July 2, 1987

Docket Nos. 50-387/388

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Mr. Harold W. Keiser
Vice President
Nuclear Operations
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Dear Mr. Keiser:

SUBJECT: CHANGES TO 4.16 kv ESS BUS UNDERVOLTAGE TECHNICAL SPECIFICATIONS (TAC NOS. 63448 AND 63449)

RE: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

The Commission has issued the enclosed Amendment No. 66 to Facility Operating License No. NPF-14 and Amendment No. 37 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station, Units 1 and 2. These amendments are in response to your letter dated September 29, 1986, as revised April 6, 1987.

These amendments change the Technical Specifications for Susquehanna Steam Electric Station, Units 1 and 2 to correct an omission in the Technical Specifications by providing an Action Statement in Section 3.3.3. In your letter dated April 6, 1987, you withdrew a part of your request contained in your September 29, 1986 submittal dealing with note (g) to Table 3.3.3-1. Accordingly, we have not acted on that part of your request.

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

Sincerely,

/s/ Mohan Thadani for

Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Enclosures:
1. Amendment No. 66 to License No. NPF-14
2. Amendment No. 37 to License No. NPF-22
3. Safety Evaluation

cc w/enclosures:
See next page

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PDI-2/LA	PDI-2/PM	PDI-2/D	OGC
MO'Brien	MThadani:ca	WButler	
6/5/87	6/11/87	7/2/87	/87

(M. Young) OGC concurred on amendment pgs 6.22.87

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

July 2, 1987

Docket Nos. 50-387/388

Mr. Harold W. Keiser
Vice President
Nuclear Operations
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

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Sincerely,

for Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Enclosures:
1. Amendment No. 66 to License No. NPF-14
2. Amendment No. 37 to License No. NPF-22
3. Safety Evaluation

cc w/enclosures:
See next page

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U.S. Nuclear Regulatory Commission
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King of Prussia, Pennsylvania 19406

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. 66
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 September 29, 1986, as revised April 6, 1987, 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. 66 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.

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3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/
Mohan Thadani for

Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: **July 2, 1987**

PDI-2/LA	PDI-2/PM	OGC	PDI-2/D
MOBrien	MThadani:ca		WButler
6/5/87	6/11/87	6/22/87	7/2/87

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

for Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 2, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 66

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	INSERT
3/4 3-30	3/4 3-30

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

ACTION STATEMENTS

ACTION 30 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement:

a. For one trip system, place the inoperable trip system in the tripped condition within 1 hour* or declare the associated ECCS inoperable.

b. For both trip systems, declare the associated ECCS inoperable.

ACTION 31 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, declare the associated ECCS inoperable.

ACTION 32 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, place the inoperable channel in the tripped condition within 1 hour.

ACTION 33 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, restore the inoperable channel to OPERABLE status within 8 hours or declare the associated ECCS inoperable.

ACTION 34 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, place at least one inoperable channel in the tripped condition within 1 hour* or declare the HPCI system inoperable.

ACTION 35 - With the number of OPERABLE channels less than the Total Number of Channels, declare the associated emergency diesel generator inoperable and take the ACTION required by Specification 3.8.1.1 or 3.8.1.2, as appropriate.

ACTION 36 - a) With the number of OPERABLE channels one less than the Total Number of Channels, place the inoperable channel in the tripped condition within 1 hour;* operation may then continue until performance of the next required CHANNEL FUNCTIONAL TEST.

b) With both channels inoperable, declare the associated 4.16Kv ESS bus inoperable, and take the ACTION required by Specification 3.8.3.1 or 3.8.3.2 as appropriate.

*The provisions of Specification 3.0.4 are not applicable.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

Mohan Thadani for

Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 2, 1987

PDI-2/LA	PDI-2/PM	OGC	PDI-2/D
MO'Brien	MThadani:ca		WButler
6/5/87	6/11/87	6/23/87	7/2/87

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

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. 37
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 September 29, 1986, as revised April 6, 1987, 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. 37 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.

ATTACHMENT TO LICENSE AMENDMENT NO. 37

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	INSERT
3/4 3-30	3/4 3-30

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

ACTION STATEMENTS

ACTION 30 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement:

a. For one trip system, place the inoperable trip system in the tripped condition within 1 hour* or declare the associated ECCS inoperable.

b. For both trip systems, declare the associated ECCS inoperable.

ACTION 31 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, declare the associated ECCS inoperable.

ACTION 32 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, place the inoperable channel in the tripped condition within 1 hour.

ACTION 33 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, restore the inoperable channel to OPERABLE status within 8 hours or declare the associated ECCS inoperable.

ACTION 34 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, place at least one inoperable channel in the tripped condition within 1 hour* or declare the HPCI system inoperable.

ACTION 35 - With the number of OPERABLE channels less than the Total Number of Channels, declare the associated emergency diesel generator inoperable and take the ACTION required by Specification 3.8.1.1 or 3.8.1.2, as appropriate.

ACTION 36 - a) With the number of OPERABLE channels one less than the Total Number of Channels, place the inoperable channel in the tripped condition within 1 hour;* operation may then continue until performance of the next required CHANNEL FUNCTIONAL TEST.

b) With both channels inoperable, declare the associated 4.16Kv ESS bus inoperable, and take the ACTION required by Specification 3.8.3.1 or 3.8.3.2 as appropriate.

*The provisions of Specification 3.0.4 are not applicable.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 66 TO FACILITY OPERATING LICENSE NO. NPF-14 AND

AMENDMENT NO. 37 TO FACILITY OPERATING LICENSE NO. NPF-22

PENNSYLVANIA POWER & LIGHT COMPANY

ALLEGHENY ELECTRIC COOPERATIVE, INC.

DOCKET NOS. 50-387 AND 50-388

SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

1.0 INTRODUCTION

By letter dated September 29, 1986, as revised April 6, 1987, Pennsylvania Power & Light Company requested amendments to Facility Operating License Nos. NPF-14 and NPF-22 for the Susquehanna Steam Electric Station, Units 1 and 2. The proposed amendments would change the Unit 1 and the Unit 2 Technical Specifications to add an Action Statement, related to 4.16 kv ESS bus degraded voltage protection system, to Table 3.3.3-1 of both Units. A second change to the Technical Specifications requested by the licensee in the September 29, 1986 submittal related to the provision of a two-hour time window for degraded voltage protection system monthly surveillance. This second change was withdrawn by the licensee in its April 6, 1987 letter. Accordingly, the safety of the second change is not evaluated.

2.0 EVALUATION

At Susquehanna Units 1 and 2, the 4.16 kv ESS bus degraded voltage protection systems consist of two independent undervoltage protection systems with different undervoltage relay setpoints at 84% and 65% of the nominal system voltage. The degraded voltage protection system for 4.16 kv buses utilizes a two-out-of-two logic at the two voltage setpoints of 84% and 65%. A loss of voltage protection is also provided at 20% of the nominal system voltage.

The Action Statement 36 presently provides directions for action which must be taken if one of the two degraded voltage protection channels is inoperable. The proposed change would add a second part which would provide directions for actions which must be taken if both the channels are inoperable.

In the event one channel of the degraded voltage protection system, with two-out-of-two logic, is declared inoperable, the Action Statement 36 a) requires that the inoperable channel be placed in the tripped condition within one hour and operation may continue until performance of the next required Channel Functional Test.

In the event both degraded voltage protection system channels are declared inoperable, Action Statement 36 b) would be operative. Action Statement 36 b)

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imposes the same conservative Limiting Condition for Operations (LCO) as is imposed for a loss of a 4.16 kv ESS bus which is specified in Technical Specification paragraphs 3.8.3.1 (operation) and 3.8.3.2 (shutdown). No additional periods of 4.16 kv ESS bus unavailability have been requested.

The staff finds that the proposed Action Statement 36 b) (which states, "With both channels inoperable, declare the associated 4.16 kv ESS bus inoperable, and take the ACTION required by Technical Specification 3.8.3.1 or 3.8.3.2 as appropriate.") is appropriate and conservative because, the addition of the proposed Action Statement does not increase the unavailability of the 4.16 kv ESS buses. Therefore, the proposed change is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (51 FR 45212) on December 17, 1986 (April 6, 1987 change by the licensee had no effect on the staff's no significant hazards determination) and consulted with the State of Pennsylvania. No public comments were received, and the State of Pennsylvania did not have any comments.

The staff 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, 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 nor to the health and safety of the public.

Principal Contributors: Mohan C. Thadani and S. Rhow

Dated: July 2, 1987