

September 23, 1987

Docket No. 50-387

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

Dear Mr. Keiser:

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SUBJECT: TECHNICAL SPECIFICATION CHANGE TO PERMIT OPERATING CONDITION CHANGE (TAC NO. 66177)

RE: SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1

The Commission has issued the enclosed Amendment No. 71 to Facility Operating License No. NPF-14 for the Susquehanna Steam Electric Station (SSES), Unit 1. This amendment is in response to your letter dated September 14, 1987.

This amendment has been prepared and issued on an emergency basis to permit SSES Unit 1 to transfer from Operating Condition 4 to Operating Condition 5 and proceed with the scheduled refueling operations. Specifically, the amendment provides a one-time relief from the requirements of Technical Specification 3.0.4 relating to Intermediate Range Monitors Operability.

This amendment was authorized by telephone on September 14, 1987, and confirmed by letter on September 15, 1987.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance of Amendment To Facility Operating License and Final Determination of No Significant Hazards Consideration and Opportunity for Hearing will be included in the Commission's Biweekly Federal Register Notice.

Sincerely,

Bruce A. Boger, Assistant Director
for Region I Reactors
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:

- Amendment No. 71 to License No. NPF-14
- Safety Evaluation

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PDR ADOCK 05000387
P PDR

cc w/enclosures:
See next page

PDI-2/PA
MO'Brien
9/17/87

MTC
PDI-2/PM
MThadani:ca
9/17/87

PDI-2/D
WButler
9/17/87

OGC
9/21/87

AD
BBoger
9/22/87

verbal concurrence from SCollins "for"
RI/DD
BKane
09/14/87



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

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Vice President
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Enclosures:

1. Amendment No. 71 to
License No. NPF-14
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Harold W. Keiser
Pennsylvania Power & Light Company

Susquehanna Steam Electric Station
Units 1 & 2

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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. 71
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 14, 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. 71 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 became effective September 14, 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

Bruce A. Boger, Assistant Director
for Region I Reactors
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: ~~September~~ 23, 1987

PDI-2/PM
WBrien
9/17/87

MH2
PDI-2/PM
MThadani:ca
9/17/87

PGC
WButler
9/22/87

PDI-2/D
WButler
9/22/87

AD/RI
BBoger
9/22/87

3. This license amendment became effective September 14, 1987.

FOR THE NUCLEAR REGULATORY COMMISSION



Bruce A. Boger, Assistant Director
for Region I Reactors
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: ~~September~~ 23, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 71

FACILITY OPERATING LICENSE NO. NPF-14

DOCKET NO. 50-387

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised page is identified by Amendment number and contains vertical lines indicating the area of change. The overleaf page is provided to maintain document completeness.*

REMOVE

3/4 3-51
3/4 3-52*

INSERT

3/4 3-51
3/4 3-52*

INSTRUMENTATION

3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.6. The control rod block instrumentation channels shown in Table 3.3.6-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6-2.

APPLICABILITY: As shown in Table 3.3.6-1.

ACTION:

- a. With a control rod block instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.6-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value.*
- b. With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, take the ACTION required by Table 3.3.6-1.

SURVEILLANCE REQUIREMENTS

4.3.6 Each of the above required control rod block trip systems and instrumentation channels shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.6-1.

*For the Intermediate Range Monitors the provisions of Specification 3.0.4 are not applicable for the purposes of entering Operational Condition 5 from Operational Condition 4 on September 14, 1987.

TABLE 3.3.6-1
CONTROL ROD BLOCK INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP FUNCTION</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. <u>ROD BLOCK MONITOR</u>^(a)			
a. Upscale	2	1*	60
b. Inoperative	2	1*	60
c. Downscale	2	1*	60
2. <u>APRM</u>			
a. Flow Biased Neutron Flux - Upscale	4	1	61
b. Inoperative	4	1, 2, 5	61
c. Downscale	4	1	61
d. Neutron Flux - Upscale, Startup	4	2, 5	61
3. <u>SOURCE RANGE MONITORS</u>			
a. Detector not full in ^(b)	3	2	61
	2	5	61
b. Upscale ^(c)	3	2	61
	2	5	61
c. Inoperative ^(c)	3	2	61
	2	5	61
d. Downscale ^(d)	3	2	61
	2***	5	61
4. <u>INTERMEDIATE RANGE MONITORS</u>			
a. Detector not full in	6	2, 5	61
b. Upscale	6	2, 5	61
c. Inoperative ^(e)	6	2, 5	61
d. Downscale ^(e)	6	2, 5	61
5. <u>SCRAM DISCHARGE VOLUME</u>			
a. Water Level-High	2	1, 2, 5**	62
6. <u>REACTOR COOLANT SYSTEM RECIRCULATION FLOW</u>			
a. Upscale	2	1	62
b. Inoperative	2	1	62
c. Comparator	2	1	62

SUSQUEHANNA - UNIT 1

3/4 3-52

Amendment No. 43



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 71 TO FACILITY OPERATING LICENSE NO. NPF-14

PENNSYLVANIA POWER & LIGHT COMPANY

ALLEGHENY ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-387

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1

1.0 INTRODUCTION

By letter dated September 14, 1987, Pennsylvania Power & Light Company requested, on an emergency basis, an amendment to Facility Operating License No. NPF-14 for the Susquehanna Steam Electric Station (SSES), Unit 1. The proposed amendment would provide a one-time relief for the Intermediate Range Monitors from the requirements of Technical Specification 3.0.4, and permit a mode change from the present condition 4 to condition 5. The requested relief is to be effective on September 14, 1987 for a one-time mode change only.

2.0 EVALUATION

On June 4, 1987, the staff issued Generic Letter (GL) 87-09 to address the outcome of the staff's recent initiatives to improve Technical Specifications. GL 87-09 provided guidance for three problems related to the applicability of Limiting Conditions for Operation (LCO) and surveillance requirements in Sections 3.0 and 4.0 of the Standard Technical Specifications (STS). One of three problems involves unnecessary restrictions on mode changes by Technical Specification Section 3.0.4. In the GL 87-09, the staff concluded that the Specification 3.0.4 unduly restricts facility operation when conformance with Action Requirements provides an acceptable level of safety for continued operation. For an LCO that has Action Requirements permitting continued operation for an unlimited period of time, entry into another specified condition of operation should be permitted in accordance with the Action Requirements.

In the September 14, 1987 submittal, the licensee stated that as a result of its performance of the required 60-month performance discharge test, one division of the 24-volt dc batteries has been rendered inoperable. This in turn has rendered the associated IRMs of Control Rod Block instrumentation inoperable and precluded mode change from the current Operational Condition 4 to required Operational Condition 5 (for the purpose of continuation of the scheduled refueling operations). Pending improvement of the Technical Specifications in accordance with the GL 87-09, the licensee has requested a one-

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time relief for IRMs from the requirements of specification Section 3.0.4 to permit a mode change from Condition 4 to Condition 5. The staff has reviewed the licensee's request and finds that the licensee's argument is acceptable and the requested relief is consistent with the provisions of the GL 87-09. The staff, therefore, finds the proposed change acceptable.

3.0 EMERGENCY BASIS

In its September 14, 1987 letter, the licensee has shown that Unit 1 is currently ready to enter Operational Condition 5, but is unable to do so as a result of Technical Specification Section 3.0.4 restriction on mode change due to the post-test discharge of the division 1 24-volt dc batteries. The licensee states that it will take about three days to recharge the batteries and enter the Operational Condition 5 to proceed with its refueling operations. This will delay the licensee's restart for Cycle 4 operations by about three days, effectively derating Unit 1.

The licensee has further stated that because it was conducting the 60-month battery discharge test for the first time, it inadvertently performed the test while in Condition 4 and did not foresee the impact of the Division 1 24-volt dc battery loss on the restriction for mode changes.

The staff agrees with the licensee and finds that there exists an acceptable emergency basis for the proposed change to the Technical Specifications.

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has provided standards for determining whether a significant hazards consideration exists (10 CFR 50.92(c)). A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The staff has reviewed the licensee's request and concurs with the following basis and conclusions provided by the licensee in its September 14, 1987 submittal.

- I. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change allows SSES Unit 1 to follow a currently prescribed action statement upon entering Operational Condition 5. Inserting a control rod block by tripping one of the inoperable IRM channels is the prescribed action, and taking this action upon entry as opposed to having already been in

Operational Condition 5 does not effect the probability or consequences of any accident previously analyzed for the condition. This logic has been endorsed by the NRC via Generic Letter 87-09.

- II. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Operational Condition 5 is allowed to be entered with the required IRMs operable to perform their rod block function. Since upon entry into Operational Condition 5, the rod block will be inserted via manually tripping the channel, no circumstances exist that could not have occurred previously, and therefore no condition will exist that would create the possibility of a new or different kind of accident.

- III. The proposed change does not involve a significant reduction in a margin of safety.

The answers expressed in I and II above indicate the insignificance of the role that the operational condition change plays in terms of safety for this case. The margin of safety has not been significantly reduced by manually inserting a rod block upon entry into Operational Condition 5 as opposed to entering Operational Condition 5 with operable IRMs which could automatically provide the rod block. In fact, the proposed condition is safer since the automatic function will not be relied upon.

Accordingly, the staff has concluded that the amendment involves a no significant hazards consideration.

The State of Pennsylvania was consulted on September 15, 1987, and had no comments on the determination.

5.0 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 made a final no significant hazards consideration finding with respect to this amendment. 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 nor environmental assessment need be prepared in connection with the issuance of this amendment.

6.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) the amendment does not (a) significantly increase the probability or consequences of an accident previously evaluated, (b) increase the possibility of a new or different kind of accident from any previously evaluated or (c) significantly reduce a safety margin and, therefore, the amendment does not involve significant hazards consideration; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and the security or to the health and safety of the public.

Principal Contributors: Mohan C. Thadani and Tom Dunning

Dated: ~~September~~ 23, 1987