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Docket No. 50-278

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

Dear Mr. Bauer:

The Commission has issued the enclosed Amendment No. 85 to Facility Operating License No. DPR-56 for the Peach Bottom Atomic Power Station, Unit No. 3. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated July 6, 1982, as supplemented July 22, 1982.

The changes to the TSs amend the minimum critical power ratios during mid-Cycle 5 operation of Peach Bottom Unit No. 3. These changes are needed to correct a recently discovered input error to the ODYN transient computer code.

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

Sincerely,

Original signed by

Morton B. Fairtile, Project Manager
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No. 85 to DPR-56
2. Safety Evaluation
3. Notice

cc w/enclosures:
See next page

No legal objection to issuance of amendment or FR notice. SER issued not requested.

OFFICE	ORB#4:DL	ORB#4:DL	C-ORB#4 DL	AD:OR:DL	OELD		
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DATE	7/27/82	7/27/82	7/27/82	7/27/82	7/27/82		

Philadelphia Electric Company

cc w/enclosure(s):

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

cc w/enclosure(s) & incoming dtd.:
7/6/82, 7/22/82.

Mr. R. A. Heiss, Coordinator
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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. 50-278

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 85
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 July 6, 1982, as supplemented July 22, 1982, 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. 85 , 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

(for) John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 29, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 85

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

Remove	Insert
133d	133d
133e	133e
142	142
142a	142a

Table 3.5.K.2

OPERATING LIMIT MCPR VALUES
FOR VARIOUS CORE EXPOSURES*

Fuel Type	MCPR Operating Limit For Incremental Cycle Core Average Exposure**	
	BOC to 1000 MWD/t Before EOC	1000 MWD/t before EOC To EOC
8x8	1.25	1.30
PTA &P 8X8R	1.27	1.32
8x8R	1.25	1.30

* If requirement 4.5.K.2.a is met.

** These values shall be increased by 0.01 for single loop operation.

Table 3.5.K.3

OPERATING LIMIT MCPR VALUES
FOR VARIOUS CORE EXPOSURES*

Fuel Type	MCPR Operating Limit For Incremental Cycle Core Average Exposure**	
	BOC to 1000 MWD/t Before EOC	1000 MWD/t before EOC To EOC
8x8	1.40	1.42
PTA &P 8X8R	1.44	1.45
8x8R	1.40	1.42

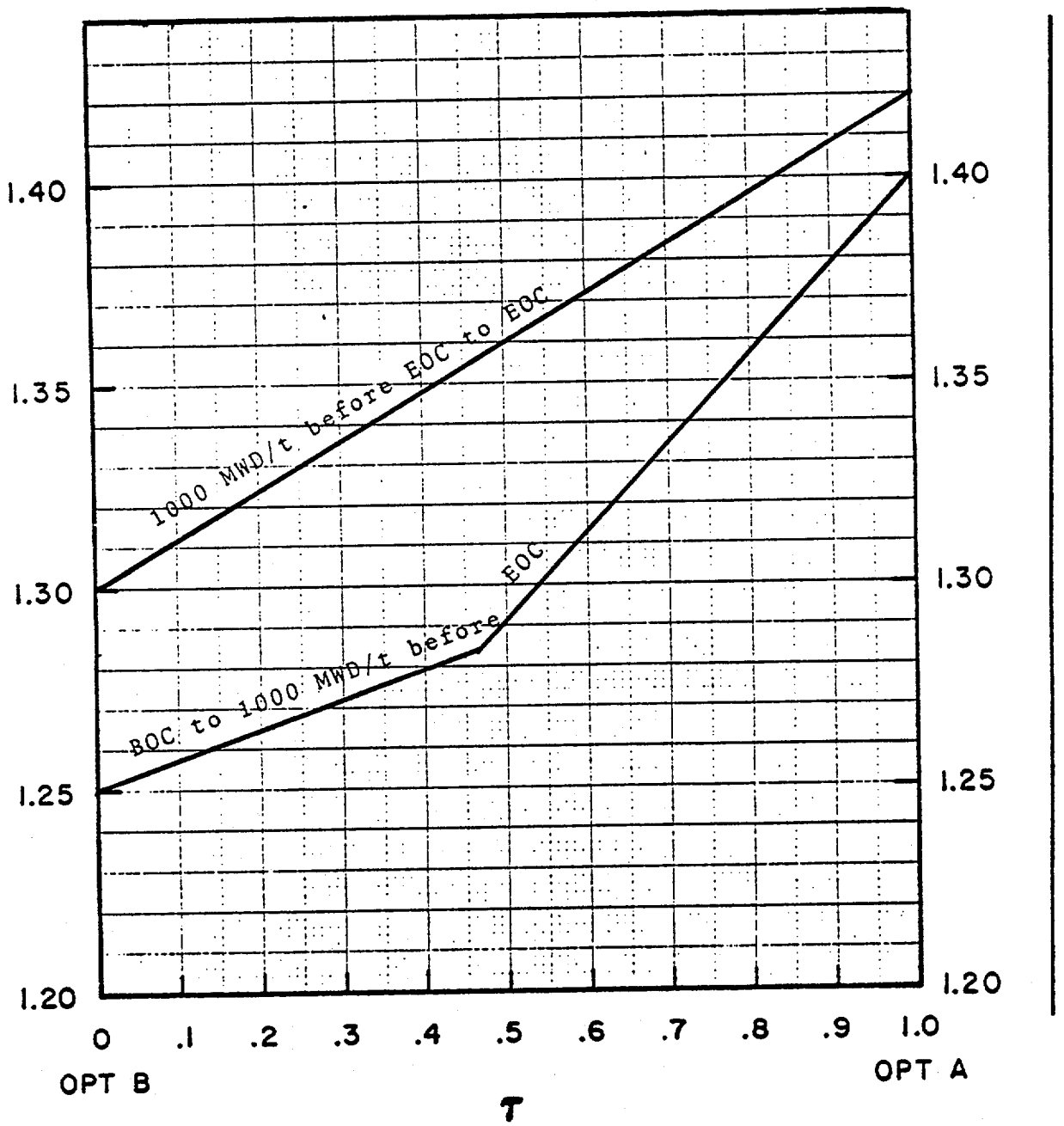
* If surveillance requirement of section 4.5.K.2 is not performed.

** These values shall be increased by 0.01 for single loop operation.

PEACH BOTTOM UNIT 3

FIGURE 3.5.K.1 MCPR OPERATING LIMIT vs τ

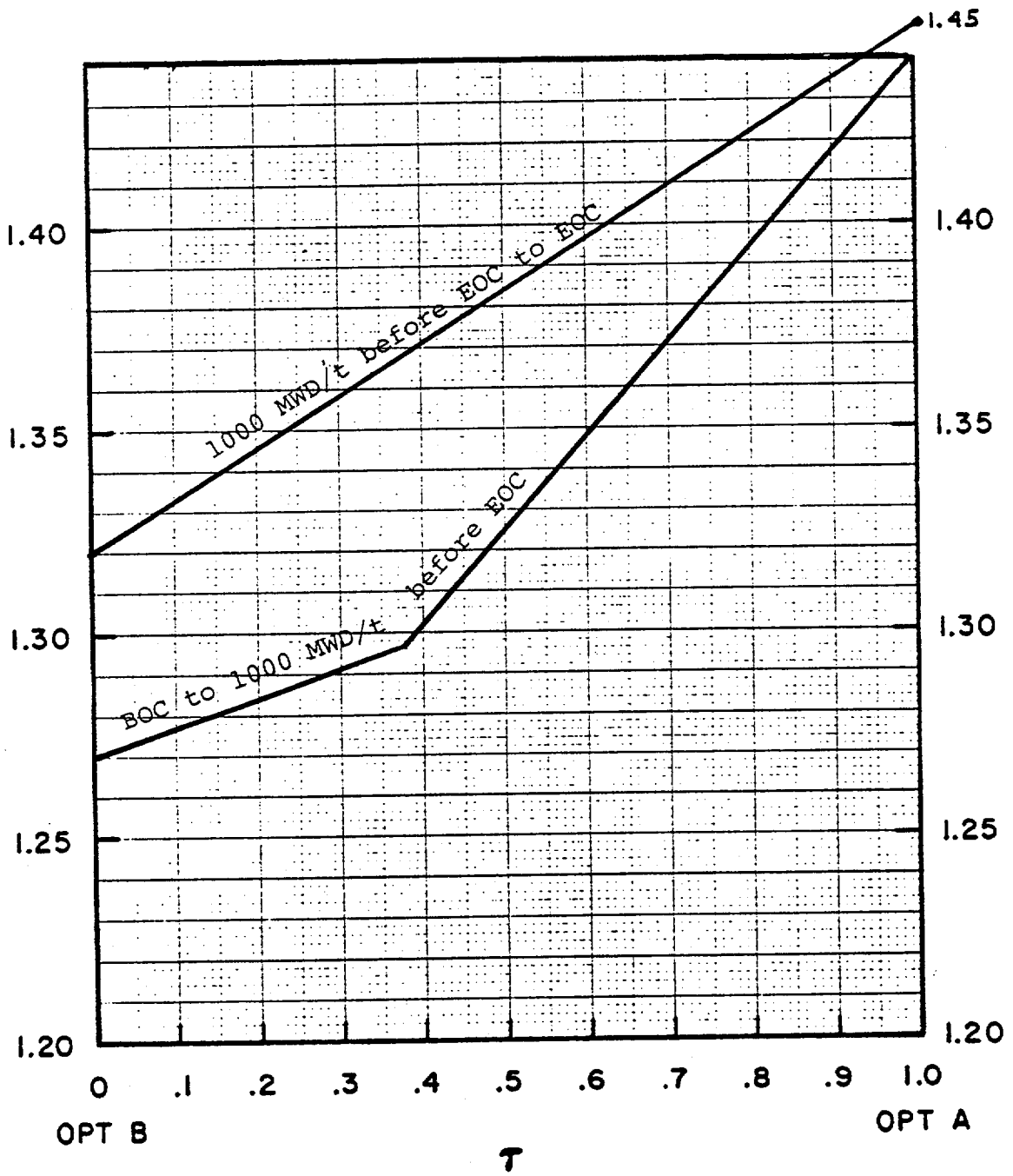
FUEL TYPE 8x8 and 8x8R



PEACH BOTTOM UNIT 3

FIGURE 3.5.K.2 MCPR OPERATING LIMIT vs τ

FUEL TYPE P8x8R and PTA



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 85 TO FACILITY OPERATING LICENSE NO. 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 NO. 3

DOCKET NO. 50-278

INTRODUCTION

By letters dated July 6 and 22, 1982 (Reference 1) the Philadelphia Electric Company (PECo or the licensee) made application to amend the Technical Specifications (TSs) for the Peach-Bottom 3 Cycle 5 to reflect changes in analyses resulting from corrections to an ODYN computer code error. In support of this application PECo also submitted a revised Supplemental Reload Licensing Document (Reference 3). We have reviewed the following areas: (1) safety limit MCPR, (2) operating limit MCPR, (3) changes to Tables 3.5.K.2, 3.5.K.3 and Figures 3.5.K.1, 3.5.K.2 of the TSs (Reference 2), and (4) transient analysis.

EVALUATION

The objective of this review is to confirm that the thermal-hydraulic design aspects of the reload code provide an acceptable margin of safety from conditions which could lead to fuel damage during normal operation and anticipated operational transients.

Safety Limit MCPR

The safety limit MCPR has been established to assure that at least 99.9 percent of the fuel rods in the core do not experience a boiling transient during the worst anticipated operational occurrences. As stated in Reference 4, the safety limit MCPR is 1.07 and remains unchanged.

Operating Limit MCPR (OLMCPR)

The licensee submitted analytical results (Reference 3) for the pressurization transients using the corrected fuel length input data to the ODYN code. The OLMCPR for option A resulting from the limiting transient, the generator load rejection without bypass transient, is 1.45 for the fuel at end of Cycle 5 (EOC 5) as compared to the original OLMCPR of 1.42 for EOC 5. The difference of 0.03 in CPR reflects the changes in analytical results because of corrections to the ODYN code.

The pressurization transients were also analyzed for the fuel at EOC 5-1000 MWD/t; this represents an increased burnup from the EOC 5-2000 MWD/t given in the original TSs. Section 11 of Reference 3 presents the CPR for both non-pressurization and pressurization transients. The maximum calculated MCPRs in Section 11 are specified as the OLMCPRs and are incorporated in the TSs.

We have reviewed the results of the OLMCPRs discussed above and find the results acceptable. Peach Bottom Unit 3 Reload 4 (Cycle 5) pressurization transients were analyzed using ODYN, the original analyses were submitted by letter dated March 30, 1981, and our Safety Evaluation was issued on September 16, 1981 (Reference 6). Due to a recently discovered fuel length input error in the original analysis, the licensee has reanalyzed the affected transients utilizing corrected values. The results of these reanalyses are presented in Reference 3. The most limiting transient using ODYN option B is the generator load rejection without bypass event, which results in an OLMCPR of 1.32 for the fuel at the end of the current Cycle 5 (EOC 5) as compared to an original OLMCPR of 1.30 for EOC 5. The difference of 0.02 in CPR reflects the changes in analytical results due to the error correction. The licensee also reanalyzed the pressurization transients at an additional exposure point (EOC 5-1000 MWD/t) using the corrected version of ODYN. REDY-analyzed transients are not affected.

Summary of Conclusions on Error Correction

We have reviewed the licensee's proposed changes to the TSs related to the OLMCPR (pages 133d, 133e, 142, 142a) resulting from corrections to the ODYN computer code. We conclude that these changes are acceptable.

ENVIRONMENTAL CONSIDERATIONS

We have determined that the amendment does 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 amendment involves 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 this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a margin of safety, the amendment does 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: July 29, 1982

The following NRC personnel have contributed to this Safety Evaluation: Morton Fairtile, George Thomas and Summer Sun.

References

1. E. J. Bradley (PECo) letters to H. R. Denton (NRC) dated July 6 and 22, 1982.

2. Enclosure to Reference 1-Application for Amendment of Facility Operating License, DPR-56.

3. "Supplemental Reload Licensing Submittal for Peach Bottom Atomic Power Station Unit 3, Reload No. 4, Revision 1," General Electrical Company Report Y1003J01A20, June 1982.

4. "General Electric Boiling Water Reactor Generic Reload Fuel Application," General Electric Company Report NEDE-24011-P-A-2, July 1981.

5. General Electric Company Generic Reload Fuel Application, NEDE 24011-P-A-1.

6. NRC License Amendment No. 79 to Facility Operating License No. DPR-56, September 16, 1981.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-278

PHILADELPHIA ELECTRIC COMPANY, ET AL

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 85 to Facility Operating License No. 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 (TSs) for operation of the Peach Bottom Atomic Power Station, Unit No. 3 (the facility) located in York County, Pennsylvania. The amendment is effective as of its date of issuance.

The changes to the TSs amend the minimum critical power ratios during mid-Cycle 5 operation of Peach Bottom Unit No. 3. These changes are needed to correct a recently discovered input error to the ODYN transient computer code.

The application for the amendment 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 amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that 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 issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated July 6, 1982, as supplemented July 22, 1982, (2) Amendment No. 85 to License No. 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 29th day of July 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

Sydney Miner, Acting Chief
Operating Reactors Branch #4
Division of Licensing