

Mr. George A. Hunger, Jr.
Director-Licensing, MC 52A-5
Philadelphia Electric Company
Nuclear Group Headquarters
Correspondence Control Desk
P.O. Box No. 195
Wayne, Pennsylvania 19087-0195

Dear Mr. Hunger:

SUBJECT: SEISMIC MONITORING INSTRUMENTATION TECHNICAL SPECIFICATIONS, PEACH
BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 (TAC NOS. M85927 AND
M85928)

The Commission has issued the enclosed Amendments Nos. 176 and 179 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 in response to your application dated March 5, 1993,
as supplemented by letter dated May 13, 1993.

These amendments revise Table 3.15 and the associated bases regarding seismic
monitoring instrumentation. The revisions are required to support your
planned upgrade of the seismic monitoring instrumentation.

These amendments are effective upon installation of the new solid-state
seismic instrumentation. Notify the staff when you have fully implemented the
provisions of these amendments.

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,

Original signed by
Joseph W. Shea, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 176 to DPR-44
2. Amendment No. 179 to DPR-56
3. Safety Evaluation

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cc w/enclosures:
See next page

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

June 21, 1993

Docket Nos. 50-277
and 50-278

Mr. George A. Hunger, Jr.
Director-Licensing, MC 52A-5
Philadelphia Electric Company
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Correspondence Control Desk
P.O. Box No. 195
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These amendments revise Table 3.15 and the associated bases regarding seismic monitoring instrumentation. The revisions are required to support your planned upgrade of the seismic monitoring instrumentation.

These amendments are effective upon installation of the new solid-state seismic instrumentation. Notify the staff when you have fully implemented the provisions of these amendments.

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Joseph W. Shea, Project Manager
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cc w/enclosures:
See next page

Mr. George A. Hunger, Jr.
Philadelphia Electric Company

Peach Bottom Atomic Power Station,
Units 2 and 3

cc:

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Review Division
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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. 50-277

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 176
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 March 5, 1993, as supplemented by letter dated May 13, 1993, 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 176, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective upon installation of the new solid-state seismic instrumentation.

FOR THE NUCLEAR REGULATORY COMMISSION

Charles L. Miller

Charles L. Miller, Director
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 21, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 176

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

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

Remove

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240w

Insert

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PBAPS

TABLE 3.15**

SEISMIC MONITORING INSTRUMENTATION

<u>Instruments and Sensor Locations#</u>	<u>Measurement Range</u>	<u>Minimum Instruments Operable</u>
1. Triaxial Time-History Accelerometers		
a. Containment Foundation (torus compartment)	-1 to 1g	1
b. Refueling Floor	-1 to 1g	1
c. RCIC Pump (Rm #7)	-1 to 1g	1
d. "C" Diesel Generator	-1 to 1g	1
2. Triaxial Peak Accelerographs		
a. Reactor Piping (Drywell)	0.01 to 2g	1
b. Refueling Floor	0.01 to 2g	1
c. "C" Diesel Generator	0.01 to 2g	1
3. Central Recording and Analysis System		
a. Cable Spreading Rm	-1 to 1g	1*

* With reactor control room annunciation

** Effective upon completion of installation

Seismic instrumentation located in Unit 2

PBAPS

3.15/4.14 BASES

The operability of the seismic monitoring instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the plant.

The time-history data from the Triaxial Time-History Accelerometers is recorded in the cable spreading room using a solid-state central recording system. Following a seismic event, the data is downloaded into a computer so that the results and data can be analyzed.



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. 179
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 March 5, 1993, as supplemented by letter dated May 13, 1993, 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. 179, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective upon installation of the new solid-state seismic instrumentation.

FOR THE NUCLEAR REGULATORY COMMISSION

Charles L. Miller

Charles L. Miller, Director
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 21, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 179

FACILITY OPERATING LICENSE NO. DPR-56

DOCKET NO. 50-278

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

Remove

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240w

Insert

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PBAPS

TABLE 3.15**

SEISMIC MONITORING INSTRUMENTATION

<u>Instruments and Sensor Locations#</u>	<u>Measurement Range</u>	<u>Minimum Instruments Operable</u>
1. Triaxial Time-History Accelerometers		
a. Containment Foundation (torus compartment)	-1 to 1g	1
b. Refueling Floor	-1 to 1g	1
c. RCIC Pump (Rm #7)	-1 to 1g	1
d. "C" Diesel Generator	-1 to 1g	1
2. Triaxial Peak Accelerographs		
a. Reactor Piping (Drywell)	0.01 to 2g	1
b. Refueling Floor	0.01 to 2g	1
c. "C" Diesel Generator	0.01 to 2g	1
3. Central Recording and Analysis System		
a. Cable Spreading Rm	-1 to 1g	1*

* With reactor control room annunciation

** Effective upon completion of installation

Seismic instrumentation located in Unit 2

PBAPS

3.15/4.14 BASES

The operability of the seismic monitoring instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the plant.

The time-history data from the Triaxial Time-History Accelerometers is recorded in the cable spreading room using a solid-state central recording system. Following a seismic event, the data is downloaded into a computer so that the results and data can be analyzed.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 176 AND 179 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 March 5, 1993, as supplemented by letter dated May 13, 1993, the Philadelphia Electric Company, Public Service Electric & Gas Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) submitted a request for changes to the Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, Technical Specifications (TS). The requested changes would revise Table 3.15 and the associated bases regarding seismic monitoring instrumentation. The revisions are requested to support a planned upgrade of the PBAPS seismic monitoring instrumentation. The letter dated May 13, 1993, did not change the substance of the original request and did not change the initial no significant hazards consideration determination.

2.0 EVALUATION

PBAPS has seismic instrumentation that is designed to detect and record vibratory ground motion. The object of the seismic instrumentation is to provide the operator with the timely information on the severity of an earthquake so that the operator can evaluate the effects of the earthquake on the plant.

PBAPS has triaxial servo accelerometers located in four locations throughout the plant. Those locations are:

1. Unit 2, Torus room, elevation 105, on the containment foundation;
2. Unit 2, refueling floor, elevation 234;
3. Unit 2, Reactor Core Isolation Cooling pump room, elevation 88, on the pump foundation; and
4. "C" diesel generator building, elevation 127.

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The accelerometers provide an input to a seismic instrument panel located in the cable spreading room. The seismic instrumentation in the cable spreading room can record the time-history response of the accelerometers and provides an alarm in the control room if the site operating basis earthquake parameters are exceeded.

In addition, triaxial peak accelerographs are provided in three locations. Those locations are;

1. Unit 2, refueling floor, elevation 234;
2. "C" diesel generator building, elevation 127
3. Unit 2, reactor building, elevation 170.

These instruments provide permanent records of peak acceleration.

Existing Technical Specification (TS) Section 3.15 and Table 3.15 provide the operability requirements for the installed seismic instrumentation. PECO, in the application dated March 5, 1993, described a planned modification of the existing instrumentation. The licensee states that the modification will replace the existing instrumentation with a more reliable solid-state computer based system.

The proposed changes to the Technical Specification for Units 2 and 3 would modify the measurement range for the triaxial time-history accelerographs and the triaxial response-spectrum recorders from 0.1 - 10g to the range of -1 to +1g in Table 3.15 of Appendix A. Since the original installation of the triaxial time-history accelerographs and the triaxial response-spectrum recorders their respective measurement ranges have been calibrated to the design measurement range of -1 to +1g. However, Table 3.15 of the technical specifications incorrectly identifies these instruments as having a measurement range from 0.1 to 10g which is the absolute range that the instruments are capable of providing not the specified design measurement range of -1 to +1g. The proposed changes to Table 3.15 will accurately reflect the seismic monitoring instrumentation's design measurement range of -1 to +1g.

Page 240u, Section 2, "Triaxial Peak Accelerographs" is being revised by replacing a dash with the word "to" to improve the clarity of the range and to provide consistency. Values related to the instrument measurement range in this section are unaltered by this modification.

The proposed changes to the Bases Section 3.15/4.14 will reflect the implementation of the upgraded seismic monitoring instrumentation. Currently, the Bases state that the time-history recordings of the triaxial time-history accelerographs are done on a digital cassette accelerograph. Because the modification replaces the existing cassette accelerographs with solid-state equipment, the Bases Section will be revised to reflect the change.

The staff has reviewed the licensee's proposed TS changes. The proposed changes clarify the existing TS and cause them to more accurately reflect plant equipment. Therefore, the staff finds the proposed changes acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 (58 FR 16869). 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 or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) 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 Contributors: P. Rush
J. Shea

Date: June 21, 1993