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Dockets Nos. 50-277
and 50-278

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

Gentlemen:

The Commission has issued the enclosed Amendments Nos. 27 and 26 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 and are in response to your request dated August 6, 1976.

These amendments involve changes to the Technical Specifications to state explicit remedial action to be taken in the event that maximum average planar linear heat generation rate (MAPLHGR), local linear heat generation (LHGR) or minimum critical power ratio (MCPR) operating limit is exceeded.

Copies of the Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures:

1. Amendments Nos. 27 and 26
2. Safety Evaluation
3. Federal Register Notice

cc:

See next page

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OFFICE >	ORB#3	ORB#3	OELD	ORB#3		
SURNAME >	TVerdery:acr	CParrish		GLear		
DATE >	9/ /76	9/ /76	9/ /76	9/ /76		

cc:

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Philadelphia Electric Company
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Governor's Office of State Planning
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Albert R. Steel, Chairman
Board of Supervisors
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U. S. Environmental Protection Agency
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Washington, D. C. 20460

U. S. Environmental Protection Agency
Region III Office
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Martin Memorial Library
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York, Pennsylvania 17401



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

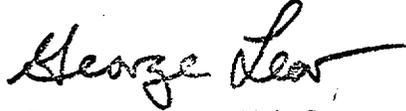
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27
License No. DPR-44

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company, and Atlantic City Electric Company, (the licensees) dated August 6, 1976, 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 a change to the Technical Specifications as indicated in the attachment to this license amendment.

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

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script that reads "George Lear". The signature is written in black ink and is positioned above the typed name and title.

George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 10, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 27

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

Replace pages 133a, 133b, 140c, 140d, and 140e with the attached revised pages.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

3.5.I Average Planar LHGR

During power operation, the APLHGR for each type of fuel as a function of average planar exposure shall not exceed the limiting value shown in Figure 3.5.1-A, 3.5.1-B, 3.5.1-F, 3.5.1-G, as applicable. If at any time during operation it is determined by normal surveillance that the limiting value of APLHGR is being exceeded, action shall be initiated within one (1) hour to restore APLHGR to within prescribed limits. If the APLHGR is not returned to within prescribed limits within five (5) hours, reactor power shall be decreased at a rate which would bring the reactor to the cold shutdown condition within 36 hours unless APLHGR is returned to within limits during this period. Surveillance and corresponding action shall continue until reactor operation is within the prescribed limits.

3.5.J Local LHGR

During power operation, the linear heat generation rate (LHGR) of any rod in any fuel assembly at any axial location shall not exceed the maximum allowable LHGR as calculated by the following equation:

$$\text{LHGR} \leq \text{LHGR}_d \left[1 - (\Delta P/P)_{\max} (L/LT) \right]$$

$$\begin{aligned} \text{LHGR}_d &= \text{Design LHGR} \\ &= 18.5 \text{ kW/ft for } 7 \times 7 \text{ fuel} \\ &= 13.4 \text{ kW/ft for } 8 \times 8 \text{ fuel} \end{aligned}$$

$$\begin{aligned} (\Delta P/P)_{\max} &= \text{Maximum power} \\ &\quad \text{spiking penalty} \\ &= 0.026 \text{ for } 7 \times 7 \text{ fuel} \\ &= 0.022 \text{ for } 8 \times 8 \text{ fuel} \end{aligned}$$

$$LT = \text{Total core length} = 12 \text{ ft}$$

$$L = \text{Axial position above bottom of core}$$

4.5.I. Average Planar LHGR

The APLHGR for each type of fuel as a function of average planar exposure shall be checked daily during reactor operation at $\geq 25\%$ rated thermal power.

4.5.J. Local LHGR

The LHGR as a function of core height shall be checked daily during reactor operation at $\geq 25\%$ rated thermal power.

LIMITING CONDITION OF OPERATION

SURVEILLANCE REQUIREMENT

3.5.J. Local LHGR (Cont'd)

If at any time during operation it is determined by normal surveillance that limiting value for LHGR is being exceeded, action shall be initiated within one (1) hour to restore LHGR to within prescribed limits. If the LHGR is not returned to within prescribed limits within five (5) hours, reactor power shall be decreased at a rate which would bring the reactor to the cold shutdown condition within 36 hours unless LHGR is returned to within limits during this period. Surveillance and corresponding action shall continue until reactor operation is within the prescribed limits.

3.5.K. Minimum Critical Power Ratio (MCPR)

During power operation, MCPR shall be ≥ 1.28 for 7x7 fuel and ≥ 1.31 for 8x8 fuel at rated power and flow. For core flows other than rated the MCPR shall be ≥ 1.28 times k_f for 7x7 fuel and ≥ 1.31 times k_f for 8x8 fuel where k_f is as shown in Figure 3.5.1-E. If at any time during operation it is determined by normal surveillance that the limiting value for MCPR is being exceeded, action shall be initiated within one (1) hour to restore MCPR to within prescribed limits. If the MCPR is not returned to within prescribed limits within five (5) hours, reactor power shall be decreased at a rate which would bring the reactor to the cold shutdown condition within 36 hours unless MCPR is returned to within limits during this period. Surveillance and corresponding action shall continue until reactor operation is within prescribed limits.

4.5.K. Minimum Critical Power Ratio (MCPR)

MCPR shall be checked daily during reactor power operation at $\geq 25\%$ rated thermal power.

PBAPS

L. Average Planar LHGR (APLHGR), Local LHGR, and Minimum Critical Power Ratio (MCPR)

In the event that the calculated value of APLHGR, LHGR or MCPR exceeds its limiting value, a determination is made to ascertain the cause and initiate corrective action to restore the value to within prescribed limits. The status of all indicated limiting fuel bundles is reviewed as well as input data associated with the limiting values such as power distribution, instrumentation data (traversing in core probe-TIP, local power range monitor - LPRM and reactor heat balance instrumentation), control rod configuration, etc., in order to determine whether the calculated values are valid.

In the event that the review indicates that the calculated value exceeding limits is valid, corrective action is immediately undertaken to restore the value to within prescribed limits. Following corrective action, which may involve alterations to the control rod configuration and consequently changes to the core power distribution, revised instrumentation data, including changes to the relative neutron flux distribution for up to 43 incore locations is obtained and the power distribution, APLHGR, LHGR and MCPR calculated. Corrective action is initiated within one hour of an indicated value exceeding limits and verification that the indicated value is within prescribed limits is obtained within five hours of the initial indication.

In the event that the calculated value of APLHGR, LHGR or MCPR exceeding its limiting value is not valid, i.e., due to an erroneous instrumentation indication etc.), corrective action is initiated within one hour of an indicated value exceeding limits. Verification that the indicated value is within prescribed limits is obtained within five hours of the initial indication. Such an invalid indication would not be a violation of the limiting condition for operation and therefore would not constitute a reportable occurrence.

Operating experience has demonstrated that a calculated value of APLHGR, LHGR or MCPR exceeding its limiting value predominately occurs due to this latter cause. This experience coupled with the extremely unlikely occurrence of concurrent operation exceeding APLHGR, LHGR or MCPR and a Loss of Coolant Accident or applicable Abnormal Operational Transients demonstrates that the times required to initiate corrective action (1 hour) and restore the calculated value of APLHGR, LHGR or MCPR to within prescribed limits (5 hours) are adequate.

PBAPS

M. References

1. "Fuel Densification Effects on General Electric Boiling Water Reactor Fuel". Supplements 6, 7 and 8 NEDM-10735, August, 1973.
2. Supplement 1 to Technical Report on Densifications of General Electric Reactor Fuels, December 14, 1974 (Regulatory Staff).
3. Communication: V. A. Moore to I. S. Mitchell, "Modified GE Model for Fuel Densification", Docket 50-321, March 27, 1974.
4. General Electric Company Analytical Model for Loss-of-Coolant Analysis in Accordance with 10 CFR 50, Appendix K, NEDE-20566 (Draft), August 1974.
5. General Electric Refill Reflood Calculation (Supplement to SAFE Code Description) transmitted to the USAEC by letter, G. L. Gyorey to Victor Stello, Jr., dated December, 1974.
6. "General Electric Boiling Water Reactor Reload No. 1 Licensing Submittal with Partial Installation of the Alternate Flow Path for Peach Bottom Atomic Power Station Unit 2, License No. DPR-44, Docket No. 50-277", NEDO-21172, Revision 1, March 1976.
7. General Electric BWR Generic Reload Application for 8x8 fuel, NEDO-20360, Revision 1, November 1974.

TABLE 3.5-1

PEACH BOTTOM 2 (Alternate Flow Path)
SIGNIFICANT INPUT PARAMETERS TO THE
LOSS-OF-COOLANT ACCIDENT ANALYSIS

PLANT PARAMETERS:

Core Thermal Power	3440 MWT which corresponds to 105% of rated steam flow
Vessel Steam Output	14.049×10^6 lbm/h which corresponds to 105% of rated steam flow
Vessel Steam Dome Pressure	1055 psia
Design Basis Recirculation Line Break Area	4.28* and 1.0
Recirculation Line Break Area for Small Breaks	1.0 and 0.07

FUEL PARAMETERS:

<u>Fuel Type</u>	<u>Fuel Bundle Geometry</u>	<u>Peak Technical Specification Linear Heat Generation Rate (KW/ft)</u>	<u>Design Axial Peaking Factor</u>	<u>Initial Minimum Critical Power Ratio</u>
Initial Core	7 x 7	18.5	1.5	1.17
Reload No. 1	8 x 8	13.4	1.4	1.17

A more detailed list of input to each model and its source is presented in Section II of Reference 5.

*The DBA area includes: the area of the recirculation suction line (3.66 ft^2); plus the throat area of ten jet pumps (0.54 ft^2) and the reactor water cleanup system line (0.08 ft^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

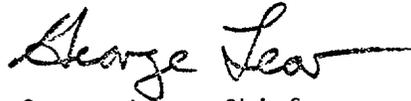
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 26
License No. DPR-56

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company, and Atlantic City Electric Company, (the licensees) dated August 6, 1976, 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 1;
 - 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 a change to the Technical Specifications as indicated in the attachment to this license amendment.

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

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script that reads "George Lear". The signature is written in dark ink and has a long, sweeping horizontal stroke at the end.

George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 10, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 26

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-56

DOCKET NO. 50-278

Replace pages 133a, 133b, 140b, 140c and 140d with the attached revised pages.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

3.5.I Average Planar LHGR

During power operation, the APLHGR for each type of fuel as a function of average planar exposure shall not exceed the limiting value shown in Figure 3.5.1-A, 3.5.1-B, 3.5.1-C, 3.5.1-D, as applicable. If at any time during operation it is determined by normal surveillance that the limiting value of APLHGR is being exceeded, action shall be initiated within one (1) hour to restore APLHGR to within prescribed limits. If the APLHGR is not returned to within prescribed limits within five (5) hours, reactor power shall be decreased at a rate which would bring the reactor to the cold shutdown condition within 36 hours unless APLHGR is returned to within limits during this period. Surveillance and corresponding action shall continue until reactor operation is within the prescribed limits.

3.5.J Local LHGR

During power operation, the linear heat generation rate (LHGR) of any rod in any fuel assembly at any axial location shall not exceed the maximum allowable LHGR as calculated by the following equation:

$$\text{LHGR} \leq \text{LHGR}_d \left[1 - (\Delta P/P)_{\max} (L/LT) \right]$$

$$\begin{aligned} \text{LHGR}_d &= \text{Design LHGR} \\ &= 18.5 \text{ kW/ft for } 7 \times 7 \text{ fuel} \end{aligned}$$

$$\begin{aligned} (\Delta P/P)_{\max} &= \text{Maximum power} \\ &\quad \text{spiking penalty} \\ &= 0.026 \text{ for } 7 \times 7 \text{ fuel} \end{aligned}$$

$$\text{LT} = \text{Total core length} = 12.167 \text{ ft.}$$

Unit 3

$$L = \text{Axial position above bottom of core}$$

4.5.I. Average Planar LHGR

The APLHGR for each type of fuel as a function of average planar exposure shall be checked daily during reactor operation at $\geq 25\%$ rated thermal power.

4.5.J. Local LHGR

The LHGR as a function of core height shall be checked daily during reactor operation at $\geq 25\%$ rated thermal power.

LIMITING CONDITION OF OPERATION

SURVEILLANCE REQUIREMENT

3.5.J. Local LHGR (Cont'd)

If at any time during operation it is determined by normal surveillance that limiting value for LHGR is being exceeded, action shall be initiated within one (1) hour to restore LHGR to within prescribed limits. If the LHGR is not returned to within prescribed limits within five (5) hours, reactor power shall be decreased at a rate which would bring the reactor to the cold shutdown condition within 36 hours unless LHGR is returned to within limits during this period. Surveillance and corresponding action shall continue until reactor operation is within the prescribed limits.

3.5.K. Minimum Critical Power Ratio (MCPR)

During power operation, MCPR shall be ≥ 1.26 at rated power and flow. For core flows other than rated the MCPR shall be ≥ 1.26 times k_f , where k_f is as shown in Figure 3.5.1-E. If at any time during operation it is determined by normal surveillance that the limiting value for MCPR is being exceeded, action shall be initiated within one (1) hour to restore MCPR to within prescribed limits. If the MCPR is not returned to within prescribed limits within five (5) hours, reactor power shall be decreased at a rate which would bring the reactor to the cold shutdown condition within 36 hours unless MCPR is returned to within limits during this period. Surveillance and corresponding action shall continue until reactor operation is within prescribed limits.

4.5.K. Minimum Critical Power Ratio (MCPR)

MCPR shall be checked daily during reactor power operation at $\geq 25\%$ rated thermal power.

PBAPS

- (1) The core is operating at full power in the xenon-free condition.
- (2) The highest worth control rod is assumed to be fully inserted.
- (3) The analysis is performed for the most reactive point in the cycle.
- (4) The control rods are assumed to be the worst possible pattern without exceeding thermal limits.
- (5) A bundle in the vicinity of the highest worth control rod is assumed to be operating at the maximum allowable linear heat generation rate.
- (6) A bundle in the vicinity of the highest worth control rod is assumed to be operating at the minimum allowable critical power ratio.

The three-dimensional BWR code then simulates the core response to the control rod withdrawal error. The second code calculates the Rod Block Monitor response to the rod withdrawal error. This code simulates the Rod Block Monitor under selected failure conditions (LPRM) for the core response (calculated by the 3-dimensional BWR simulation code) for the control rod withdrawal.

The analysis of the rod withdrawal error for Peach Bottom Unit 3 considers the continuous withdrawal of the maximum worth control rod at its maximum drive speed from the reactor which is operating with the limiting control rod pattern as discussed above. This rod pattern is shown in Figure 7-6 of NEDO-21140.^{1/}

A brief summary of the analytical method used to determine the nuclear characteristics is given in Section 5.3 of NEDO-20360.^{2/}

L. Average Planar LGHR (APLHGR), Local LHGR, and Minimum Critical Power Ratio (MCPR)

In the event that the calculated value of APLHGR, LHGR or MCPR exceeds its limiting value, a determination is made to ascertain the cause and initiate corrective action to restore the value to within prescribed limits. The status of all indicated limiting fuel bundles is reviewed as well as input data associated with the limiting values such as power distribution, instrumentation data (traversing in-core probe-TIP, local power range monitor - LPRM and reactor heat balance instrumentation), control rod configuration, etc., in order to determine whether the calculated values are valid.

PBAPS

In the event that the review indicates that the calculated value exceeding limits is valid, corrective action is immediately undertaken to restore the value to within prescribed limits. Following corrective action, which may involve alterations to the control rod configuration and consequently changes to the core power distribution, revised instrumentation data, including changes to the relative neutron flux distribution for up to 43 in - core locations is obtained and the power distribution, APLHGR, LHGR and MCPR calculated. Corrective action is initiated within one hour of an indicated value exceeding limits, and verification that the indicated value is within prescribed limits is obtained within five hours of the initial indication.

In the event that the calculated value of APLGHR, LHGR or MCPR exceeding its limiting value is not valid, i.e., due to an erroneous instrumentation indication etc, corrective action is initiated within one hour of an indicated value exceeding limits. Verification that the indicated value is within prescribed limits is obtained within five hours of the initial indication. Such an invalid indication would not be a violation of the limiting condition for operation and therefore would not constitute a reportable occurrence.

Operating experience has demonstrated that a calculated value of APLHGR, LHGR or MCPR exceeding its limiting value predominately occurs due to this latter cause. This experience coupled with the extremely unlikely occurrence of concurrent operation exceeding APLHGR, LHGR or MCPR and a Loss of Coolant Accident or applicable Abnormal Operational Transients demonstrates that the times required to initiate corrective action (1 hour) and restore the calculated value of APLHGR, LHGR or MCPR to within prescribed limits (5 hours) are adequate.

M. References

1. "Peach Bottom Atomic Power Station Unit 3 Channel Inspection and Safety Analyses with Bypass Holes Plugged," NEDO-21140, December 1975.
2. General Electric BWR Generic Reload Application for 8 x 8 fuel, NEDO-20360, Revision 1, November 1974.
3. R. B. Linford, Analytical Methods of Plant Transient Evaluations for the GE BWR, February 1973, (NEDO-10802).
4. General Electric Company Analytical Model for Loss-of-Coolant Analysis in Accordance with 10 CFR Part 50, Appendix K, NEDE-20566 (Draft), August 1974.

TABLE 3.5-1
 PEACH BOTTOM 3 (PLUGGED)
 SIGNIFICANT INPUT PARAMETERS TO THE
 LOSS-OF-COOLANT ACCIDENT ANALYSIS

PLANT PARAMETERS:

Core Thermal Power	3440 MWt which corresponds to 105% of rated steam flow
Vessel Steam Output	14.049×10^6 lbm/h which corresponds to 105% of rated steam flow
Vessel Steam Dome Pressure	1055 psia
Design Basis Recirculation Line Break Area	4.28* and 1.0
Recirculation Line Break Area for Small Breaks	1.0 and 0.07

FUEL PARAMETERS:

<u>Fuel Type</u>	<u>Fuel Bundle Geometry</u>	<u>Peak Technical Specification Linear Heat Generation Rate (KW/ft)</u>	<u>Design Axial Peaking Factor</u>	<u>Initial Minimum Critical Power Ratio</u>
Initial Core	7 x 7	18.5	1.5	1.17

A more detailed list of input to each model and its source is presented in Section II of Reference 1.

*The DBA area includes: the area of the recirculation suction line (3.66 ft^2); plus the throat area of ten jet pumps (0.54 ft^2) and the reactor water cleanup system line (0.08 ft^2)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 27 TO FACILITY OPERATING LICENSE NO. DPR-44
AND AMENDMENT NO. 26 TO FACILITY OPERATING LICENSE NO. DPR-56
PHILADELPHIA ELECTRIC COMPANY
DOCKETS NOS. 50-277 AND 50-278
PEACH BOTTOM ATOMIC POWER STATION UNITS NOS. 2 AND 3

Introduction

By letter dated August 6, 1976 Philadelphia Electric Company (PECO) applied for an amendment to Facility Operating Licenses Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station Units Nos. 2 and 3. The amendment involves changes to the Technical Specifications to state explicit remedial action to be taken in the event that maximum average planar linear heat generation rate (MAPLHGR), local linear heat generation rate (LHGR) or minimum critical power ratio (MCPR) operating limit is exceeded. This request for license amendment is in response to our request dated February 9, 1976.

Certain modifications to the wording in the license amendment, as requested by PECO, were necessary to conform the affected Technical Specifications to our standard format. These changes have been discussed with the licensee's representatives and they concur.

Discussion and Evaluation

In accordance with 10 CFR Part 50 §50.36(c)(2), when a limiting condition for operation (LCO) is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification until the condition can be met. The incorporation of specific remedial actions in the limiting conditions for operation which define operating limits for the MAPLHGR, LHGR, and MCPR will allow a limited period of time for operator action to be taken for restoration of plant parameters within required limits rather than requiring an immediate plant shutdown. The NRC staff recognized that the LCO's for the abovementioned operating limits did not include a specific time period for operator action to restore these parameters within prescribed limits. Consequently, we requested the licensee to submit an application for amendment to incorporate specific remedial actions.

The remedial actions proposed by PECO would allow a total time period of five (5) hours for operator action to investigate the cause for exceeding any operating limit. This period would allow sufficient time for the status of all indicated limiting fuel bundles to be reviewed in order to determine whether the calculated values for limits are valid. The review would include a check of input data associated with the determination of limiting values; such input data involves power distribution, instrumentation data and control rod configuration.

In the event that the review indicates the validity of the calculated value of MAPLHGR, LHGR or MCPR which exceeds a specified limit (i.e., there is no instrumentation malfunction), corrective action is immediately undertaken to restore the value to within prescribed limits. Such corrective action may involve alterations to the control rod configuration and consequent changes in core power distribution. Following corrective action, revised instrumentation data for up to 43 in-core locations would be obtained and the power distribution, APLHGR, LHGR, and MCPR calculated. Corrective action will be initiated within one hour of an indicated value exceeding limits and verification that the indicated value is within prescribed limits is obtained within five hours of the initial indication.

It is considered highly unlikely that a Loss of Coolant Accident or applicable abnormal operation transient would occur at such time a limiting condition for operation (limit on APLHGR, LHGR or MCPR) is exceeded. Based upon this low probability of occurrence and on the foregoing evaluation, we conclude that the proposed time limits for remedial action are acceptable.

Environmental Consideration

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 statement, negative declaration, or environmental 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 changes 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 changes 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: February 10, 1977

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKETS NOS. 50-277 AND 50-278

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

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 27 and 26 to Facility Operating Licenses Nos. DPR-44 and DPR-56, respectively, 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, located in Peach Bottom, York County, Pennsylvania. The amendments are effective as of the date of issuance.

These amendments involve changes to the Technical Specifications to state explicit remedial action to be taken in the event that maximum average planar linear heat generation rate (MAPLHGR), local linear heat generation rate (LHGR) or minimum critical power ratio (MCPR) operating limit is exceeded.

The application for these 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.

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 statement, negative declaration or 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 August 6, 1976, (2) Amendments Nos. 27 and 26 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 Martin Memorial Library, 159 E. Market Street, York, Pennsylvania 17401.

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 Operating Reactors.

Dated at Bethesda, Maryland, this 10 day of February 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors