

August 3, 1988

Dockets Nos. 50-277/278

Mr. William M. Alden
Director-Licensing
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

Dear Mr. Alden:

SUBJECT: REACTOR WATER LEVEL INSTRUMENTATION SYSTEM - RECORDER RANGE
MODIFICATION (TAC NOS. 66536 AND 66537)

RE: PEACH BOTTOM ATOMIC POWER STATION, UNIT NOS. 2 AND 3

The Commission has issued the enclosed Amendments Nos. 134 and 137 to Facility Operating License Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station, Unit Nos. 2 and 3. These amendments consist of changes to the Technical Specifications (TS) in response to your application dated October 19, 1987.

These amendments increase the recorder ranges of the reactor vessel water level instrumentation. Changes are made to TS Table 3.2.F to change both the fuel zone recorder and the wide range recorder upper end point to plus 60 inches. Other changes of an editorial nature are also made to Table 3.2.F. These changes are related to the reactor water level instrumentation system in response to Generic Letter 84-23 and Item II.F.2. of NUREG-0737.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

/s/

Robert E. Martin, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 134 to DPR-44
2. Amendment No. 137 to DPR-56
3. Safety Evaluation

cc w/enclosures:
See next page

Previously concurred*

PDI-2/LA
MO'Brien
7/21/88

PDI-2/PM*
REMartin:tr
07/19/88

OGC
7/21/88

PDI-2/D
WButler
7/29/88

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
August 3, 1988

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Sincerely,

A handwritten signature in cursive script that reads "Robert Martin".

Robert E. Martin, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 134 to DPR-44
2. Amendment No. 137 to DPR-56
3. Safety Evaluation

cc w/enclosures:
See next page

Mr. William M. Alden
Philadelphia Electric Company

Peach Bottom Atomic Power Station,
Units 2 and 3

cc:

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Pennsylvania Department of
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Delta, Pennsylvania 17314

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Annapolis, Maryland 21401

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Baltimore, Maryland 21201



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
August 3, 1988

PHILADELPHIA ELECTRIC COMPANY
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DELMARVA POWER AND LIGHT COMPANY
ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-277

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 134
License No. DPR-44

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company, et al. (the licensee) dated October 19, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and 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 rules and 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 or 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. DPR-44 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 134, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 3, 1988

PDI/BLA
Brien
7/27/88

RDI-RYPM
REMartin:tr
7/19/88

OGC/MLY
mejoing
7/27/88

PDI-2/D
WButler
7/29/88 WB

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 134, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

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: August 3, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 134

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised areas are indicated by marginal lines.

Remove

77

Insert

77

TABLE 3.2.F SURVEILLANCE INSTRUMENTATION

Item	Minimum No. of Operable Instrument Channels	Parameter	Instrument	Type Indication and Range	Action*
1	2	Reactor Water Level (narrow range)	LR-2(3)-6-96 LI-2(3)-6-94A,B,C	Recorder 0 to 60 inches Indicator 0 to 60 inches	(1) (2) (3)
2	2	Reactor Water Level (wide range)	LR-2(3)-2-3-110A,B (Green Pen)	Recorder -165 to +60 inches	(10) (11)
3	2	Reactor Water Level (fuel zone)	LR-2(3)-2-3-110A,B (Red Pen)	Recorder -325 to +60 inches	(10) (11)
4	2	Reactor Pressure	PR-2(3)-6-96 PR-2(3)-2-3-404A,B PI-2(3)-6-90A,B,C	Recorder 0 to 1500 psig Indicator 0 to 1200 psig	(1) (2) (3)
5	2	Drywell Pressure	PR-4(5)805 (Pen 2) PR-2(3)508 (Pen 2)	Recorder 0 to 70 psig	(1) (2) (3)
6	2	Drywell Pressure (wide range)	PR-8(9)102A,B (Red Pen)	Recorder 0 to 225 psig	(8) (9)
7	2	Drywell Pressure (subatmospheric range)	PR-8(9)102A,B (Green Pen)	Recorder 5 to 25 psia	(8) (9)
8	2	Drywell Temperature	TR-4(5)805 (Pen 1) TI-2(3)501	Recorder 40 to 440 degrees F Indicator 40 to 440 degrees F	(1) (2) (3) (1) (2) (3) (12)
9	2	Suppression Chamber Water Temperature	TR-8(9)123A,B TIS-2(3)-2-71A,B	Recorder 30 to 230 degrees F Indicator 30 to 230 degrees F	(1) (2) (3) (6)
10	2	Suppression Chamber Water Level (narrow range)	LR-8(9)027 LI-8(9)027	Recorder 13.7 to 15.7 feet Indicator 13.7 to 15.7 feet	(1) (2) (3)

Amendment No. AT 74-95, 125, 126, 134

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PBAPS Unit 2



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

PHILADELPHIA ELECTRIC COMPANY
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DELMARVA POWER AND LIGHT COMPANY
ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-278

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 137
License No. DPR-56

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company, et al. (the licensee) dated October 19, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and 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 rules and 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 or 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. DPR-56 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 137, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 3, 1988

RDY/LA
MO'Brien
7/27/88

RDI-RYPM
REMartin:tr
7/27/88

OGC/My
myoung
7/27/88

RDI-2/D
WButler
for 7/29/88 WB

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 137, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

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: August 3, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 137

FACILITY OPERATING LICENSE NO. DPR-56

DOCKET NO. 50-278

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised areas are indicated by marginal lines.

Remove

77

Insert

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TABLE 3.2.F SURVEILLANCE INSTRUMENTATION

Item	Minimum No. of Operable Instrument Channels	Parameter	Instrument	Type Indication and Range	Action*
1	2	Reactor Water Level (narrow range)	LR-2(3)-6-96 LI-2(3)-6-94A,B,C	Recorder 0 to 60 inches Indicator 0 to 60 inches	(1) (2) (3)
2	2	Reactor Water Level (wide range)	LR-2(3)-2-3-110A,B (Green Pen)	Recorder -165 to +60 inches	(10) (11)
3	2	Reactor Water Level (fuel zone)	LR-2(3)-2-3-110A,B (Red Pen)	Recorder -325 to +60 inches	(10) (11)
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5	2	Drywell Pressure	PR-4(5)805 (Pen 2) PR-2(3)508 (Pen 2)	Recorder 0 to 70 psig	(1) (2) (3)
6	2	Drywell Pressure (wide range)	PR-8(9)102A,B (Red Pen)	Recorder 0 to 225 psig	(8) (9)
7	2	Drywell Pressure (subatmospheric range)	PR-8(9)102A,B (Green Pen)	Recorder 5 to 25 psia	(8) (9)
8	2	Drywell Temperature	TR-4(5)805 (Pen 1) TI-2(3)501	Recorder 40 to 440 degrees F Indicator 40 to 440 degrees F	(1) (2) (3) (1) (2) (3) (12)
9	2	Suppression Chamber Water Temperature	TR-8(9)123A,B TIS-2(3)-2-71A,B	Recorder 30 to 230 degrees F Indicator 30 to 230 degrees F	(1) (2) (3) (6)
10	2	Suppression Chamber Water Level (narrow range)	LR-8(9)027 LI-8(9)027	Recorder 13.7 to 15.7 feet Indicator 13.7 to 15.7 feet	(1) (2) (3)

Amendment No. 40, 25, 95, 127, 137, 137

-77-

PBAPS Unit 3



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION SUPPORTING

AMENDMENT NOS. 134 AND 137 TO FACILITY OPERATING

LICENSE NOS. DPR-44 and DPR-56

PHILADELPHIA ELECTRIC COMPANY
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DELMARVA POWER AND LIGHT COMPANY
ATLANTIC CITY ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION, UNIT NOS. 2 AND 3

DOCKET NOS. 50-277 AND 50-278

1.0 INTRODUCTION

By letter dated October 19, 1987, Philadelphia Electric Company requested an amendment to Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station, Unit Nos. 2 and 3. The amendments would increase the recorder ranges of the reactor vessel water level instrumentation for the fuel zone instrumentation and for the wide range instrumentation. Changes are made to Technical Specification Table 3.2.F to change the fuel zone recorder range from minus 325 inches to zero inches to a range of minus 325 inches to plus 60 inches. Changes are also made to Table 3.2.F to change the wide range recorder from a range of minus 165 to plus 50 inches to a range of minus 165 to plus 60 inches. The revised ranges encompass the former ranges and both range upper end points are the same at plus 60 inches.

Other changes are made to Table 3.2.F of an editorial nature such as spelling out the word "inches", use of the word "to" instead of a dash between numbers and spelling out the word "feet".

2.0 EVALUATION

The licensee states that the changes to the recorder ranges in the TS are related to modifications being made to the reactor water level instrumentation system in response to NRC Generic Letter 84-23 and Item II.F.2 of NUREG-0737. The staff's earlier letter of February 11, 1985, provided an evaluation of the licensee's response to this issue and the pertinent parts of the letter are restated for convenience as follows:

On October 26, 1984, the NRC staff sent Generic Letter No. 84-23 (Reactor Vessel Water Level Instrumentation in BWRs) to Philadelphia Electric Company and other BWR licensees. This Generic Letter outlined the importance of reactor vessel water level instrumentation in BWRs. The staff concluded that permanent

physical improvements should be made on a deliberate schedule to reduce the burden on the operator. Two improvement categories were proposed that, if implemented, would result in increased assurance that the level instrumentation will provide the inadequate core cooling instrumentation required by NUREG-0737, Item II.F.2. Licensees were asked to submit description of plans to implement these improvements and a proposed schedule.

By letter dated December 5, 1984, you responded to GL 84-23 and indicated that the wide range and fuel zone reactor vessel water level instrumentation would be modified to improve accuracy and reliability under transient and accident conditions and decrease the need for operator diagnosis. The specific modifications would address the issue of indication errors caused by high drywell temperature and are, therefore, acceptable.

Subsequently, the licensee evaluated and implemented modifications which had been approved as noted above. Specifically, the licensee's safety evaluation for modification package number 1457, rev. 2, prepared pursuant to 10 CFR 50.59, noted that because the numerical value of their ranges had been used in the TS to identify the two level recorders, the ranges in the TS would need revision to reflect the expanded ranges. This safety evaluation was reviewed by a NRC inspector as reported in Inspection Report Nos. 50-277/87-23 and 50-278/87-23 with no deficiencies being observed in the licensee's safety evaluation.

With respect to the subject change in the range of the level recorders the licensee states that the affected ranges envelope the ranges currently specified, the associated instrumentation provides the same safety actuation functions at the same level as before, the common upper range end point incorporates human factors principles and the accuracy of the vessel level inputs is not affected.

On the bases discussed above the staff concludes that the change in the information used to identify these level recorders on TS Table 3.2.F is consistent with previously approved safety evaluations and is acceptable. The staff also concludes that the previously mentioned editorial changes to Table 3.2.F will alleviate confusion in the reading of the data and are acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

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

4.0 CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (52 FR 47790) on December 16, 1987 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Robert E. Martin

Dated: August 3, 1988