

March 22, 198.

Dockets Nos. 50-277/278

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EWenzinger

Mr. George A. Hunger, Jr.
Director-Licensing
Philadelphia Electric Company
Correspondence Control Desk
P. O. Box 7520
Philadelphia, Pennsylvania 19101

Dear Mr. Hunger:

SUBJECT: ADMINISTRATIVE CONTROLS ON PLANT STAFF WORKING HOURS
(TAC NOS. 60234 AND 60235)

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

The Commission has issued the enclosed Amendments Nos. 142 and 144 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 February 11, 1982 as amended on August 24, 1983, November 1, 1985, September 30, 1986, September 8, 1987 and September 7, 1988.

These amendments change the Technical Specification Administrative controls to reflect the addition of restrictions on the use of overtime for plant personnel who perform safety related functions.

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. 142 to DPR-44
2. Amendment No. 144 to DPR-56
3. Safety Evaluation

cc w/enclosures:
See next page

[HUNGER2]

PDI-2/MB
NO'Brien
3/15/89

PDI-2/PM
REMartin:mr
3/15/89

OGC
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PDI-2/D
WButler
3/12/89

DFOI
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WB

CP1
W



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

March 22, 1989

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

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1. Amendment No. 142 to DPR-44
2. Amendment No. 144 to DPR-56
3. Safety Evaluation

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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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. 142
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 February 11, 1982 as amended on August 24, 1983, November 1, 1985, September 30, 1986, September 8, 1987 and September 7, 1988, 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:

8903300192 890322
PDR ADOCK 05000277
P PDC

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 142, 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



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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 22, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 142

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.

<u>Remove</u>	<u>Insert</u>
-	270
-	271
-	272

6.20 Site Staff Working Hour Restrictions

- 6.20.1 Administrative procedures shall be developed and implemented to limit the working hours of site staff who perform safety-related functions as stated in 6.20.2.
- 6.20.2 Adequate shift coverage shall be maintained without undue use of overtime. The following overtime limits shall be followed:
1. An individual shall not be permitted to work more than 16 hours straight, excluding shift turnover time.
 2. An individual shall not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
 3. A break of at least 8 hours shall be allowed between work periods. The break shall include shift turnover time.
 4. Except during extended shutdown periods, the use of overtime shall be considered on an individual basis.
 5. Working hours do not include shift turnover time or absent time but do include all work associated activities (for example training).
 6. For shift operators (i.e., licensed Senior Operators, licensed Operators, and non-licensed Operators), the following working hour limits shall be followed and supersedes item number 2.

<u>TIME PERIOD</u>	<u>PLANT MANAGER OR ALTERNATES APPROVAL REQUIRED TO EXCEED, HOURS</u>	<u>LIMIT, HOURS⁽¹⁾</u>
24 hours	16	16
48 hours	24	28
one pay period	60	84
two pay periods	112	144
four pay periods	220	264
one calendar year	2400	2500

(1) If this value is exceeded, the Plant Manager must report in writing to the Site Vice President citing the reason for exceedance and corrective actions taken.

6.20.3 Any exceedance of the working hour restrictions of 6.20.2 shall be authorized by the employing officer, or alternates as specified in administrative controls, for site personnel performing safety-related functions in accordance with established procedures and with documentation of the basis for granting the exceedance. Procedures will be provided such that overtime is monitored on a cumulative basis.

6.20 BASESSite Staff Working Hour Restrictions

Studies indicate that fatigue causes an individual's detection of visual signals to deteriorate markedly, the time it takes for a person to make a decision increases, and more errors are made. Further, fatigue results in personnel ignoring some signals because they develop their own subjective standards as to what is important, and as they become more fatigued, they ignore more signals. The objective of the work hour restrictions specified in this section is to assure that, to the extent practicable, personnel are not assigned to perform safety-related functions while in a fatigued condition. The controls will limit both continuous working hours for personnel performing safety-related functions and accumulated working hours during the year for shift operators. Additionally, the controls will ensure adequate rest breaks between work periods. The working hour restrictions are based on guidelines provided in NUREG/CR-4248.

"Alternate" as used in specification 6.20.3 refers to the positions identified in 6.20.3 or positions designated in administrative controls. "Employing officer" as used in specification 6.20.2 refers to the position ultimately responsible for scheduling an employee's time.



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. 144
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 February 11, 1982 as amended August 24, 1983, November 1, 1985, September 30, 1986, September 8, 1987 and September 7, 1988, 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. 144, 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



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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 22, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 144

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.

<u>Remove</u>	<u>Insert</u>
-	270
-	271
-	272

6.20 Site Staff Working Hour Restrictions

- 6.20.1 Administrative procedures shall be developed and implemented to limit the working hours of site staff who perform safety-related functions as stated in 6.20.2.
- 6.20.2 Adequate shift coverage shall be maintained without undue use of overtime. The following overtime limits shall be followed:
1. An individual shall not be permitted to work more than 16 hours straight, excluding shift turnover time.
 2. An individual shall not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
 3. A break of at least 8 hours shall be allowed between work periods. The break shall include shift turnover time.
 4. Except during extended shutdown periods, the use of overtime shall be considered on an individual basis.
 5. Working hours do not include shift turnover time or absent time but do include all work associated activities (for example training).
 6. For shift operators (i.e., licensed Senior Operators, licensed Operators, and non-licensed Operators), the following working hour limits shall be followed and supersedes item number 2.

<u>TIME PERIOD</u>	<u>PLANT MANAGER OR ALTERNATES APPROVAL REQUIRED TO EXCEED, HOURS</u>	<u>LIMIT, HOURS⁽¹⁾</u>
24 hours	16	16
48 hours	24	28
one pay period	60	84
two pay periods	112	144
four pay periods	220	264
one calendar year	2400	2500

- (1) If this value is exceeded, the Plant Manager must report in writing to the Site Vice President citing the reason for exceedance and corrective actions taken.

6.20.3 Any exceedance of the working hour restrictions of 6.20.2 shall be authorized by the employing officer, or alternates as specified in administrative controls, for site personnel performing safety-related functions in accordance with established procedures and with documentation of the basis for granting the exceedance. Procedures will be provided such that overtime is monitored on a cumulative basis.

6.20 BASESSite Staff Working Hour Restrictions

Studies indicate that fatigue causes an individual's detection of visual signals to deteriorate markedly, the time it takes for a person to make a decision increases, and more errors are made. Further, fatigue results in personnel ignoring some signals because they develop their own subjective standards as to what is important, and as they become more fatigued, they ignore more signals. The objective of the work hour restrictions specified in this section is to assure that, to the extent practicable, personnel are not assigned to perform safety-related functions while in a fatigued condition. The controls will limit both continuous working hours for personnel performing safety-related functions and accumulated working hours during the year for shift operators. Additionally, the controls will ensure adequate rest breaks between work periods. The working hour restrictions are based on guidelines provided in NUREG/CR-4248.

"Alternate" as used in specification 6.20.3 refers to the positions identified in 6.20.3 or positions designated in administrative controls. "Employing officer" as used in specification 6.20.2 refers to the position ultimately responsible for scheduling an employee's time.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION SUPPORTING

AMENDMENT NOS. 142 AND 144 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 February 11, 1982 as amended on August 24, 1983, November 1, 1985, September 30, 1986, September 8, 1987 and September 7, 1988, 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 amend the Technical Specifications to reflect the addition of restrictions on the use of overtime for plant personnel who perform safety-related functions. The proposed amendment incorporates restrictions on working hours and administrative controls based on seven-day work periods for all site staff who perform safety-related functions and also based on periods of up to one calendar year for shift operators (licensed Senior Operators, licensed Operators and non-licensed Operators). The licensee states that the purpose of the amendment is to ensure control over excessive periods of continuous work or chronic overtime. The controls are intended to minimize the probability of personnel error and improve personnel attentiveness to safety-related activities.

2.0 EVALUATION

The following are the overtime limits as proposed for the licensee's amendment to the Peach Bottom Technical Specifications.

"Adequate staffing shall be maintained without undue use of overtime. The following overtime limits shall be followed:

1. An individual shall not be permitted to work more than 16 hours straight, excluding shift turnover time.
2. An individual shall not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.

3. A break of at least 8 hours shall be allowed between work periods. The break shall include shift turnover time.
4. Except during extended shutdown periods, the use of overtime shall be considered on an individual basis.
5. Working hours do not include shift turnover time or absent time but do include all work associated activities (for example training).
6. For shift operators (i.e., licensed Senior Operators, licensed Operators, and non-licensed operators), the following working hour limits shall be followed and supersedes item number 2:

<u>TIME PERIOD</u>	<u>PLANT MANAGER OR ALTERNATES APPROVAL REQUIRED TO EXCEED, HOURS</u>	<u>LIMIT, HOURS</u>
24 hours	16	16
48 hours	24	28
one pay period	60	84
two pay periods	112	144
four pay periods	220	264
one calendar year	2400	2500

- (1) If this value is exceeded, the Plant Manager must report in writing to the Site Vice President citing the reason for exceedance and corrective actions taken.

The overtime limits in items 1-6 above are the same as those called for in the current NRC policy as it appears in Generic Letters 82-12 and 82-16. Similar limits, in accordance with Generic Letter 82-12, were implemented by the licensee in response to an NRC confirmatory order dated March 14, 1983 regarding Post-TMI items as set forth in NUREG-0737.

In addition, the licensee has added overtime limits for extended periods of time, as indicated in the table above. Those additional limits apply to shift operators. Although the licensee notes in the "Bases" section of the amendment that the working hour restrictions are based on guidelines provided in NUREG/CR-4248, the licensee has actually adopted less conservative limits than the guidelines in that document. However, since the licensee is proposing to put into place administrative controls that exceed present NRC policy, the proposed limits are acceptable.

The amendment also requires that the Plant Manager or appropriate alternates must approve the exceedance of the hourly limitations in the first column of the table. If the limits in the second column are exceeded, the Plant Manager must report in writing to the site Vice President citing the reason for the exceedance and corrective actions must be taken. The licensee also states that procedures will be provided such that overtime is monitored on a cumulative basis. Approval to exceed limits in the first column can be granted on an individual basis only, except during extended shutdown periods. The licensee intends that this will ensure management attention in each case.

The licensee further states that management control and awareness of overtime working hour status will be kept at the senior level and will ensure that the need for potential corrective actions to limit the amount of overtime is brought to the attention of plant management.

The computation of working hours, for the purpose of this Technical Specification, excludes shift turnover time and sick, vacation, or other types of leave. All work activities, including training, are included as working hours.

The licensee has included limits in the amendment application on overtime hours that are within current NRC policy as stated in Generic Letters 82-12 and 82-16. The amendment also provides for a level of managerial control that is sufficiently high to ensure monitoring of trends in overtime work. The staff therefore, finds the amendment acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

These amendments involve a change to recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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 (53 FR 40998) on October 19, 1988 and consulted with the State of Pennsylvania. That notice superseded and replaced in its entirety the notice published in the Federal Register on January 29, 1986 (51 FR 3717). 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: Dolores S. Morisseau

Dated: March 22, 1989