

REGULATORY DOCKET FILE # Y



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

December 10, 1980

Dockets Nos. 50-277
and ✓ 50-278

Mr. Edward G. Bauer, Jr.
Vice President and General Counsel
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

IS PRC
OPERATING REACTORS
BRANCH

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Dear Mr. Bauer:

The Commission has issued the enclosed Amendments Nos. 76 and 75 to Facility Operating Licenses Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station, Units Nos. 2 and 3. These amendments consist of changes to the Technical Specifications (TSs) in partial response to your application dated September 30, 1980.

The changes to the TSs revise (1) the Reactor Protection System response time for both Units 2 and 3 and (2) the Operating Limit Minimum Critical Power Ratio limits for Unit 2. The remainder of your September 30, 1980, application is still under review and will be processed separately.

Copies of our Safety Evaluation and a related Notice of Issuance are also enclosed.

Sincerely,

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosures:

- 1. Amendment No. 76 to DPR-44
- 2. Amendment No. 75 to DPR-56
- 3. Safety Evaluation
- 4. Notice

cc w/enclosures: See next page

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Mr. Edward G. Bauer, Jr.
Philadelphia Electric Company

cc:

Eugene J. Bradley
Philadelphia Electric Company
Assistant General Counsel
2301 Market Street
Philadelphia, Pennsylvania 19101

Troy B. Conner, Jr.
1747 Pennsylvania Avenue, N. W.
Washington, D. C. 20006

Raymond L. Hovis, Esquire
35 South Duke Street
York, Pennsylvania 17401

Warren K. Rich, Esquire
Assistant Attorney General
Department of Natural Resources
Annapolis, Maryland 21401

Philadelphia Electric Company
ATTN: Mr. W. T. Ullrich
Peach Bottom Atomic
Power Station
Delta, Pennsylvania 17314

Albert R. Steel, Chairman
Board of Supervisors
Peach Bottom Township
R. D. #1
Delta, Pennsylvania 17314

Curt Cowgill
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Peach Bottom Atomic Power Station
P. O. Box 399
Delta, Pennsylvania 17314

Director, Technical Assessment
Division
Office of Radiation Programs
(AW-459)
US EPA
Crystal Mall #2
Arlington, Virginia 20460

Region III Office
ATTN: EIS COORDINATOR
Curtis Building (Sixth Floor)
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

M. J. Cooney, Superintendent
Generation Division - Nuclear
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

Government Publications Section
State Library of Pennsylvania
Education Building
Commonwealth and Walnut Streets
Harrisburg, Pennsylvania 17126

cc w/enclosure(s) & incoming dtd.:
9/30/80

Mr. R. A. Heiss, Coordinator
Pennsylvania State Clearinghouse
Governor's Office of State Planning
and Development
P. O. Box 1323
Harrisburg, Pennsylvania 17120



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. 76
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 September 30, 1980, 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 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. 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. 76, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 10, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 76

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 pages are identified by amendment number and contain vertical lines indicating the area of change.

Remove Pages

35

133c

Insert Pages

35

133c

PBAPS

LIMITING CONDITIONS FOR OPERATION

3.1 REACTOR PROTECTION SYSTEM

Applicability:

Applies to the instrumentation and associated devices which initiate a reactor scram.

Objective

To assure the operability of the reactor protection system.

Specification:

- A. When there is fuel in the vessel the setpoint, minimum number of trip systems, and minimum number of instrument channels that must be operable for each position of the reactor mode switch shall be as given in Table 3.1.1.
- B. The designed system response times from the opening of the sensor contact up to and including the opening of the trip actuator contacts shall not exceed 50 milliseconds. Otherwise, the affected trip system shall be placed in the tripped condition, or the action listed in Table 3.1.1 for the specific trip function shall be taken.

SURVEILLANCE REQUIREMENTS

4.1 REACTOR PROTECTION SYSTEM

Applicability:

Applies to the surveillance of the instrumentation and associated devices which initiate reactor scram.

Objective

To specify the type and frequency of surveillance to be applied to the protection instrumentation.

Specification:

- A. Instrumentation systems shall be functionally tested and calibrated as indicated in Tables 4.1.1 and 4.1.2 respectively.
- B. Daily, during reactor power operation, the maximum fraction of limiting power density shall be checked and the scram and APRM rod block settings given by equations in Specification 2.1.A.1 and 2.1.B shall be calculated if the maximum fraction of the limiting power density exceeds the fraction of rated power.

TABLE 3.5-2

OPERATING LIMIT MCPR VALUES AS DETERMINED
FOR VARIOUS CORE EXPOSURES

<u>Fuel Type</u>	<u>MCPR Operating Limit For Incremental Cycle 5 Core Average Exposure</u>	
	<u>BOC to 1000 MWD/t Before EOC</u>	<u>1000 MWD/t Before EOC to EOC</u>
8X8	1.28	1.28
8X8R & LTA	1.28	1.28
P8X8R	1.30	1.30



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. 75
License No. DPR-56

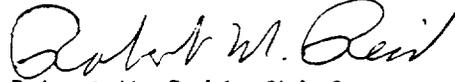
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company, et al. (the licensee) dated September 30, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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 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. 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. 75, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 10, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 75

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 page is identified by amendment number and contains a vertical line indicating the area of change.

Remove Page

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Insert Page

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PBAPS

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.1 REACTOR PROTECTION SYSTEM

Applicability:

Applies to the instrumentation and associated devices which initiate a reactor scram.

Objective

To assure the operability of the reactor protection system.

Specification:

- A. When there is fuel in the vessel the setpoint, minimum number of trip systems, and minimum number of instrument channels that must be operable for each position of the reactor mode switch shall be as given in Table 3.1.1.
- B. The designed system response times from the opening of the sensor contact up to and including the opening of the trip actuator contacts shall not exceed 50 milliseconds. Otherwise, the affected trip system shall be placed in the tripped condition, or the action listed in Table 3.1.1 for the specific trip function shall be taken.

4.1 REACTOR PROTECTION SYSTEM

Applicability:

Applies to the surveillance of the instrumentation and associated devices which initiate reactor scram.

Objective

To specify the type and frequency of surveillance to be applied to the protection instrumentation.

Specification:

- A. Instrumentation systems shall be functionally tested and calibrated as indicated in Tables 4.1.1 and 4.1.2 respectively.
- B. Daily, during reactor power operation, the maximum fraction of limiting power density shall be checked and the scram and APRM rod block settings given by equations in Specification 2.1.A.1 and 2.1.B shall be calculated if the maximum fraction of the limiting power density exceeds the fraction of rated power.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

AMENDMENT NO. 76 TO FACILITY OPERATING LICENSE NO. DPR-44

AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DPR-56

PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3

PHILADELPHIA ELECTRIC COMPANY

DOCKETS NOS. 50-277 AND 50-278

I. INTRODUCTION

By letter dated September 30, 1980⁽¹⁾, Philadelphia Electric Company (licensee) submitted an application for amendment to Facility Operating Licenses Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station, Units Nos. 2 and 3. Included in this submittal was: (1) change of the specification on the Reactor Protection System (RPS) response time from 100 milliseconds to 50 milliseconds (applicable to both Units Nos. 2 and 3), and (2) revision of the exposure dependent Minimum Critical Power Ratio (MCPR) for Unit No. 2, consistent with the revision in RPS response time.

II. EVALUATION

(1) RPS Scram Delay Time

In the spring of 1980, during the NRC staff's review of the Peach Bottom Unit No. 2 Reload 4 application, we identified that the safety analyses were performed using a 50-millisecond scram circuit delay time, i.e., the time between the opening of the sensor contact up to and including the opening of the trip actuator. This value was inconsistent with Peach Bottom Specification 3.1 which specified that the RPS delay logic will not exceed 100 milliseconds. As a result of this as well as reported discrepancies from other licensees, we issued NRC IE Circular 80-08⁽²⁾. As stated therein:

"For GE BWR's, we request that you take the following corrective action promptly after receipt of this Circular: (1) verify that the actual RPS response time in the most recent test is less than the value specified in the safety analysis, (2) observe the RPS response time value specified in the safety analysis until a Technical Specification change (if necessary) is approved, and (3) take appropriate actions to make Technical Specification on RPS response time consistent with the RPS response time used in the safety analysis. If a value less than that currently in the Technical Specifications is proposed, the licensee will be expected to provide the basis for that value, including the validity of tests and methods."

Although we did not require a response to the Circular, the corrective actions by the licensee are documented in his letter dated April 23, 1980⁽³⁾. That response satisfied our requested corrective action.

The current application would conform the Technical Specification on RPS response time to that used in the safety analysis. The application also contained a basis for the change.

We have reviewed the licensee's submittal to determine if the decrease in response time would affect the assumption used in the safety analysis, specifically, that the delays in the RPS are at the maximum specified values. The licensee's submittal stated that their investigation of tests and methods demonstrated that all subject RPS instrument response times are and have been significantly less than 50 milliseconds and that Peach Bottom could comply with a 50-millisecond RPS delay time value. Our Office of Inspection and Enforcement has independently reviewed plant data for the past five years and verified that all measured delay times are less than 50 milliseconds. Accordingly, we conclude that the licensee has adequately justified a reduction in RPS delay time from 100 to 50 milliseconds.

(2) Operating Limit MCPR

Amendment No. 70 to DPR-44 was issued on June 13, 1970, and included a Δ CPR augmentation of 0.03 for the transient analyses because of the inconsistency of the RPS scram delay times as discussed in (1) above. As stated in our Safety Evaluation supporting that amendment, which is incorporated herein by reference, this .03 augmentation would apply until such time that the 50-millisecond RPS logic delay time was justified⁽⁴⁾. In view of our acceptance of the 50-millisecond delay time, we find the revised MCPR limits for Unit No. 2 to be supported by our previous evaluation and are acceptable.

III. ENVIRONMENTAL CONSIDERATIONS

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

IV. CONCLUSIONS

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: December 10, 1980

References

1. Letter, PECO (Bradley) to NRC (Denton), dated September 30, 1980.
2. IE Circular 80-08, "BWR Technical Specification Inconsistencies - RPS Response Time", dated April 18, 1980.
3. Letter, PECO (Cooney) to NRC (Grier), dated April 23, 1980.
4. Safety Evaluation by NRR Supporting Amendment No. 70 to DPR-44, dated June 13, 1980.

UNITED STATES NUCLEAR REGULATORY COMMISSION
DOCKETS NOS. 50-277 AND 50-278
PHILADELPHIA ELECTRIC COMPANY, ET AL
NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 76 and 75 to Facility Operating Licenses Nos. DPR-44 and DPR-56, issued to Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company, and Atlantic City Electric Company, which revised Technical Specifications for operation of the Peach Bottom Atomic Power Station, Units Nos. 2 and 3 (the facility) located in York County, Pennsylvania. The amendments are effective as of the date of issuance.

The changes to the Technical Specifications revise (1) the Reactor Protection System response time for both Units 2 and 3 and (2) the Operating Limit Minimum Critical Power Ratio Limits for Unit 2.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

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The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated September 30, 1980, (2) Amendments Nos. 76 and 75 to Licenses Nos. DPR-44 and DPR-56, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Government Publications Section, State Library of Pennsylvania, Education Building, Commonwealth and Walnut Streets, Harrisburg, Pennsylvania. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 10th day of December 1980.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Licensing