

NOV 12 1982

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: Issuance of Amendment No. 5 to Facility Operating License NPF-14,
Susquehanna Steam Electric Station, Unit 1

The U. S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 5 to Facility Operating License NPF-14 to the Pennsylvania Power and Light Company for Susquehanna Steam Electric Station, Unit 1, located in Luzerne County, Pennsylvania. Amendment No. 5 authorizes operation of Susquehanna Steam Electric Station, Unit 1, at 100 percent rated power (3293 megawatts thermal); defers full qualification documentation on containment vent and purge valves to December 1982; changes implementation of interim gas pipeline procedures to December 1982; adds implementation of design modifications to wetwell/drywell vacuum breakers to be completed by startup following first refueling outage; modifies implementation date for maintenance and surveillance program; defers equipment qualification for equipment covered by Section 5.3 of NUREG-0803 for SDV break environment to be completed by startup following first refueling outage; adds schedule for corrective action on emergency preparedness findings; adds schedule for full seismic and dynamic qualification of seismic category I mechanical and electrical equipment; adds evaluation and application of inplant SRV test to be conducted at LaSalle, Unit 1; adds submittal of detailed analysis or testing results for feedwater isolation valves with feedwater line break outside containment; adds submittal of report discussing experience and reliability of the Display Control System; and adds license subject to final resolution of pending litigation involving Table S-3.

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Mr. Norman W. Curtis

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Also enclosed is a copy of the FEDERAL REGISTER Notice of Issuance of Amendment No. 5 to Facility Operating License NPF-14, which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 5 to Facility Operating License NPF-14
- 2. Federal Register Notice

cc w/encls.: See next page

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DATE	11/10/82	11/10/82	11/10/82	11/11/82	11/12/82		

see license for amendment for compliance

Susquehanna

Mr. Norman W. Curtis
Vice President
Engineering and Construction
Pennsylvania Power & Light Company
Allentown, Pennsylvania 18101

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

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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

Department of Environmental Resources
Office of Environmental Planning
ATTN: Mr. David Hess
Room 813, Executive House
Harrisburg, Pennsylvania 17120

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. 5
 License No. NPF-14

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
 - A. The application, as amended for a license filed by the Pennsylvania Power & Light Company and the Allegheny Electric Cooperative, Inc. (the licensees) 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 in paragraphs 2.C.(1), 2.C.(5), 2.C.(13), 2.C.(16), 2.C.(18)(a), 2.C.(19), 2.C.(20), 2.C.(23), 2.G.(a), 2.I and the addition of paragraphs 2.C.(18)(d), 2.C.(18)(e), 2.C.(29), 2.C.(30), 2.C.(31), 2.C.(32), and 2.J to the Facility Operating License No. NPF-14 to read as follows:

(1) Maximum Power Level

Pennsylvania Power & Light Company (PP&L) is authorized to operate the facility at reactor core power levels not in excess of 3293 megawatts thermal in accordance with the conditions specified herein and in Attachment 1 to this license. The preoperational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license.

(5) Qualification of Purge Valves (Section 5.2.4, SSER#1; 22, SSER#4)

a) PP&L shall block valves HV-15703 and HV-15713 so as not to permit opening by more than 50 degrees and shall lock-closed all other nonqualified vent and purge valves in lines greater than 2-in. in

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diameter, pending satisfactory qualification of the affected valves.

- b) By December 31, 1982, PP&L shall submit purge valve qualification documentation which shows the maximum opening of 18-in. and 24-in. valves for which the top pin shear stress will be within conservative allowables ($\leq 0.4 S_y$) during the maximum torque loads of a LOCA and seismic event. PP&L shall implement changes approved by the staff after the completion of the staff's review of these documents.

(13) Nearby Facilities (Section 2.2.2, SSER#3, SSER#4)

- (a) PP&L shall submit a complete report for NRC review and approval delineating interim gas line flow restrictions to 39 m³/sec of natural gas.
- (b) By December 31, 1982, the approved interim gas line flow restrictions and procedures addressing system configuration changes shall be implemented.
- (c) By February 28, 1983, PP&L shall submit a report for NRC review and approval describing either:
 - (1) Permanent modifications which limit flow to 39 m³/sec, or
 - (2) Relocation of the pipeline to a safe distance from the facility.
- (d) By September 30, 1984, the selected modification or relocation of the pipeline shall be completed.

(16) Wetwell to Drywell Vacuum Breakers (Section 6.2.1.8, SSER#3, SSER#4)

Prior to startup following the first refueling outage, PP&L shall implement design modification on the wetwell/drywell vacuum breaker valves that include:

- a) installation of new disc assemblies, new shaft bearing caps; and
- b) replacement of the shaft, keys and turnbuckle with stronger materials.

(18) Environmental Qualification (Section 3.11, SER, SSER#1, SSER#2, SSER#3, SSER#4)

- (a) PP&L shall complete all actions related to environmental qualification of equipment on a schedule specified in Section 3.11 and Appendix 3.B of Supplement No. 3 of the Safety Evaluation Report with the exceptions of Section 3.11.5.(1) and Section 3.11.5.(2)(e).

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- (d) By April 15, 1983, PP&L shall implement the maintenance and surveillance schedule for components requiring initial maintenance and surveillance after the first year of operation.
- (e) Prior to startup following the first refueling outage, PP&L shall implement the required equipment qualifications for equipment pursuant to Section 5.3 of NUREG-0803 for and SDV break environment.
- (19) Assurance of Proper Design and Construction (Section 17.6, SSER #3, SSER #4)
 - (a) By December 31, 1982, PP&L shall review and categorize discrepancies on large pipe anchors outside containment.
 - (b) By December 31, 1982, PP&L shall restore to their original design requirements, discrepancies in large pipe anchors outside containment requiring more complex analysis than used in the original design.

(20) Emergency Preparedness (Appendix D, SSER #1, SSER #2; 13.3, SSER #4)

By March 1, 1983, PP&L shall certify to the NRC staff the completion of the following offsite emergency preparedness items:

- (a) Adequate supplies of KI for offsite emergency workers are obtained by the State of Pennsylvania to fulfill the existing State plan or a contingency plan is developed that reflects the inability to obtain supplies to support the existing State plan.
- (b) Adequate supplies of dosimetry for offsite emergency workers are obtained by the State of Pennsylvania to implement the existing State plan or the State plan is revised accordingly.
- (c) State and county plans are modified as necessary to account for the abandonment of the field Emergency Operations Center concept.

(23) Seismic and Dynamic Qualification (Section 3.10, SER, SSER#1, SSER#3, SSER#4)

- (b) Prior to commencement of the first refueling outage, PP&L shall perform the nonlinear analysis to qualify the In-Vessel Rack (F22-E006) to the SQRT criteria and provide the qualification documentation to the NRC staff for review and approval.
- (c) By December 31, 1982, PP&L shall provide the completed final qualification report for Main Steam Isolation Valve Actuator (HV-1F022A through D, HV-1F023 A through D) to the NRC staff for review.
- (d) PP&L shall implement the NRC staff's requirements after completion of the staff's review of the final qualification report for the Main Steam Isolation Valve Leakage Control System Heater (1E-203 A through D).

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(e) Before the 25-cycle operational limit is reached, PP&L shall replace Recirculation Discharge Valve assembly (HV-1F031 A and B) with fully qualified new assemblies including a new Limitorque actuator. The replacement actuators shall be wired for torque seating type operation.

(f) Prior to startup following the first refueling outage, PP&L shall fully qualify the following items to the SORT criteria and provide the final qualification reports to the NRC staff for review.

- 1) CRD vent and drain valves (C12-F010/F011)
- 2) Power Range Monitor Cabinet (H12-P608)
- 3) Level Switch (E41-N014)
- 4) Level Switch - Condensate Storage Tanks, Suppression Pool, HCPI Turbine Exhaust Drain Pot (E41-N002/N003, N015, N018)
- 5) High Pressure Coolant Injection Turbine (15-211)

(29) SRV Inplant Test (Section 6.2.1.8, SER; 5.2.1.5, SSER#1)

Within 90 days following the staff receipt of the report providing the results of the inplant SRV test at the LaSalle, Unit 1 facility, PP&L shall furnish the results of its evaluation and application of the LaSalle data to assure that for Susquehanna Unit 1, the ΔT between bulk and local pool temperatures will not exceed 10 F.

(30) Dynamic Testing and Analysis of Systems, Components, and Equipment (Section 3.9.2, SSER#4)

(a) By April 1, 1983, PP&L shall provide to the NRC staff detailed analysis or testing results which demonstrate that the feedwater isolation valves can adequately perform their intended function and satisfy the requirements of General Design Criteria (GDC) 54 and 55 following a feedwater line break outside containment.

(b) Prior to exceeding five percent of full power, PP&L shall verify that all check valves relied upon for containment isolation, either within or outside containment, are dynamically qualified or PP&L shall provide a basis for continued operation and a program for qualifying such valves.

(31) Control Room Design Review (Section 22, SSER #4)

Prior to startup following the first refueling outage, PP&L shall provide a report discussing the experience, including demonstrated reliability, of the Display Control System.

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(32) Emergency Service Water System (Section 6.3.4, SSER #4)

Prior to startup following the first refueling outage, PP&L shall complete design modifications to the emergency service water (ESW) system, approved by the staff, to eliminate single failure in the ESW system which leads to the need for an uncooled residual heat removal (RHR) pump.

G. Reporting to the Commission:

(a) PP&L shall report any violations of the requirements contained in Section 2, Items C(1), C(3) through C(32), and F of this license within twenty-four (24) hours by telephone and confirm by telegram, mailgram, or facsimile transmission to the NRC Regional Administrator, Region I, or designee, not later than the first working day following the violation, with written followup report within fourteen (14) working days.

I. In accordance with the Commission's direction in its Statement of Policy, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts, October 29, 1982, this license is subject to the final resolution of the pending litigation involving Table S-3. See, Natural Resources Defense Council v. NRC, No. 74-1586 (April 27, 1982).

J. This license is effective as of the date of issuance and shall expire at midnight on July 17, 2022.

FOR THE NUCLEAR REGULATORY COMMISSION

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Darrell G. Eisenhut, Director
 Division of Licensing
 Office of Nuclear Reactor Regulation

Date of Issuance: NOV 12 1982

*SEE PREVIOUS ORC FOR CONCURRENCES.

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G. Reporting to the Commission:

(a) PP&L shall report any violations of the requirements contained in Section 2, Items C(1), C(3) through C(31), and F of this license within twenty-four (24) hours by telephone and confirm by telegram, mailgram, or facsimile transmission to the NRC Regional Administrator, Region I, or designee, not later than the first working day following the violation, with written followup report within fourteen (14) working days.

I. In accordance with the Commission's direction in its Statement of Policy, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts, October 29, 1982, this license is subject to the final resolution of the pending litigation involving Table S-3. See, Natural Resources Defense Council v. NRC, No. 74-1586 (April 27, 1982).

J. This license is effective as of the date of issuance and shall expire at midnight on July 17, 2022.

FOR THE NUCLEAR REGULATORY COMMISSION

Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Date of Issuance:

Remains within reasonable time constraints
11/10/82

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET 50-387

PENNSYLVANIA POWER AND LIGHT COMPANY

ALLEGHENY ELECTRIC COOPERATIVE, INC.

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY

OPERATING LICENSE

On July 17, 1982, the U. S. Nuclear Regulatory Commission (the Commission) issued Facility Operating License NPF-14, to Pennsylvania Power and Light Company and Allegheny Electric Cooperative, Inc. (licensees) authorizing operation of the Susquehanna Steam Electric Station, Unit No. 1 (the facility), at reactor core power levels of 164.4 megawatts thermal (five percent power) in accordance with the provisions of the license, the Technical Specifications and the Environmental Protection Plan.

The Commission has now issued Amendment No. 5 to Facility Operating License No. NPF-14 which authorizes operation of the Susquehanna Steam Electric Station, Unit No. 1, at reactor core power levels not in excess of 3293 megawatts thermal (100 percent power) in accordance with the provisions of the amended license; defers full qualification documentation on containment vent and purge valves to December 1982; changes implementation of interim gas pipeline procedures to December 1982; adds implementation of design modifications to wetwell/drywell vacuum breakers to be completed by startup following first refueling outage; modifies implementation date for maintenance and surveillance program; defers equipment qualification for equipment covered by Section 5.3 of NUREG-0803 for

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SDV break environment to be completed by startup following first refueling outage; adds schedule for corrective action on emergency preparedness findings; adds schedule for full seismic and dynamic qualification of seismic category I mechanical and electrical equipment; adds evaluation and application of inplant SRV test to be conducted at LaSalle, Unit 1; adds submittal of detailed analysis or testing results for feedwater isolation valves with feedwater line break outside containment; adds submittal of report discussing experience and reliability of the Display Control System; and adds license subject to final resolution of pending litigation involving Table S-3. The amendment is effective as of the date of issuance.

The Susquehanna Steam Electric Station, Unit No. 1 is a boiling water nuclear reactor located at the licensees' site in Luzerne County, Pennsylvania.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulation. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the amended license. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the FEDERAL REGISTER on August 9, 1978 (43FR35406). The increase in power level authorized by this Amendment is encompassed by that prior public notice.

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

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For further details with respect to this action, see (1) Amendment No. 5 to License No. NPF-14; (2) the Commission's Safety Evaluation Report (NUREG-0776), dated April 1981, Supplement No. 1, dated June 1981, Supplement No. 2, dated September 1981, Supplement No. 3, dated July 1982, and Supplement No. 4 dated November 1982; (3) the Final Safety Analysis Report and amendments thereto; and (4) the Final Environmental Statement (NUREG-0564) dated, June 1981.

These items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555 and at the Osterhout Free Library, Reference Department, 71 South Franklin Street, Wilkes-Barre, Pennsylvania 18701. A copy of Amendment No. 5 to Facility Operating License No. NPF-14 may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing. Copies of the Safety Evaluation Report and its Supplements No. 1, 2, 3 and 4 (NUREG-0776) and the Final Environmental Statement (NUREG-0564), may be purchased at current rates from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161, and through the NRC GPO sales program by writing to the U. S. Nuclear Regulatory Commission, Attention: Sales Manager, Washington, D. C. 20555. GPO deposit account holders may call 301-492-9530.

Dated at Bethesda, Maryland, this 12th day of November 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

15
B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

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DISTRIBUTION FOR AMENDMENT NO. 5 TO FACILITY OPERATING LICENSE NPF-14

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1

Document Control (50-387)

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