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

SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 (TAC NOS. M95834

AND M95836)

Dear Mr. Byram:

The Commission has issued the enclosed Amendment No. 163 to Facility Operating License No. NPF-14 and Amendment No. 134 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station, Units 1 and 2. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated February 2, 1996, as supplemented September 23, 1996.

These amendments change Technical Specification (TS) 3.6.1.2 for each unit to permit primary containment leakage testing of the main steamline isolation valves (MSIVs) at either 22.5 psig or 45 psig according to the type of test to be conducted. The previous TS only specified 22.5 psig for the MSIVs' test 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 Chester Poslusny, Senior Project Manager Project Directorate I-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket Nos. 50-387/388

Enclosures: 1. Amendment No. 163 to License No. NPF-14

> Amendment No. 134 to License No. NPF-22

Safety Evaluation

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DOCUMENT NAME: SU95834.AMD

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

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original signed by Chester Poslusny, Senior Project Manager Project Directorate I-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket Nos. 50-387/388

Enclosures: 1.

1. Amendment No. 163 to

License No. NPF-14

2. Amendment No. 134 to

License No. NPF-22

3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION Docket File JSto1z GHill(4) WPasciak, RGN-I MO'Brien **CBerlinger** WLong **PUBLIC** 167-C22 PDI-2 Reading **CPoslusny** CGrimes whoments **ACRS SVarga** OGC W149 PDI-2/PM CO Pb1-2/D SCSB/ BC: T8B/ **OFFICE** PDI-27LA MO'Brien NAME CPoslusny:rb **CBerlinger** CGrimes JStotz 216/17 DATE

OFFICIAL RECORD COPY

DOCUMENT NAME: SU95834.AMD



WASHINGTON, D.C. 20555-0001 February 25, 1997

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. M95834

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These amendments change Technical Specification (TS) 3.6.1.2 for each unit to permit primary containment leakage testing of the main steamline isolation valves (MSIVs) at either 22.5 psig or 45 psig according to the type of test to be conducted. The previous TS only specified 22.5 psig for the MSIVs' test pressure.

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Sincerely,

Chester Poslusny, Senior Project Manager

Project Directorate I-2

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

Docket Nos. 50-387/388

Enclosures: 1. Amendment No. 163 to

License No. NPF-14

2. Amendment No. 134 to License No. NPF-22

Safety Evaluation

cc w/encls: See next page

Mr. Robert G. Byram
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

Bryan A. Snapp, Esq. Assistant Corporate Counsel Pennsylvania Power & 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. K. Jenison
Senior Resident Inspector
U. S. Nuclear Regulatory Commission
P.O. Box 35
Berwick, Pennsylvania 18603-0035

Mr. William P. Dornsife, Director Bureau of Radiation Protection Pennsylvania Department of Environmental Resources P. O. Box 8469 Harrisburg, Pennsylvania 17105-8469

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. George Kuczynski Plant Manager Susquehanna Steam Electric Station Pennsylvania Power and Light Company Box 467 Berwick, Pennsylvania 18603

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

George T. Jones Vice President-Nuclear Operations 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



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. 163 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 February 2, 1996, as supplemented September 23, 1996, 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) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 163 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: February 25, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 163

FACILITY OPERATING LICENSE NO. NPF-14

DOCKET NO. 50-387

Replace the following page of the Appendix A Technical Specifications with enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

<u>REMOVE</u>

INSERT

3/4 6-2

3/4 6-2

CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Primary containment leakage rates shall be limited to:

- a. An overall integrated leakage rate (Type A test) in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program.
- b. A combined leakage rate in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program, for all penetrations and all valves listed in Table 3.6.3-1, except for main steam line isolation valves*, main steam line drain valves* and valves which are hydrostatically leak tested per Table 3.6.3-1, subject to Type B and C tests.
- #c. *Less than or equal to 100 scf per hour for any one main steam isolation valve and a combined maximum pathway leakage rate of ≤ 300 scf per hour for all four main steam lines through the isolation valves when tested at either P_t, 22.5 psig, or P_a.
- d. *Less than or equal to 1.2 scf per hour for any one main steam line drain valve when tested in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program.
- e. A combined leakage rate of less than or equal to 3.3 gpm for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment, when tested at $1.10 \, P_a$.

<u>APPLICABILITY:</u> When PRIMARY CONTAINMENT INTEGRITY is required per Specification 3.6.1.1.

ACTION:

With:

- a. The measured overall integrated primary containment leakage rate (Type A test) not in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program, or
- b. The measured combined leakage rate for all penetrations and all valves listed in Table 3.6.3-1, except for main steam line isolation valves*, main steam line drain valves* and valves which are hydrostatically leak tested per Table 3.6.3-1, subject to Type B and C tests not in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program, or
- #c. The measured leakage rate exceeding 100 scf per hour for any one main steam isolation valve or a total maximum pathway leakage rate of > 300 scf per hour for all four main steam lines through the isolation valves, or
- d. The measured leak rate exceeding 1.2 scf per hour for any one main steam line drain valve, or
- e. The measured combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment exceeding 3.3 gpm,

Exemption to Appendix "J" of 10 CFR 50.

[#] Deletion of the MSIV Leakage Control System was approved in Amendment No. 151 and implemented during the U1 9RIO.



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. 134 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 February 2, 1996, as supplemented September 23, 1996, 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) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 134 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: February 25, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 134

FACILITY OPERATING LICENSE NO. NPF-22

DOCKET NO. 50-388

Replace the following page of the Appendix A Technical Specifications with enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

REMOVE

INSERT

3/4 6-2

3/4 6-2

CONTAINMENT SYSTEMS

i

PRIMARY CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Primary containment leakage rates shall be limited to:

- a. An overall integrated leakage rate (Type A test) in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program.
- b. A combined leakage rate in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program, for all penetrations and all valves listed in Table 3.6.3-1, except for main steam line isolation valves*, main steam line drain valves* and valves which are hydrostatically leak tested per Table 3.6.3-1, subject to Type B and C tests.
- c. *Less than or equal to 100 scf per hour for any one main steam isolation valve and a combined maximum pathway leakage rate of ≤ 300 scf per hour for all four main steam lines through the isolation valves when tested at either P_t, 22.5 psig, or P_a.
- d. *Less than or equal to 1.2 scf per hour for any one main steam line drain valve when tested in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program.
- e. A combined leakage rate of less than or equal to 3.3 gpm for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment, when tested at $1.10 \, P_a$.

APPLICABILITY: When PRIMARY CONTAINMENT INTEGRITY is required per Specification 3.6.1.1.

ACTION:

With:

- a. The measured overall integrated primary containment leakage rate (Type A test) not in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program, or
- b. The measured combined leakage rate for all penetrations and all valves listed in Table 3.6.3-1, except for main steam line isolation valves*, main steam line drain valves* and valves which are hydrostatically leak tested per Table 3.6.3-1, subject to Type B and C tests not in accordance with Specification 6.8.5, Primary Containment Leakage Rate Testing Program, or
- c. The measured leakage rate exceeding 100 scf per hour for any one main steam isolation valve or a total maximum pathway leakage rate of > 300 scf per hour for all four main steam lines through the isolation valves, or
- d. The measured leak rate exceeding 1.2 scf per hour for any one main steam line drain valve, or
- e. The measured combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment exceeding 3.3 gpm,

Exemption to Appendix "J" of 10 CFR 50.



WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.163TO FACILITY OPERATING LICENSE NO. NPF-14

AMENDMENT NO.134 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 February 2, 1996, as supplemented September 23, 1996, Pennsylvania Power and Light Company (the licensee) submitted a request for changes to the Susquehanna Steam Electric Station (SSES), Units 1 and 2, Technical Specifications (TSs). The requested changes would change TS 3.6.1.2c for each unit to permit main steam isolation valve (MSIV) local leak rate tests (LLRTs) to be performed with a test pressure of either 22.5 or 45.0 psig depending on the system configuration at the time of testing. The September 23, 1996, letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination or change the amendment request as originally noticed.

Part 50, Appendix J, Option B, Section III.B, "Type B and C tests," of 10 CFR states: "The tests must demonstrate that the sum of the leakage rates at accident pressure of Type B tests, and...Type C tests, is less than the performance criterion (La) with margin, as specified in the Technical Specifications." "Accident pressure" or Pa, for SSES is 45.0 psig. However, the SSES TSs currently specify that the MSIVs be tested with a test pressure of 22.5 psig. The MSIV leakage acceptance criteria would not be changed with this amendment.

2.0 DISCUSSION AND EVALUATION

Two MSIVs are provided in each main steam line (MSL) of SSES, Units 1 and 2, installed in such a manner that normal steam flow tends to seat the valve disks. Test connections are installed upstream of each MSIV, however the upstream test connection cannot be used because the MSL is open to the reactor vessel. This arrangement, which is necessary for steam system functional reasons, renders it impractical to test the MSIVs in the forward direction at full accident pressure since the test pressure tends to unseat the inboard MSIV. As indicated in the Standard Technical Specifications, the staff therefore authorizes exemptions to permit MSIVs to be leak rate tested at

a reduced pressure of 22.5 psig. Since this test method does not involve putting full test pressure on either MSIV disk in the close direction the test results are considered conservative. Testing at the reduced pressure of 22.5 psig had been approved by the staff and was included in the current TSs.

However, there is one occasional plant condition during which it is practicable to perform MSIV leak rate tests in accordance with Appendix J. When plugs are installed in the MSL nozzles in the reactor vessel, with suitable restraining devices, a closed cavity is formed between the reactor vessel and upstream MSIV enabling test pressure to be applied to each MSIV (with the other MSIV open) in the accident direction. It then becomes practicable to test in full accordance with Appendix J and this was the proposed TS addition that the staff has evaluated. Since the results of this test method are more accurate, this test method is acceptable and may be used when the MSL plugs are installed.

The staff has also determined that the proposed amendment, which only deals with the measurement of leakage from the main steam line, would not adversely affect the basis for the August 15, 1995, Appendix J, exemption which increased the allowable leakage rate for MSIVs for the Susquehanna units.

Based on the above, the staff finds that the proposed alternate test method is consistent with Appendix J testing requirements and is acceptable.

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 (61 FR 42282). 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.

Principal Contributor: W. Long

Date: February 25, 1997