



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

MAR 07 1986

Docket Nos: 50-387
and 50-388

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

Dear Mr. Keiser:

Subject: Amendment Nos. 55 and 23 to Facility Operating License Nos.
NPF-14 and NPF-22 Susquehanna Steam Electric Station,
Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment Nos. 55 and 23 to Facility Operating License Nos. NPF-14 and NPF-22 for the Susquehanna Steam Electric Station, Units 1 and 2 respectively. These amendments are in response to your letter dated November 26, 1985. These amendments revise the Unit 1 and Unit 2 Technical Specifications 3.8.3.1 and 3.8.3.2.

A copy of the related safety evaluation supporting Amendment Nos. 55 and 23 to Facility Operating License Nos. NPF-14 and NPF-22 is enclosed.

Sincerely,

A handwritten signature in cursive script, appearing to read "Elinor G. Adensam".

For

Elinor G. Adensam, Director
BWR Project Directorate No. 3
Division of BWR Licensing

Enclosures:

1. Amendment Nos. 55 and 23
to NPF-14 and NPF-22
2. Safety Evaluation

cc w/enclosures:
See next page

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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. 55
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 November 26, 1985, 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 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. 55 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 amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


For Elinor G. Adensam, Director
BWR Project Directorate No. 3
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: MAR 07 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 55

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. The corresponding overleaf page is also provided to maintain document completeness.

REMOVE

3/4 8-17

3/4 8-18

3/4 8-18a

3/4 8-19

3/4 8-20

INSERT

3/4 8-17

3/4 8-18 (overleaf)

3/4 8-18a (overleaf)

3/4 8-19

3/4 8-20 (overleaf)

3/4.8.3 ONSITE POWER DISTRIBUTION SYSTEMS

DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.3.1 The following power distribution system divisions shall be energized with tie breakers open both between redundant buses within the unit and between units at the same station:

a. A.C. power distribution:

1. Division I, consisting of:

- a) Load group Channel "A", consisting of:
- | | |
|--|--------------|
| 1) 4160 volt A.C. switchgear bus | 1A201 |
| 2) 480 volt A.C. load center | 1B210 |
| 3) 480 volt A.C. motor control centers | 0B516, 0B517 |
| | 1B216, 1B217 |
| 4) 208/480 volt A.C. instrument panels | 1Y216 |
- b) Load group Channel "C", consisting of:
- | | |
|--|--------------|
| 1) 4160 volt A.C. switchgear bus | 1A203 |
| 2) 480 volt A.C. load center | 1B230 |
| 3) 480 volt A.C. motor control centers | 0B536, 0B136 |
| | 1B236, 1B237 |
| 4) 208/120 volt A.C. instrument panels | 1Y236 |
- c) Isolated 480 volt A.C. swing bus, including:
- | | |
|----------------------------------|-------|
| 1) Preferred power source | 1B219 |
| 2) Preferred power source MG set | |
| 3) Alternate power source | |
| 4) Automatic transfer switch | |

2. Division II, consisting of:

- a) Load group Channel "B", consisting of:
- | | |
|--|--------------|
| 1) 4160 volt A.C. switchgear bus | 1A202 |
| 2) 480 volt A.C. load center | 1B220 |
| 3) 480 volt A.C. motor control centers | 0B526, 0B527 |
| | 1B226, 1B227 |
| 4) 208/120 volt A.C. instrument panels | 1Y226 |
- b) Load group Channel "D", consisting of:
- | | |
|--|--------------|
| 1) 4160 volt A.C. switchgear bus | 1A204 |
| 2) 480 volt A.C. load center | 1B240 |
| 3) 480 volt A.C. motor control centers | 0B546, 0B146 |
| | 1B246, 1B247 |
| 4) 208/120 volt A.C. instrument panels | 1Y246 |
- c) Isolated 480 volt A.C. swing bus, including:
- | | |
|----------------------------------|-------|
| 1) Preferred power source | 1B229 |
| 2) Preferred power source MG set | |
| 3) Alternate power source | |
| 4) Automatic transfer switch | |

b. D.C. power distribution:

1. Division I, consisting of:

- a) Load group Channel "A", consisting of:
- | | |
|----------------------|----------------|
| 1) 125 volt DC buses | 1D612, 2D612,* |
| | 1D614, 2D614* |
| 2) Fuse box | 1D611, 2D611* |

*Not required to be OPERABLE when the requirements of ACTION c have been satisfied.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

D.C. power distribution: (Continued)

- | | | |
|----|--|---------------------|
| b) | Load group Channel "C", consisting of: | |
| | 1) 125 volt DC buses | 1D632, 2D632* |
| | 2) Fuse box | 1D634, 2D634* |
| c) | Load group "I", consisting of: | 1D631, 2D631* |
| | 1) 250 volt DC buses | 1D652, 1D254 |
| | 2) Fuse box | 1D651 |
| d) | Load group "I", consisting of: | |
| | 1) ± 24 volt DC buses | 1D672 |
| | 2) Fuse box | 1D671 |
| 2. | Division II, consisting of: | |
| a) | Load group Channel "B" consisting of: | |
| | 1) 125 volt DC buses | 1D622, 2D622* |
| | 2) Fuse box | 1D624, 2D624* |
| b) | Load group Channel "D" consisting of: | 1D621, 2D621* |
| | 1) 125 volt DC buses | 1D642, 2D642* |
| | 2) Fuse box | 1D644, 2D644* |
| c) | Load group "II" consisting of: | 1D641, 2D641* |
| | 1) 250 volt DC buses | 1D662, 1D264, 1D274 |
| | 2) Fuse box | 1D661 |
| d) | Load group "II" consisting of: | |
| | 1) ± 24 volt DC buses | 1D682 |
| | 2) Fuse box | 1D681 |

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

- a. With one of the above required A.C. distribution system load groups not energized, re-energize the load group within 8 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 of the above required Unit 1 D.C. distribution system load groups not energized, re-energize the load group within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With one or more of the above required Unit 2 D.C. distribution system load groups not energized, within 2 hours either:
 1. Reenergize the load group(s), or
 2. Transfer the Unit 1 and common loads aligned to the deenergized Unit 2 load group(s) to the corresponding Unit 1 load group(s).

*Not required to be OPERABLE when the requirements of ACTION c have been satisfied.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

Otherwise, declare the Unit 1 and common loads aligned to the deenergized Unit 2 load group(s) inoperable and take the ACTION required by the applicable Specification(s).

- d. With the Unit 1 loads associated with one or more of the above required Unit 1 125-volt D.C. load group(s) aligned to the corresponding Unit 2 load group(s), realign the Unit 1 loads to the Unit 1 load group(s) within 72 hours after restoring the Unit 1 load group(s) to OPERABLE status; otherwise, declare the Unit 1 loads aligned to the Unit 2 load group(s) inoperable and take the ACTION required by the applicable Specification(s).
- e. With one or both of the isolated 480 volt A.C. swing busses inoperable, declare the associated LPCI loop inoperable (see Specification 3.5.1).

SURVEILLANCE REQUIREMENTS

4.8.3.1.1 Each of the above required power distribution system load groups shall be determined energized at least once per 7 days by verifying correct breaker alignment and voltage on the busses/MCCs/panels.

4.8.3.1.2 The isolated 480 volt A.C. swing bus automatic transfer switches shall be demonstrated OPERABLE at least once per 31 days by actuating the load test switch or by disconnecting the preferred power source to the transfer switch and verifying that swing bus automatic transfer is accomplished.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

3.8.3.2 As a minimum, the following power distribution system divisions shall be energized:

a. For A.C. power distribution, Division I or Division II with:

1. Division I consisting of:

- a) Load group Channel "A" consisting of:
 - 1) 4160 volt A.C. switchgear bus 1A201
 - 2) 480 volt A.C. load center 1B210
 - 3) 480 volt A.C. motor control centers 0B516, 0B517
1B216, 1B217
 - 4) 208/120-volt A.C. instrument panels 1Y216
- b) Load group Channel "C", consisting of:
 - 1) 4160 volt A.C. switchgear bus 1A203
 - 2) 480 volt A.C. load center 1B230
 - 3) 480 volt A.C. motor control centers 0B536, 0B136
1B236, 1B237
 - 4) 208/120 volt A.C. instrument panels 1Y236
- c) Isolated 480 volt A.C. swing bus, including: 1B219*
 - 1) Preferred power source
 - 2) Preferred power source MG set
 - 3) Alternate power source
 - 4) Automatic transfer switch

2. Division II consisting of:

- a) Load group Channel "B", consisting of:
 - 1) 4610 volt A.C. switchgear bus 1A202
 - 2) 480 volt A.C. load center 1B220
 - 3) 480 volt A.C. motor control centers 0B526, 0B527
1B226, 1B227
 - 4) 208/120-volt A.C. instrument panels 1Y226
- b) Load group Channel "D", consisting of:
 - 1) 4160 volt A.C. switchgear bus 1A204
 - 2) 480 volt A.C. load center 1B240
 - 3) 480 volt A.C. motor control centers 0B546, 0B146
1B246, 1B247
 - 4) 208/120 volt A.C. instrument panels 1Y246
- c) Isolated 480 volt A.C. swing bus, including 1B229**
 - 1) Preferred power source
 - 2) Preferred power source MG set
 - 3) Alternate power source
 - 4) Automatic transfer switch

*The swing bus shall be OPERABLE if the Division I LPCI subsystem alone is fulfilling the requirements of Specification 3.5.2.

**The swing bus shall be OPERABLE if the Division II LPCI subsystem alone is fulfilling the requirements of Specification 3.5.2.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

b. For D.C. power distribution, Division I or Division II, with:

1. Division I consisting of:

a) Load group Channel "A", consisting of:

- 1) 125 volt DC buses 1D612, 2D612**
- 2) Fuse box 1D614, 2D614**
1D611, 2D611**

b) Load group Channel "C", consisting of:

- 1) 125 volt DC buses 1D632, 2D632**
- 2) Fuse box 1D634, 2D634**
1D631, 2D631**

c) Load group "I", consisting of:

- 1) 250 volt DC buses 1D652, 1D254
- 2) Fuse box 1D651

d) Load group "I", consisting of:

- 1) ± 24 volt DC buses 1D672
- 2) Fuse box 1D671

2. Division II consisting of:

a) Load group Channel "B", consisting of:

- 1) 125 volt DC buses 1D622, 2D622**
- 2) Fuse box 1D624, 2D624**
1D621, 2D621**

b) Load group Channel "D", consisting of:

- 1) 125 volt DC buses 1D642, 2D642**
- 2) Fuse box 1D644, 2D644**
1D641, 2D641**

c) Load group "II", consisting of:

- 1) 250 volt DC buses 1D662, 1D264, 1D274
- 2) Fuse box 1D661

d) Load group "II", consisting of:

- 1) ± 24 volt DC buses 1D682
- 2) Fuse box 1D681

APPLICABILITY: OPERATIONAL CONDITIONS 4, 5 and *.

*When handling irradiated fuel in the secondary containment.

**Not required to be OPERABLE when the requirements of ACTION c have been satisfied.



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. 23
License No. NPF-22

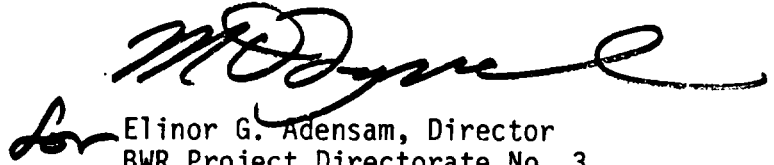
1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
 - A. The application for the amendment filed by the Pennsylvania Power & Light Company, dated November 26, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and 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 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. 23 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 amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


for Elinor G. Adensam, Director
BWR Project Directorate No. 3
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: MAR 07 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 23

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. The corresponding overleaf page is also provided to maintain document completeness.

REMOVE

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3/4 8-17 (overleaf)
3/4 8-18

3/4 8-19
3/4 8-20

3/4 8-21
3/4 8-22 (overleaf)

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

- b. With less than the above required Unit 1 125-volt D.C. load group battery banks OPERABLE, either:
1. Suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel, or
 2. Transfer the common loads aligned to the inoperable Unit 1 battery bank(s) to the corresponding Unit 2 battery bank(s).
- Otherwise, declare the common loads aligned to the inoperable Unit 1 battery bank(s) inoperable and take the ACTION required by the applicable Specification(s).
- c. With the above required \pm 24-volt D.C. load group battery banks inoperable, declare the associated equipment inoperable and take the ACTION required by the applicable Specification(s).
- d. With the above required charger(s) inoperable, demonstrate the OPERABILITY of the associated battery by performing Surveillance Requirement 4.8.2.1.a.1 within one hour and at least once per 8 hours thereafter. If any Category A limit in Table 4.8.2.1-1 is not met, declare the battery inoperable.
- e. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.8.2.2 At least the above required battery and charger shall be demonstrated OPERABLE per Surveillance Requirement 4.8.2.1.

ELECTRICAL POWER SYSTEMS

3/4.8.3 ONSITE POWER DISTRIBUTION SYSTEMS

DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.3.1 The following power distribution system divisions shall be energized with tie breakers open both between redundant buses within the unit and between units at the same station:

a. A.C. power distribution:

1. Division I, consisting of:

a) Load group Channel "A", consisting of:

- | | |
|--|--------------|
| 1) 4160-volt A.C. switchgear bus | 1A201, 2A201 |
| 2) 480-volt A.C. load center | 1B210, 2B210 |
| 3) 480-volt A.C. motor control centers | 0B516, 0B517 |
| | 1B216, 2B216 |
| | 1B217, 2B217 |
| | 1Y216, 2Y216 |

b) Load group Channel "C", consisting of:

- | | |
|--|--------------|
| 1) 4160-volt A.C. switchgear bus | 1A203, 2A203 |
| 2) 480-volt A.C. load center | 1B230, 2B230 |
| 3) 480-volt A.C. motor control centers | 0B536, 0B136 |
| | 1B236, 2B236 |
| | 2B237 |
| 4) 208/120-volt A.C. instrument panels | 1Y236, 2Y236 |

c) Isolated 480 volt A.C. swing bus, including: 2B219

- 1) Preferred power source
- 2) Preferred power source MG set
- 3) Alternate power source
- 4) Automatic transfer switch

2. Division II, consisting of:

a) Load group Channel "B", consisting of:

- | | |
|--|--------------|
| 1) 4160-volt A.C. switchgear bus | 1A202, 2A202 |
| 2) 480-volt A.C. load center | 1B220, 2B220 |
| 3) 480-volt A.C. motor control centers | 0B526, 0B527 |
| | 1B226, 2B226 |
| | 1B227, 2B227 |
| 4) 208/120-volt A.C. instrument panels | 1Y226, 2Y226 |

b) Load group Channel "D", consisting of

- | | |
|--|--------------|
| 1) 4160-volt A.C. switchgear bus | 1A204, 2A204 |
| 2) 480-volt A.C. load center | 1B240, 2B240 |
| 3) 480-volt A.C. motor control centers | 0B546, 0B146 |
| 4) 208/120-volt A.C. instrument panels | 1Y246, 2Y246 |

c) Isolated 480-volt A.C. swing bus, including: 2B229

- 1) Preferred power source
- 2) Preferred power source MG set
- 3) Alternate power source
- 4) Automatic transfer switch

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

- b. D.C. power distribution:
1. Division I, consisting of:
 - a) Load group Channel "A", consisting of:
 - 1) 125-volt D.C. buses 1D612**, 1D614**, 2D612, 2D614
 - 2) Fuse box 1D611**, 2D611
 - b) Load group Channel "C", consisting of:
 - 1) 125-volt D.C. buses 1D632**, 1D634**, 2D632, 2D634
 - 2) Fuse box 1D631**, 2D631
 - c) Load group "I", consisting of:
 - 1) 250-volt D.C. buses 2D652, 2D254
 - 2) Fuse box 2D651,
 - d) Load group "I", consisting of:
 - 1) ± 24-volt D.C. buses 2D672
 - 2) Fuse box 2D671
 2. Division II, consisting of:
 - a) Load group Channel "B" consisting of:
 - 1) 125-volt D.C. buses 1D622**, 1D624**, 2D622, 2D624
 - 2) Fuse box 1D621**, 2D621
 - b) Load group Channel "D" consisting of:
 - 1) 125-volt D.C. buses 1D642**, 1D644**, 2D642, 2D644
 - 2) Fuse box 1D641**, 2D641
 - c) Load group "II" consisting of:
 - 1) 250-volt D.C. buses 2D662, 2D264, 2D274
 - 2) Fuse box 2D661
 - d) Load group "II" consisting of:
 - 1) ± 24-volt D.C. buses 2D682
 - 2) Fuse box 2D681

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one of the above required Unit 2 A.C. distribution system load groups not energized, reenergize the load group within 8 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 of the above required Unit 1 and common A.C. distribution system load groups not energized, re-energize the load group within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With one of the above required Unit 2 D.C. distribution system load groups not energized, reenergize the load group within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

**Not required to be OPERABLE when the requirements of ACTION d have been satisfied.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

d. With one or more of the above required Unit 1 D.C. distribution system load groups not energized, within 2 hours either:

1. Reenergize the load group(s), or
2. Transfer the common loads aligned to the deenergized Unit 1 load group(s) to the corresponding Unit 2 load group(s).

Otherwise, declare the common loads aligned to the deenergized Unit 1 load group(s) inoperable and take the ACTION required by the applicable Specification(s).

e. With one or both of the isolated 480-volt A.C. swing busses inoperable, declare the associated LPCI loop inoperable (see Specification 3.5.1).

SURVEILLANCE REQUIREMENTS

4.8.3.1.1 Each of the above required power distribution system load groups shall be determined energized at least once per 7 days by verifying correct breaker alignment and voltage on the busses/MCCs/panels.

4.8.3.1.2 The isolated 480-volt A.C. swing bus automatic transfer switches shall be demonstrated OPERABLE at least once per 31 days by actuating the load test switch or by disconnecting the preferred power source to the transfer switch and verifying that swing bus automatic transfer is accomplished.

ELECTRICAL POWER SYSTEMS

DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.3.2 As a minimum, the following power distribution system divisions shall be energized:

a. For A.C. power distribution, Division I or Division II with:

1. Division I consisting of:
 - a) Load group Channel "A", consisting of:
 - 1) 4160-volt A.C. switchgear bus 1A201, 2A201
 - 2) 480-volt A.C. load center 1B210, 2B210
 - 3) 480-volt A.C. motor control centers 0B516, 0B517
1B216, 2B216
1B217, 2B217
1Y216, 2Y216
 - 4) 208/120-volt A.C. instrument panels
 - b) Load group Channel "C", consisting of:
 - 1) 4160-volt A.C. switchgear bus 1A203, 2A203
 - 2) 480-volt A.C. load center 1B230, 2B230
 - 3) 480-volt A.C. motor control centers 0B536, 0B136
1B236, 2B236
2B237
 - 4) 208/120-volt A.C. instrument panels 1Y236, 2Y236
 - c) Isolated 480 volt A.C. swing bus, including: 2B219*
 - 1) Preferred power source
 - 2) Preferred power source MG set
 - 3) Alternate power source
 - 4) Automatic transfer switch
2. Division II consisting of:
 - a) Load group Channel "B", consisting of:
 - 1) 4160-volt A.C. switchgear bus 1A202, 2A202
 - 2) 480-volt A.C. load center 1B220, 2B220
 - 3) 480-volt A.C. motor control center 0B526, 0B527
1B226, 2B226
1B227, 2B227
1Y226, 2Y226
 - 4) 208/120-volt A.C. instrument panels
 - b) Load group Channel "D", consisting of:
 - 1) 4160-volt A.C. switchgear bus 1A204, 2A204
 - 2) 480-volt A.C. load center 1B240, 2B240
 - 3) 480-volt A.C. motor control center 0B546, 0B146
1B246, 2B246
2B247
 - 4) 208/120-volt A.C. instrument panels 1Y246, 2Y246
 - c) Isolated 480 volt A.C. swing bus, including: 2B229*
 - 1) Preferred power source
 - 2) Preferred power source MG set
 - 3) Alternate power source
 - 4) Automatic transfer switch

*The swing bus shall be OPERABLE if the Division I LPCI subsystem alone is fulfilling the requirements of Specification 3.5.2.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

- b. For D.C. power distribution, Division I or Division II, with:
1. Division I consisting of:
 - a) Load group Channel "A", consisting of:
 - 1) 125-volt D.C. buses 1D612***, 1D614***, 2D612, 2D614
 - 2) Fuse box 1D611***, 2D611
 - b) Load group Channel "C", consisting of:
 - 1) 125-volt D.C. buses 1D632***, 1D634***, 2D632, 2D634
 - 2) Fuse box 1D631***, 2D631
 - c) Load group "I", consisting of:
 - 1) 250-volt D.C. buses 2D652, 2D254
 - 2) Fuse box 2D651
 - d) Load group "I", consisting of:
 - 1) ± 24-volt D.C. buses 2D672
 - 2) Fuse box 2D671
 2. Division II consisting of:
 - a) Load group Channel "B", consisting of:
 - 1) 125-volt D.C. buses 1D622***, 1D624***, 2D622, 2D624
 - 2) Fuse box 1D621***, 2D621
 - b) Load group Channel "D", consisting of:
 - 1) 125-volt D.C. buses 1D642***, 1D644***, 2D642, 2D644
 - 2) Fuse box 1D641***, 2D641
 - c) Load group "II", consisting of:
 - 1) 250-volt D.C. buses 2D662, 2D264, 2D274
 - 2) Fuse box 2D661
 - d) Load group "II", consisting of:
 - 1) ± 24-volt D.C. buses 2D682
 - 2) Fuse box 2D681

APPLICABILITY: OPERATIONAL CONDITIONS 4, 5, and **.

*The swing bus shall be OPERABLE if the Division II LPCI subsystem alone is fulfilling the requirements of Specification 3.5.2.

**When handling irradiated fuel in the secondary containment.

***Not required to be OPERABLE when the requirements of ACTION c have been satisfied.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. NPF- 14
AND AMENDMENT NO. 23 TO FACILITY OPERATING LICENSE NO. NPF- 22
PENNSYLVANIA POWER AND LIGHT COMPANY
SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2
DOCKET NOS. 50-387 AND 50-388

1.0 INTRODUCTION

On November 26, 1985, the Pennsylvania Power and Light Company requested a change to the Unit 1 and Unit 2 Technical Specifications. Additionally, PP&L requested a change specific to Unit 2. The first change, which effects both units would change specification 3.8.3.1 and 3.8.3.2 by more clearly identifying certain motor control centers (480 volt A.C. MCC's) and instrument panels (Load Group 208/120 volt A.C. instrument panels) as separate load groups. These MCC's and instrument panels are powered by specific 480-volt and 120-volt divisionalized busses (SSES has a four division system electrical design). The change groups these MCC's and instrument panels under their associated power channels. This change will allow the MCC's and instrument panels to be identified as other load groups have always been identified in the past. The licensee's requested change is in conformance with the standard Technical Specifications.

The second change requested by the licensee is specific to Unit 2 specification 3.8.3.1 and its appropriate action statement. The requested change will allow a required Unit 1 and common A.C. distribution load group to be de-energized for up to 72 hours. The 72 hour outage time has been changed from the original allowed outage time of 8 hours.

2.0 EVALUATION

The staff finds the first change to be acceptable as it is administrative in nature and improves the clarity of the Unit 1 and Unit 2 Technical Specifications.

The second change requested by the licensee, specific to Unit 2, has also been found to be acceptable based upon the staff's evaluation which follows.

In the Susquehanna design for A.C. power distribution the Unit 1 4KV busses feed the Unit 1 loads and equipment which supports loads common to Unit 1 and Unit 2. The Unit 2 4KV busses feed the Unit 2 loads but are not capable of feeding loads common to both Units 1 and 2. Since the Unit 1 4KV busses feed the common loads for Units 1 and 2, the Unit 1 4KV busses have been included in the Unit 2 Technical Specifications. The licensee's requested change allows Unit 2 to operate for up to 72 hours after losing a Unit 1 and common load group. This change does not affect or change the requirement for Unit 2 to shutdown within 8 hours upon the loss of a Unit 2

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load group or the requirement for Unit 1 to shutdown within 8 hours upon the loss of a Unit 1 and common load group. The staff has reviewed the licensee's justification and finds that the most limiting condition for operation which could occur from de-energizing one of the load groups (a load group is defined as the loads supported by a 4KV bus both directly and through the load centers and MCC's) is the loss of one loop of ESW because of the loss of power to its discharge valve, and the loss of a diesel generator. The time period presently allowed in the Technical Specifications as an outage time for either of these events is 72 hours.

The de-energizing of one A.C. distribution system load group has a safety impact that is no greater than the impact on plant operations when one diesel generator and/or one ESW loop is lost. The loss of one diesel generator and/or the loss of an ESW loop is analyzed in the FSAR. The staff presently finds it acceptable to allow a 72 hour out of service time for an inoperable diesel generator and/or an inoperable loop of ESW. This change is commensurate with this time limitation.

The licensee has stated that this change does not impact the safety of plant operation since this change only results in a loss of equipment for a previously determined allowable time. The staff agrees with the licensee's determination.

Additionally, this change is consistent with the bases of the Technical Specifications which states that action requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The operability of the power sources are consistent with the initial condition assumptions of the accident analysis in the FSAR. Therefore, the allowable time for which a Unit 1 and common load group may be inoperable is 72 hours since this is commensurate with the inoperability of a diesel generator and/or an ESW loop.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve 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 these amendments involve 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet 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 these amendments.

4.0 CONCLUSION

The Commission made a proposed determination that these amendments involve no significant hazards consideration which was published in the Federal Register (51 FR 1878) January 15, 1986, 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 these amendments will not be inimical to the common defense and security nor to the health and safety of the public.

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Dated: MAR 07 1986