



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

FEB 15 1985

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: AMENDMENT NO. 34 TO FACILITY OPERATING LICENSE NO. NPF-14 -
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 34 to Facility Operating License No. NPF-14 for the Susquehanna Steam Electric Station, Unit 1. The amendment is in response to your letter dated September 19, 1984. This amendment revises Technical Specification 4.6.1.7 parts "c" and "d" to support plant modifications that will be made during the first refueling outage for Unit 1. The plant modifications involve the relocation of two temperature elements used to monitor drywell atmosphere temperature in the area of the recirculation pumps. The change to part "c" includes revised elevation and azimuth values of the relocated temperature elements and the change to part "d" is editorial in nature.

A copy of the related safety evaluation supporting Amendment No. 34 to Facility Operating License NPF-14 is enclosed.

Sincerely,

A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing

Enclosures:

1. Amendment No. 34 to NPF-14
2. Safety Evaluation

cc: w/enclosures
See next page

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Previous concurrences concurred on by*: 
LB#2/DL LB#2/DL LB#2/DL
*MCampagnone:pob *EHylton ASchwencer
1/25/85 1/25/85 2/13/85

OELD
*JGoldberg
1/25/85

Subject to noted typo corrections on letter & checking w/SECY after comment period expires on 1/31/85 and alteration to SER on editorial change.

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OELD
Goldberg
1/25/85

*subject to noted typo
revisions on letter
and checking w/ SERC
after comment period
expires on 1/31/85 and
admission to SER on editorial
change*

Susquehanna

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Vice President
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Harrisburg, PA 17108-1266

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



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. 34
License No. NPF-14

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
 - A. The application for an amendment filed by the Pennsylvania Power & Light Company dated September 19, 1984 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 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:

C. (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 34, 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 amendment is effective upon startup following the first refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: FEB 15 1985

- 3. This amendment is effective upon startup following the first refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: FEB 15 1985

LB#2/DL
M. G. ... : pob
2/15/85

LB#2/DL
E. H. ... : ton
2/15/85

AS
LB#2/DL
ASchwencer
2/13/85

Gray
OELD
~~IC~~ Gray
2/15/85
subject to
checking w/SECY
after 90-day
period expires
4/31/85 and
addition to SER
on editorial change

TM
AD/DL
TM Novak
2/13/85

ATTACHMENT TO LICENSE AMENDMENT NO. 34
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

3/4 6-9
3/4 6-10

INSERT

3/4 6-9
3/4 6-10

CONTAINMENT SYSTEMS

DRYWELL AND SUPPRESSION CHAMBER INTERNAL PRESSURE

LIMITING CONDITION FOR OPERATION

3.6.1.6 Drywell and suppression chamber internal pressure shall be maintained between -1.0 and +2.0 psig.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

With the drywell and/or suppression chamber internal pressure outside of the specified limits, restore the internal pressure to within the limit within 1 hour or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.6 The drywell and suppression chamber internal pressure shall be determined to be within the limits at least once per 12 hours.

CONTAINMENT SYSTEMS

DRYWELL AVERAGE AIR TEMPERATURE

LIMITING CONDITION FOR OPERATION

3.6.1.7 Drywell average air temperature shall not exceed 135°F.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

With the drywell average air temperature greater than 135°F, reduce the average air temperature to within the limit within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.7 The drywell average air temperature shall be the arithmetical average of the higher temperature at a minimum of 3 of the following elevations and shall be determined to be within the limit at least once per 24 hours:

	<u>Elevation</u>	<u>Azimuth</u>
a.	797'8"	110°, 295°
b.	752'2"	90°, 270°
c.	737'	150°, 300°
d.	711' or 720'	270°, 85°

14



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

SAFETY EVALUATION

AMENDMENT NO. 34 TO NPF-14

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1

DOCKET NO 50-387

Introduction

The licensee, in a letter dated September 19, 1984, proposed changes to the Technical Specifications of the operating license for Susquehanna Steam Electric Station, Unit 1 which are as follows:

- a) changing 4.6.1.7 part "c" to revise elevation and azimuth value to reflect the relocation of the drywell atmosphere temperature elements
- b) an editorial change to 4.6.1.7 part "d".

The intent of the changes is to a) have the drywell atmosphere temperature elements more accurately represent the average drywell air temperature and b) to clarify the technical specification 4.6.1.7 part "d".

Evaluation

The primary containment air cooling system consists of 14 unit coolers, each having a capacity of approximately 8650 CFM. These units are located around the reactor pressure vessel in the lower section of the drywell between elevations 704' and 714' (recirculation pump area). The cooling units are connected to ductwork on the discharge side only; air enters the cooling units directly from the surrounding space. The ambient temperature signal in the control rod drive (CRD) areas will automatically start the CRD standby unit cooler (normally only one is running). A high temperature in any other portion of the drywell will automatically start all six (6) standby unit coolers. If the average air temperature in the drywell cannot be maintained below the limit of 135°F with all 14 units, the reactor will be shutdown in accordance with the Technical Specifications.

The primary containment drywell temperature monitoring system includes two redundant subsystems, with each having four dual element type resistance temperature detectors (RTDs) located throughout the drywell. Four of these eight temperature elements have safety related functions. The other four are used to obtain a representative average drywell air temperature during normal plant conditions and, therefore, are classified as non-safety related.

The Technical Specifications limit the average drywell air temperature to 135°F. The average temperature is the arithmetic average of the highest

temperature at a minimum of three (3) drywell elevations. The reason for controlling drywell temperature is to assure that the initial containment conditions assumed in accident analyses (drywell temperature, pressure, humidity) are not exceeded. The temperature monitoring system, however, also serves other purposes (i.e., to permit control of environmental conditions for instrumentation, and in some cases to detect small leaks).

In Susquehanna, Unit 1, as stated in the licensee's letter, two RTDs are located on elevation 711' in the recirculation pump area. This area contains several hot (recirculation pumps and piping) and cold (cooling units) components. All 14 cooling units draw air directly from this space. An average temperature based on measurement from this region could be non-representative due to locally high temperatures.

The licensee proposed to relocate the two RTDs, at elevation 711' in the recirculation pump area to elevation 737' for use in calculating the average drywell atmosphere temperature, which is regulated through the Technical Specifications. This relocation will assure more appropriate monitoring of the temperature zones.

Additionally, an editorial change was reviewed. Prior to the proposal, on page 3/4 6-10 the azimuth values for c and d were inadvertently reversed. In order to correct the Technical Specifications, the staff has approved the appropriate change.

Conclusion

The proposed modification of the drywell atmosphere temperature monitoring system by the licensee is technically justified to obtain a representative average drywell temperature. The modification does not involve any significant safety considerations. We, therefore, recommend approval of the change to the Technical Specifications as proposed by the licensee.

Environmental Consideration

This amendment involves a change in 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 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.

Conclusion

We have 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 or to the health and safety of the public.

Dated: FEB 15 1965

Issuance of Amendment No. 34 to Facility Operating Licence No NPF-14
Susquehanna Steam Electric Station, Unit 1

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