Augus 31, 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, UNIT 1 (TAC NO. 92104)

Dear Mr. Byram:

The Commission has issued the enclosed Amendment No. 153 to Facility Operating License No. NPF-14 for the Susquehanna Steam Electric Station, Unit 1. This amendment is in response to your letter dated April 11, 1995.

This amendment extends on a one-time basis the allowed outage time (AOT) from 3 to 7 days for one offsite circuit being out of service.

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 C. Poslusny
Chester Poslusny, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-387

Enclosures: 1. Amendment No. 153 to License No. NPF-14
2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

Docket File	MO'Brien	CGrimes
PUBLIC	CPoslusny	NTiehan
PDI-2 Reading	OGC	ACRS(4)
SVarga	GHill(2)	CAnderson, RGN-I
JStolz		

No legal objection

OFC	:PDI-2/LA	:PDI-2/PM	:OGC	:PDI-2/D	:	:
NAME	:MO'Brien	:CPoslusny:rb:		:JStolz	:	:
DATE	: 8/1/95	: 8/4/95	: 8/23/95	: 8/30/95	:	:

OFFICIAL RECORD COPY
FILENAME: SU92104.AMD

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 31, 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, UNIT 1 (TAC NO. 92104)

Dear Mr. Byram:

The Commission has issued the enclosed Amendment No. 153 to Facility Operating License No. NPF-14 for the Susquehanna Steam Electric Station, Unit 1. This amendment is in response to your letter dated April 11, 1995.

This amendment extends on a one-time basis the allowed outage time (AOT) from 3 to 7 days for one offsite circuit being out of service.

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

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

Docket No. 50-387

Enclosures: 1. Amendment No. 153 to License No. NPF-14
2. Safety Evaluation

cc w/encls: See next page

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

Mrs. Maitri Banerjee
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. Harold G. Stanley
Vice President-Nuclear Operations
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 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. 153
License No. NPF-14

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 April 11, 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. 153 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

Donald S. Brinkman for 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 31, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 153

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.

REMOVE	INSERT
3/4 8-1a	3/4 8-1a

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

3. Restore both offsite circuits to OPERABLE status within 72 hours* or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. With one diesel generator of 3.8.1.1.b inoperable,

1. Perform Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter, and

2.# For each of the remaining three OPERABLE, aligned diesel generators:

a. Verify Surveillance Requirement 4.8.1.1.2.a.4 has been successfully performed within the last 24 hours, or

b. Perform Surveillance Requirement 4.8.1.1.2.a.4 sequentially on each diesel generator within 24 hours, and

3. Restore the diesel generator to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

---

* This time is extended to 7 days during the installation of the T-10 230kV switchyard that is scheduled for the Fall of 1995.

\# This ACTION is not required to be performed if the absence of common cause for diesel generator inoperability can be established for the diesel generators (i.e. cause can be established and does not represent a common mode/generic failure mechanism for the remaining OPERABLE diesel generators).

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 153 TO FACILITY OPERATING LICENSE NO. NPF-14

PENNSYLVANIA POWER AND LIGHT COMPANY

ALLEGHENY ELECTRIC COOPERATIVE, INC.

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1

DOCKET NO. 50-354

1.0 INTRODUCTION

By letter dated April 11, 1995, the Pennsylvania Power and Light Company (the licensee) submitted a request for changes to the Susquehanna Steam Electric Station, Unit 1, Technical Specifications (TS). The requested changes would extend on a one-time basis the allowed outage time in the Susquehanna Steam Electric Station (SSES) Technical Specification (TS) 3.8.1.1 from 3 to 7 days for one offsite circuit being out of service. This change will provide additional time if needed for the licensee to complete planned modifications to an offsite circuit.

2.0 BACKGROUND

The power supply to the T-10 start-up transformer is currently tapped directly off the Montour-Mountain 230 kV line. This arrangement exposes the T-10 to interruptions for a disturbance anywhere along the Montour-Mountain line. The licensee is proposing to modify the power supply to improve its reliability. The modification to be installed includes three elements.

The first element consists of segmenting the existing Montour-Mountain line into two new lines. This arrangement will allow T-10 to remain in service following the loss of either line. The second element consists of constructing a T-10 tap switchyard with a one and one-half breaker arrangement. The design and layout should result in minimum outage duration for the T-10. The third element is the separation of the relaying and the control circuits for both the T-10 and T-20 start-up transformer. Currently, the relaying and control equipment is in the same panel in the control room. This equipment will be relocated to the switchgear rooms in the turbine building. This relocation will provide physical separation of the T-10 and T-20 relaying and control equipment and will eliminate exposure to the loss of both the T-10 and T-20 during periodic testing of relaying components. Together, these modifications will result in a significant improvement in the reliability of the T-10 and reduce the common cause outage of both the T-10 and T-20. The licensee states that the core damage frequency for the Susquehanna plant will decrease by about 30% for LOOP events.

The licensee estimates that the construction and installation of these modifications may require T-10 to be out of service for up to 7 days. Current plant Technical Specifications only allow the T-10 to be out of service for up to 3 days. Therefore, in order to avoid a dual-unit shutdown the licensee has proposed a one-time extension to allow the T-10 to be modified.

3.0 EVALUATION

The proposed change adds a footnote to Action a.3 of Specification 3.8.1.1 to allow, on a one-time basis, one offsite power source to be out of service for up to 7 days during the construction and installation of the T-10 tap 230 kV switchyard during the Unit 2 7th outage. This change is applicable to Unit 1 only since Unit 2 will be in an outage and will not require two offsite power sources to be available. The licensee states that its analysis showed that increasing the AOT from 3 to 7 days does not increase the consequences of a LOOP event nor change the consequences of a station blackout if mitigating measures are taken. The licensee also concluded that the core damage frequency during the modification is within the risk envelope allowed by the existing TS with appropriate specified mitigative measures taken. The licensee's conclusion was based upon in part information included in the Susquehanna Steam Electric Station Independent Plant Evaluation (IPE). This IPE is still under review by the Office of Research and therefore the staff has chosen to evaluate this TS change deterministically.

The mitigating measures proposed by the licensee include the following:

1. prohibiting high-risk activities within the confines of the plant or the grid system that may result in a loss of the T-20 during the T-10 outage,

2. performing the modification during the fall season when the frequency of grid and weather-related LOOPs is reduced,

3. requiring that if the high-pressure coolant injection (HPCI) system is declared inoperable during the T-10 work window, the HPCI system shall be returned to operable status within 1 hour or the plant will be brought to at least hot shutdown within 12 hours and to at least cold shutdown within the subsequent 24 hours,

4. requiring that if the standby liquid control (SLC) system is declared inoperable during the T-10 work window, the SLC system shall be returned to operable status within 1 hour or the plant will be brought to at least hot shutdown within 12 hours and to at least cold shutdown within the subsequent 24 hours,

5. requiring that within 24 hours before taking the T-10 out of service, Surveillance 4.8.1.1.2.a.4 be successfully completed on the aligned diesel generators,

6. maintaining certain equipment and systems (important for safe shutdown) operable during the T-10 work window and restoring any failed equipment to operable status as soon as possible (The failed equipment shall be worked around the clock.),

   The equipment that will be maintained operable include: both control rod drive pumps, the diesel fire pump, yard fire hydrant (1FH122) and the associated hydrant hose station, the residual heat removal (RHR) system, the RHR service water and emergency service water systems for suppression pool cooling, the RHR and RHR service water cross tie valves, the reactor core isolation cooling system, the containment instrument gas 150 psig header and bottles, the turbine building closed cooling water system (one pump and one heat exchanger), the portable diesel generator,and the HV-141-F019 valve.

7. placing restrictions upon diesel maintenance to ensure that the "E" diesel, an additional diesel generator, is available to substitute for any diesel that might fail during a loss of offsite power event.

The staff has evaluated the licensee's submittal and concludes that although the one-time increase in AOT for the T-10 start-up transformer may result in a slight decrease in safety, by implementing the measures described above, there is assurance that any slight decrease will be adequately mitigated during the extended AOT.

Based on its evaluation, the staff has concluded that the compensatory measures taken by the licensee will minimize the potential impact of extending the outage time and, therefore, the change to extend on a one-time basis the AOT from 3 to 7 days for one offsite power source is acceptable.

The approval of this amendment is predicated on the licensees implementation of each of the mitigative measures committed to in the April 11, 1995 request for amendment listed above as items 1-7.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes 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 amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no

public comment on such finding (60 FR 29886). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

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

Principal Contributor: N. Trehan

Date: August 31, 1995