, to reflect an exemption from 10 CFR Part 50, Appendix J, Section II.H.4, concerning the scope of Type C testing on specified emergency core cooling system and reactor core isolation cooling containment isolation valves. An exemption from the regulations was also requested in the March 15, 1995, letter. Specifically, the licensee indicated that the subject valves on systems which terminate below the minimum water level of the suppression pool and are associated with closed systems, will no longer require Type C testing but would instead be tested using requirements of the American Society of Mechanical Engineers' (ASME) Boiler and Pressure Vessel (B&PV) Section XI Code. In the August 4, 1995 letter, PP&L amended the application to delete the exemption request and modified the TS change accordingly. The August 5, 1995 supplemental letter did not change the initial proposed no significant hazards consideration determination nor the Federal Register notice.

#### 2.0 BACKGROUND

The Code of Federal Regulations, 10 CFR Part 50, Appendix J, establishes requirements for containment leakage tests for all operating licenses for water-cooled power reactors. Three tests are specified in the regulation; Type A (integrated leakage), Type B (penetration local leakage), and Type C (containment isolation valve (CIV) local leakage). A CIV is defined in Appendix J as "any valve which is relied upon to perform a containment isolation function." Containment is defined as "...an essentially leak-tight

barrier against the uncontrolled release of radioactivity to the environment." Therefore, the staff considers an Appendix J CIV to be a valve which could represent a potential fission product release pathway to the environment following a postulated accident and consequently, its allowable leakage should be minimized.

#### 3.0 EVALUATION

The proposed TS change for SSES Units 1 and 2 deals with Type C testing. Appendix J specifies the types of CIVs which are required to be Type C tested. PP&L maintains programs and procedures to perform Type C tests and will continue to perform these tests on many CIVs. Specifically, PP&L performs hydrostatic tests of certain CIVs per Technical Specification 3.6.1.2.e and Table 3.6.3-1. These valves are subject to note (b) of Table 3.6.3-1 which states that the valves are tested with water, and that valve leakage is not included in calculating the total leakage for Type B and C tests (0.6 La). Technical Specification 3.6.1.2.e establishes a combined leakage rate of less than or equal to 3.3 gpm for hydrostatically tested lines. This leakage limit is based on the liquid volume of the suppression pool and the design requirement to maintain a 30-day supply of water in the pool without exposing the uppermost valve line to primary containment atmosphere. However, not all CIVs currently included in the testing regime benefit from the Type C testing requirement.

In its submittal, the licensee requested exclusion from the Appendix J Type C tests for some valves because it is unnecessary to Type C test CIVs on lines that penetrate the suppression pool and terminate below the minimum water level. The subject CIVs serve lines in the high pressure core injection (HPCI), reactor core isolation cooling (RCIC), core spray, and residual heat removal (RHR) systems. The technical basis for not Type C testing the CIVs is the fact that existing barriers to primary containment leakage will remain unchanged and the suppression pool level is assured for 30 days during all design basis, post accident modes of operation. For these lines which terminate below the minimum suppression pool water level, the maintained pool inventory serves as a continuous passive barrier to containment atmospheric leakage.

The proposed TS change identifies the specific valves which no longer require Type C testing. A new footnote "g" is added relating to each of these CIVs which reads as follows:

Containment Isolation Valve(s) are not Type C tested. Containment by-pass leakage is prevented since the line terminates below the minimum water level in the Suppression Chamber. Refer to Specification 4.0.5.

The following CIVs are affected by the change:

HV1(2)55F042-HPCI Pump Suction from Suppression Pool, HV1(2)49F031-RCIC Pump Suction from Suppression Pool, HV1(2)55F012,1(2)55F046-HPCI Pump Minimum Flow bypass to Suppression Pool, FV1(2)49F019, 1(2)49F021-RCIC Pump Minimum Flow Bypass to Suppression Pool,

HV1(2)51F004A,B,C,D-RHR Pump Suction Lines,

HV1(2)51F007A, B-RHR Pump Recirc Flow to Suppression Pool,

HV1(2)52F001A,B-Core Spray pump Suction Lines,

HV1(2)52F051A, B-Core Spray System Test Returns to Suppression Pool,

HV1(2)52F031A, B-Core Spray Pump Minimum Flow Bypass to Suppression Pool.

In lieu of the Type C testing, PP&L has committed to testing these valves per the applicable inservice testing requirements in accordance with ASME/ANSI Operations and Maintenance OM-1987 (Addenda OMA-1988), Part 10, Paragraph 3. The valves are to be reclassified and tested as ASME, Section XI, Category B, valves.

The staff notes as stated in the Final Safety Analysis Report (FSAR) for SSES, Units 1 and 2, that the subject CIVs are located in systems for which the system and the associated piping are protected against missiles and pipe whip, are designed to seismic Category I requirements and are classified as Quality, Group B per Regulatory Guide 1.26 (RG 1.26). The systems and piping will not be adversely affected by single active failures.

The suppression pool will remain filled with water for at least 30 days following the onset of an accident. The staff finds that the subject CIVs, therefore, do not constitute potential containment atmosphere leak paths, and as such are not required by Paragraph III.A.1.(d) of Appendix J to be Type C tested. Additionally, in accordance with Sections III.C.2 and III.C.3 of Appendix J, the CIVs need not be tested with air. Further, it is not necessary to test them with water, as the purpose of the water leak rate test is to assure a supply of sealing water for 30 days following the onset of an accident. As the torus is postulated to always remain filled with water, no leak rate test is necessary to satisfy Appendix J requirements. The CIVs will, however, continue to be tested pursuant to the applicable requirements of Section XI of the ASME B&PV Code. In support of the requested change, the licensee indicated that these systems were "closed systems." The staff position on closed systems could result in these systems not being classified as "closed systems", however, the system classification does not affect the staff's safety finding.

As discussed with the licensee, a discussion of the effective date for implementation of the deletion of footnote (f) has been added to TS page 3/4 6-28.

For the above reasons, the staff finds the proposed testing of the CIVs in the above penetrations to be in compliance with the requirements of Appendix J and finds that no exemption from the regulation is required.

The staff has evaluated the licensee's requested TS changes and based on the systems' design configuration and function, finds the proposed alternate testing of the CIVs to be acceptable along with the TS changes.

Based on the above evaluation, the staff concludes that the proposed changes to TSs Table 3.6.3-1 for elimination of 10 CFR Part 50, Appendix J, Type C leak rate testing for certain CIVs, which are located in lines that penetrate the primary containment and terminate below the minimum water level in the suppression pool, are acceptable. The proposed changes will not affect the existing radiological release evaluations currently described in the Susquehanna Steam Electric Station FSAR or result in a reduction in the margin of safety.

#### 3.0 STATE CONSULTATION

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

#### 4.0 **ENVIRONMENTAL CONSIDERATION**

The amendments change 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 amendments involve 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding (60 FR 20521). Accordingly, the amendments meet 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 amendments.

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

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Date: August 15, 1995