

September 22, 1987

Dockets Nos. 50-277/278

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

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Dear Mr. Bauer:

SUBJECT: RADWASTE TREATMENT SYSTEM FOR CHEMICAL AND OILY WASTES
(TAC NOS. 64642 AND 64643)

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

The Commission has issued the enclosed Amendments Nos. 124 and 127 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 December 17, 1986.

This amendment makes changes to Technical Specification page 207 to reflect the addition of a radwaste treatment sub-system to treat and filter chemical and oily wastes and also to make related editorial and format changes.

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. 124 to DPR-44
2. Amendment No. 127 to DPR-56
3. Safety Evaluation

cc w/enclosures:
See next page

8709290181 870922
PDR ADOCK 05000277
P PDR

PDI-2/PA
MO'Brien
9/22/87

PDI-2/MPM
REMartin:ca
9/13/87

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9/18/87

PDI-2/D
WButler
9/22/87

WB



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

September 22, 1987

Dockets Nos. 50-277/278

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

SUBJECT: RADWASTE TREATMENT SYSTEM FOR CHEMICAL AND OILY WASTES
(TAC NOS. 64642 AND 64643)

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

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This amendment makes changes to Technical Specification page 207 to reflect the addition of a radwaste treatment sub-system to treat and filter chemical and oily wastes and also to make related editorial and format changes.

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,

A handwritten signature in cursive script that reads "Robert E. Martin".

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

Enclosures:

1. Amendment No. 124 to DPR-44
2. Amendment No. 127 to DPR-56
3. Safety Evaluation

cc w/enclosures:

See next page

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

Peach Bottom Atomic Power Station,
Units 2 and 3

cc:

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Pennsylvania Department of
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Power Plant Research Program
Department of Natural Resources
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Annapolis, Maryland 21401

Mr. Roland Fletcher
Department of Environment
201 West Preston Street
Baltimore, Maryland 21201

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 124, 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

/s/

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: ~~September~~ 22, 1987

PDI-2/CA
WButler
9/2/87

PDI-2/PM
REMartin:ca
9/3/87

QGC
Woodhead
9/8/87

PDI-2/D
WButler
9/22/87

WB



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. 124
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 December 17, 1986, 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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PDR ADOCK 05000277
P PDR

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 124, 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: ~~September~~ 22, 1987

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 127, 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

/s/

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: ~~September~~ 22, 1987

PDI-2/DA
MCD
9/12/87

PDI-2/PM
REMartin:ca
9/03/87

OGG
9/18/87

PDI-2/D
WButler
9/24/87

ATTACHMENT TO LICENSE AMENDMENT NO. 124

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

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

Remove

207

Insert

207

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

- may be used to estimate flow.
- f. If the requirements of 3.8.B.3.a, 3.8.B.3.b, 3.8.B.3.c, 3.8.B.3.d, or 3.8.E.3.e, cannot be met, suspend release of radioactive effluents via this pathway.
- g. With less than the minimum number of radioactive liquid radwaste monitors OPERABLE exert best efforts to return the instruments to OPERABLE status within 30 days and if unsuccessful explain in the next Semi-Annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
4. All liquid effluent releases at and beyond the SITE BOUNDARY shall be processed through one of the F.d waste subsystems or combinations of these subsystems listed below, prior to release*:
- (i) The Waste Collector Filter and Demineralizer
 - (ii) The Floor Drain Filter
 - (iii) The Fuel Pool Filter Demineralizer
 - (iv) The Chemical/Oily Waste Cleanup Subsystem

*Whenever the release(s) would cause the projected dose, when it is averaged over one month to exceed 0.12 mrem to the total body or 0.4 mrem to any organ (combined total from the two reactors at the site).

With liquid waste being discharged without treatment as required above, prepare and submit to the Commission within 21 working days pursuant to Specification 6.9.2, a Special Report which includes the following information:

- a. Explanation of why liquid radwaste was

- 4a. Doses due to liquid effluent releases to areas at and beyond the SITE BOUNDARY shall be projected once per month in accordance with the methodology and parameters in the ODCM.
- 4b. The waste collector filter and demineralizer and the Floor Drain Filter shall be demonstrated operable once per quarter, unless utilized to process liquid waste during the previous 13 weeks, by analyzing the liquid processed through the subsystem and determining that it meets the requirements of Specification 3.8.B.1. The fuel pool filter demineralizer and the chemical/oily-waste cleanup subsystem are exempt from this requirement because they are alternate treatment subsystems and/or are used only periodically for batch treatment of liquids which are analyzed prior to being released and are



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. 127
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 December 17, 1986, 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. 127, 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: ~~September~~ 22, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 127

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 areas are indicated by marginal lines.

Remove

207

Insert

207

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

- may be used to estimate flow.
- f. If the requirements of 3.8.B.3.a, 3.8.B.3.b, 3.8.B.3.c, 3.8.B.3.d, or 3.8.B.3.e, cannot be met, suspend release of radioactive effluents via this pathway.
- g. With less than the minimum number of radioactive liquid radwaste monitors OPERABLE exert best efforts to return the instruments to OPERABLE status within 30 days and if unsuccessful explain in the next Semi-Annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
4. All liquid effluent releases at and beyond the SITE BOUNDARY shall be processed through one of the Radwaste subsystems or combinations of these subsystems listed below, prior to release*:
- (i) The Waste Collector Filter and Demineralizer
 - (ii) The Floor Drain Filter
 - (iii) The Fuel Pool Filter Demineralizer
 - (iv) The Chemical/Oily Waste Cleanup Subsystem
- *Whenever the release(s) would cause the projected dose, when it is averaged over one month to exceed 0.12 mrem to the total body or 0.4 mrem to any organ (combined total from the two reactors at the site).
- With liquid waste being discharged without treatment as required above, prepare and submit to the Commission within 21 working days pursuant to Specification 6.9.2, a Special Report which includes the following information:
- a. Explanation of why liquid radwaste was
- 4a. Doses due to liquid effluent releases to areas at and beyond the SITE BOUNDARY shall be projected once per month in accordance with the methodology and parameters in the ODCM.
- 4b. The waste collector filter and demineralizer and the Floor Drain Filter shall be demonstrated operable once per quarter, unless utilized to process liquid waste during the previous 13 weeks, by analyzing the liquid processed through the subsystem and determining that it meets the requirements of Specification 3.8.B.1. The fuel pool filter demineralizer and the chemical/oily-waste cleanup subsystem are exempt from this requirement because they are alternate treatment subsystems and/or are used only periodically for batch treatment of liquids which are analyzed prior to being released and are

Amendment No. 104, 127



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION SUPPORTING

AMENDMENT NOS. 124 AND 127 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 December 17, 1986, 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. This amendment would revise a single page of the Technical Specifications (TSs) to reflect the addition of a radwaste treatment sub-system to treat and filter chemical and oily wastes and also to make related editorial and format changes.

2.0 EVALUATION

The licensee specifically requested that the Peach Bottom Units 2 and 3 Technical Specifications (TS) be amended to add a new liquid radwaste subsystem (chemical and oily waste treatment subsystem) to those other subsystems listed in TS Section 3.8.8.4 on page 207. In addition, the licensee proposed an exception for the new subsystem from periodic operability surveillance requirements and also to make a few minor editorial and format changes to the same TS section for clarification.

The Peach Bottom liquid radioactive waste treatment system, common to both units 2 and 3 consists of four collection subsystems:

- (1) The equipment drain subsystem with one 25,000 gallon capacity waste collection tank,
- (2) The floor drain subsystem with one 21,000 gallon capacity floor drain collection tank,
- (3) The chemical waste subsystem with one 5,000 capacity chemical waste tank, and
- (4) The laundry subsystem with two 1000 gallon capacity laundry drain tanks.

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PDR ADOCK 05000277
P PDR

In the proposed TS changes, the licensee requests the use of the existing chemical waste tank for storage of chemical/oily waste before treatment and the use of the existing laundry drain tanks for storage of processed chemical/oily waste prior to sampling and analysis for discharge via the existing common single discharge line to the circulating water system. The licensee stated during discussions with the staff that the laundry drain tanks are rarely used since the licensee utilizes an outside contractor for handling potentially contaminated laundry generated at Peach Bottom Units 2 and 3.

A filtration system using disposable activated carbon filters will be added between the existing chemical waste tank and the existing laundry drain tanks. The system is also provided with connections to accommodate use of a disposable demineralizer skid if needed. Thus, the new subsystem will consist of a chemical drain tank, disposable filters or demineralizers, and two laundry drain tanks to process chemical/oily radioactive waste.

The licensee stated in the referenced letter that the proposed chemical/oily waste subsystem will share the single common discharge line with other liquid radwaste subsystems. The common discharge line is equipped with two flow meters in parallel, a radiation monitor, and an automatic discharge isolation valve. The automatic discharge isolation valve closes if the liquid radwaste release rate, discharge canal dilution flow rate, or radioactivity concentrations are not within the preset values determined from the sample analysis.

The proposed TS changes are limited to the physical realignment of the sub-systems with the addition of the filters and do not affect the processing requirements prior to discharge specified in TS Section 3.8.8.4. The staff finds that the proposed realignment of the liquid radwaste subsystems (forming a new chemical/oily waste subsystem) does not affect the capability of the Peach Bottom Units 2 and 3 liquid radwaste system to meet the staff's acceptance criteria delineated in Section 11.2 of Standard Review Plan. Therefore, the staff finds the proposed changes to be acceptable.

The licensee also stated in the referenced letter that the new subsystem will not be used routinely but used only for periodic processing of batch waste on an as-needed basis. Therefore, the licensee requested an exception from quarterly operability test requirements as specified for other subsystems in TS Section 4.8.B.4b. The staff estimates that the average number of chemical/oily waste batches to be processed by the new sub-system will not exceed more than three batches per year. Thus, because the system is not in routine use, the staff concludes that the requested exception from quarterly operability tests is also acceptable.

In addition, the licensee also proposed the following editorial and description changes, and a correction to the TS's:

- (1) A new format is proposed to list the four liquid radwaste subsystems in tabular form for ease of identification rather than including them in the body of the paragraph as is presently written (Section 3.8.B.4 on page 207).
- (2) A new phrase is added in Section 3.8.B.4 on page 207 to read "...effluent releases at and beyond the SITE BOUNDARY..." to be consistent with the terminology used in Section 4.8.B.4a of the surveillance requirements.
- (3) Paragraph number 6.9.3 for Special Report Specification referenced in Section 3.8.B.4 on page 207 is corrected to paragraph 6.9.2. This is a correction of a previous oversight.

The staff finds the above editorial and description changes and the paragraph number correction to be acceptable.

On the basis of the above evaluation, the staff concludes that the proposed changes to the Peach Bottom Units 2 and 3 Technical Specifications concerning the new chemical/oily liquid radwaste system are in accordance with the staff's acceptance criteria delineated in Section 11.2 of the Standard Review Plan, and are, therefore, acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

These amendments involve a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. The 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. As noted below, the staff consulted with the Commonwealth of Pennsylvania on September 8, 1987. Two potential concerns were identified, one dealing with whether or not process sampling and post-accident sampling liquids were going to the floor drains and the other concern dealing with whether or not the proposed chemical/oily waste treatment subsystem should be excepted from quarterly surveillance testing requirements. The NRC Staff, the Commonwealth of Pennsylvania representative and the licensee discussed these matters orally on September 16, 1987. Utilizing updated FSAR Figure 9.2.1a, Revision 3, the licensee stated that the proposed amendment will have no significant effect on the handling of the inputs to the chemical waste tank since these liquids will now drain by gravity directly into the floor drain collector tank instead of collecting in the chemical waste tank and then being pumped into the floor drain collector tank. The licensee also emphasized the basis for their periodic surveillance testing exception by noting that operability of the system

is inherently demonstrated by the acceptability or lack thereof of the sampling which must be performed on each batch of chemical/oily waste effluent prior to disposal.

The Commonwealth of Pennsylvania representative found this information to be acceptable and indicated that there were no further concerns with the amendment. The NRC staff has found the proposed amendment to be acceptable as stated in the Evaluation above and has not identified any information which impacts its previous proposed determination of no significant hazards consideration.

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 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 (52 FR 23105) on June 17, 1987 and consulted with the Commonwealth of Pennsylvania. The Commonwealth of Pennsylvania identified several potential concerns which were resolved as discussed in Section 3.0 above. There were no other public 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: J. Lee

Dated: September 22, 1987