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Dockets Nos. 50-277
and 50-278

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

Dear Mr. Bauer:

SUBJECT: TECHNICAL SPECIFICATION AMENDMENTS TO PERMIT MODIFICATIONS OF CERTAIN PARTS OF THE RADIOLOGICAL EFFLUENT TECHNICAL SPECIFICATIONS (RETS)

The Commission has issued the enclosed Amendments Nos. 115 and 119 , 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 response to your application dated February 19, 1985, as amended by letter dated August 22, 1985.

The changes to the TSs permit certain modifications of the Radiological Effluent Technical Specifications (RETS) which were issued August 3, 1984, as Amendments Nos. 102 and 104 to Peach Bottom Units Nos. 2 and 3, respectively.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Original signed by

Gerald E. Gears, Project Manager
BWR Project Directorate #2
Division of BWR Licensing

Enclosures:
1. Amendment No. 115 to DPR-44
2. Amendment No. 119 to DPR-56
3. Safety Evaluation

cc w/enclosures:
See next page

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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. 115
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 19, 1985, as amended by letter dated August 22, 1985, 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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 115, 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

Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical Specifications

Date of Issuance: December 10, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 115

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 a vertical line indicating the area of change.

| Remove | Insert |
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| 206 | 206 |
| 211 | 211 |
| 214 | 214 |

| LIMITING CONDITIONS FOR OPERATION | SURVEILLANCE REQUIREMENTS |
|---|---|
| 3.8.B.3.d and 3.8.B.3.e, below.<br>c. The effluent control monitor shall be set in accordance with the methodology and parameters in the ODCM to alarm and automatically close the waste discharge valve prior to exceeding the limits specified in 3.8.B.1 above.<br>d. From and after the date that the gross activity monitor on the waste effluent line is made or found to be inoperable for any reason, effluent releases may continue only if best efforts are taken to make such monitor operable, provided that prior to initiating a release:<br>1. At least two independent samples of the tank's contents are analyzed, and<br>2. At least two technically qualified members of the Facility Staff independently verify the release rate calculation and discharge line valving.<br>e. From and after the date that the flow monitor on the waste effluent line is made or found to be inoperable for any reason, effluent releases via this pathway may continue only if best efforts are taken to make such monitor operable, provided that the flow rate is estimated at least once per 4 hours during actual releases. Pump performance curves | month and an instrument check shall be performed every day during release. Functional test shall demonstrate operability of the radwaste discharge automatic isolation valve, and control room annunciation if any of the following conditions exist:<br>1. Instrument indicates measured levels above the alarm/trip setpoint.<br>2. Instrument indicates an INOP failure.<br>3b. The liquid effluent flow monitor shall be calibrated every 12 months. Additionally, an instrument check shall be performed every day during release. |

| LIMITING CONDITIONS FOR OPERATION | SURVEILLANCE REQUIREMENTS |
|---|---|
| and one main stack noble gas monitor shall be operable and set to alarm in accordance with the methodology and parameters in the ODCM. From and after the date that both reactor building exhaust vent monitors or both main stack noble gas monitors are made or found to be inoperable for any reason, effluent releases via their respective pathway may continue provided at least two independent grab samples are taken at least once per 8 hrs. and these samples are analyzed for gross activity within 24 hours, and at least two technically qualified members of the facility staff independently verify the release rate calculations. | shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exist:<br>1. Instrument indicates measured levels above the alarm setpoint.<br>2. Instrument indicates a downscale failure.<br>Additionally, an instrument check shall be performed every day. |
| c. One reactor building exhaust vent iodine filter and one main stack iodine filter and one reactor building exhaust vent particulate filter and one main stack particulate filter with their respective flow rate monitors shall be operable. From and after the date that all iodine filters or all particulate filters for either the reactor building exhaust vent monitor or the main stack monitor are made or found to be inoperable for any reason, effluent releases via their respective pathway may | 4b. The reactor building exhaust vent and the main stack flow rate monitors shall be calibrated every 12 months. Additionally, an instrument check shall be performed every day.<br>4c. The reactor building exhaust vent and the main stack iodine and particulate sample flow rate monitors shall be calibrated every 12 months. Additionally, an instrument check shall be performed every day for the reactor building exhaust vent sample flow rate monitors, and every week for the main stack sample flow rate monitor.<br>4d. The main stack sample flow line Hi/Lo pressure switches shall be functionally tested every 6 months and calibrated every 18 months. |

| LIMITING CONDITIONS FOR OPERATION | SURVEILLANCE REQUIREMENTS |
|---|---|
| pursuant to Specification 6.9.3 a Special Report which includes the following information:<br>a. Explanation of why gaseous radwaste was being discharged without treatment, identification of any inoperable equipment or subsystems and the reason for its inoperability.<br>b. Action taken to restore the inoperable equipment to operable status.<br>c. Summary description of action taken to prevent a recurrence.<br><br>Reactor shutdown is not required. | |
| 6. The concentration of hydrogen downstream of the recombiners shall be limited to less than or equal to 2% by volume.<br>a. With the concentration of hydrogen downstream of the recombiner greater than 2% but less than or equal to 4% by volume, restore the concentration to within the limit within 48 hours.<br>b. With the concentration of hydrogen downstream of the recombiner greater than 4% by volume, an orderly reduction of power shall be initiated within one hour to bring the hydrogen downstream of the recombiner to less than or equal to 2% by volume.<br>c. Except as specified in 3.8.C.6.d, two hydrogen monitors downstream of the recombiners shall be operable during power operation. | 6a. An instrument check of the operation of the hydrogen monitors shall be performed once per day.<br><br>6b. The hydrogen monitors and associated alarms downstream of the recombiner shall be calibrated once per month using standard gas containing 0-4% hydrogen, balance nitrogen or air by volume as specified in the ODCM. |

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. 119
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 19, 1985, as amended by letter dated August 22, 1985, 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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 119, 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

Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 10, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 119

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 a vertical line indicating the area of change.

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| 211 | 211 |
| 214 | 214 |

| LIMITING CONDITIONS FOR OPERATION | SURVEILLANCE REQUIREMENTS |
|---|---|
| 3.8.B.3.d and 3.8.B.3.e, below.<br>c. The effluent control monitor shall be set in accordance with the methodology and parameters in the ODCM to alarm and automatically close the waste discharge valve prior to exceeding the limits specified in 3.8.B.1 above.<br>d. From and after the date that the gross activity monitor on the waste effluent line is made or found to be inoperable for any reason, effluent releases may continue only if best efforts are taken to make such monitor operable, provided that prior to initiating a release:<br>1. At least two independent samples of the tank's contents are analyzed, and<br>2. At least two technically qualified members of the Facility Staff independently verify the release rate calculation and discharge line valving.<br>e. From and after the date that the flow monitor on the waste effluent line is made or found to be inoperable for any reason, effluent releases via this pathway may continue only if best efforts are taken to make such monitor operable, provided that the flow rate is estimated at least once per 4 hours during actual releases. Pump performance curves | month and an instrument check shall be performed every day during release. Functional test shall demonstrate operability of the radwaste discharge automatic isolation valve, and control room annunciation if any of the following conditions exist:<br>1. Instrument indicates measured levels above the alarm/trip setpoint.<br>2. Instrument indicates an INOP failure.<br>3b. The liquid effluent flow monitor shall be calibrated every 12 months. Additionally, an instrument check shall be performed every day during release. |

| LIMITING CONDITIONS FOR OPERATION | SURVEILLANCE REQUIREMENTS |
|---|---|
| and one main stack noble gas monitor shall be operable and set to alarm in accordance with the methodology and parameters in the ODCM. From and after the date that both reactor building exhaust vent monitors or both main stack noble gas monitors are made or found to be inoperable for any reason, effluent releases via their respective pathway may continue provided at least two independent grab samples are taken at least once per 8 hrs. and these samples are analyzed for gross activity within 24 hours, and at least two technically qualified members of the facility staff independently verify the release rate calculations. | shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exist:<br>1. Instrument indicates measured levels above the alarm setpoint.<br>2. Instrument indicates a downscale failure.<br>Additionally, an instrument check shall be performed every day. |
| c. One reactor building exhaust vent iodine filter and one main stack iodine filter and one reactor building exhaust vent particulate filter and one main stack particulate filter with their respective flow rate monitors shall be operable. From and after the date that all iodine filters or all particulate filters for either the reactor building exhaust vent monitor or the main stack monitor are made or found to be inoperable for any reason, effluent releases via their respective pathway may | 4b. The reactor building exhaust vent and the main stack flow rate monitors shall be calibrated every 12 months. Additionally, an instrument check shall be performed every day.<br>4c. The reactor building exhaust vent and the main stack iodine and particulate sample flow rate monitors shall be calibrated every 12 months. Additionally, an instrument check shall be performed every day for the reactor building exhaust vent sample flow rate monitors, and every week for the main stack sample flow rate monitor.<br>4d. The main stack sample flow line Hi/Lo pressure switches shall be functionally tested every 6 months and calibrated every 18 months. |

| LIMITING CONDITIONS FOR OPERATION | SURVEILLANCE REQUIREMENTS |
|---|---|
| pursuant to Specification 6.9.3 a Special Report which includes the following information:<br>a. Explanation of why gaseous radwaste was being discharged without treatment, identification of any inoperable equipment or subsystems and the reason for its inoperability.<br>b. Action taken to restore the inoperable equipment to operable status.<br>c. Summary description of action taken to prevent a recurrence.<br><br>Reactor shutdown is not required. | |
| 6. The concentration of hydrogen downstream of the recombiners shall be limited to less than or equal to 2% by volume.<br>a. With the concentration of hydrogen downstream of the recombiner greater than 2% but less than or equal to 4% by volume, restore the concentration to within the limit within 48 hours.<br>b. With the concentration of hydrogen downstream of the recombiner greater than 4% by volume, an orderly reduction of power shall be initiated within one hour to bring the hydrogen downstream of the recombiner to less than or equal to 2% by volume.<br>c. Except as specified in 3.8.C.6.d, two hydrogen monitors downstream of the recombiners shall be operable during power operation. | 6a. An instrument check of the operation of the hydrogen monitors shall be performed once per day.<br><br>6b. The hydrogen monitors and associated alarms downstream of the recombiner shall be calibrated once per month using standard gas containing 0-4% hydrogen, balance nitrogen or air by volume as specified in the ODCM. |

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION SUPPORTING

AMENDMENTS NOS. 115 AND 119 TO FACILITY OPERATING LICENSES 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, UNITS NOS. 2 AND 3

DOCKETS NOS. 50-277 AND 50-278

## 1.0 INTRODUCTION

The licensee, Philadelphia Electric Company, in its submittal dated February 19, 1985, as amended by letter dated August 22, 1985, has proposed certain modifications to the Technical Specifications (TSs). The proposed changes are to eliminate an error in present TS requirements relating to radioactive liquid effluent monitoring instrumentation and to modify gaseous effluent monitoring TSs to optimize operation of certain equipment. The proposed changes implement technical changes and clarifications that reflect current plant configuration in line with NUREG-0473, "Standard Radiological Technical Specifications for BWRs," Revision 2, February 1, 1980.

## 2.0 EVALUATION

Three changes to the Radiological Effluent Technical Specifications (RETS), issued August 3, 1984, as Amendments Nos. 102 and 104 to Facility Operating Licenses Nos. DPR-44 and DPR-56, respectively, are proposed in this submittal.

(1) The current wording of TS Section 4.8.B.3.a.2 (Liquid Radwaste Effluents -Surveillance Requirements) requires, in part, that a functional test be performed once/month to demonstrate that a downscale failure of the radwaste liquid effluent radiation monitor will automatically isolate the radwaste discharge valve and actuate the downscale failure alarm in the control room. The licensee has stated that the radwaste liquid effluent rad monitor has two failure modes as follows: a downscale failure and a INOP (INOPERABLE) failure. A downscale failure occurs when the gross activity detected by the monitor decreases below a pre-set value. The INOP failure occurs when any one of the following conditions exists: (1) low voltage to the radwaste liquid effluent rad monitor exists, (2) radwaste liquid effluent rad monitor mode switch is not in the "operate" position, or (3) removal of any one of the plug-in modules in the radwaste liquid effluent rad monitor. Either failure mode (downscale or INOP) would actuate a common downscale/INOP alarm in the control room.

However, the licensee has indicated that the design of the radwaste liquid effluent rad monitor does not permit the automatic isolation on a downscale failure of the radwaste discharge valve. Upon actuation of

the common downscale/INOP alarm in the control room, the radwaste liquid effluent rad monitor front panel lights are checked to determine which failure mode (downscale or INOP) actuated the alarm. If the INOP light on the monitor front panel is lit, the radwaste discharge valve is verified to be closed and an investigation is initiated to determine the cause of the INOP failure. If the downscale light on the monitor front panel is lit, an investigation is initiated to determine the cause of the downscale failure. The radwaste discharge valve is not verified to be closed because the Peach Bottom design does not permit the automatic isolation of this valve on a downscale failure. The licensee has requested that the current TSs be revised to reflect these current design features. The word "downscale" in TS Section 4.8.B.3a.2 would be changed to "INOP".

The licensee has further stated that the proposed change is justified because a downscale alarm is provided to alert the operator to the downscale condition and TS Section 3.8.B.3.d permits liquid radwaste releases to continue when the liquid rad monitor experiences a failure provided that prior to each release, two independent liquid effluent samples are analyzed and two technically qualified members of the facility staff independently verify release rate calculations and discharge line valving.

The staff has reviewed the proposed wording change and finds that this substitution of wording is appropriate and conforms to the current plant configuration as well as conforming to the guidance provided by the staff in NUREG-0473. Therefore, we find that the above described change is acceptable.

(2) The licensee proposes to delete Section 4.8.C.6.c (Gaseous Effluents - Hydrogen Analyzers) which references, by error, only the older type recombiner hydrogen analyzers which were supplemented by newer helium-immune hydrogen analyzers prior to the effective date of the RETS. In place of Section 4.8.C.6.c, the licensee proposes to modify Section 4.8.C.6.b to include a range of gas concentrations required for calibrating both the older type recombiner hydrogen analyzers as well as the newer helium-immune analyzers. The specific gas concentrations for each instrument type would be placed in The Offsite Dose Calculation Manual (ODCM) by reference.

The surveillance calibration requirements currently addressed in Section 4.8.C.6.c would be placed in the revised Section 4.8.C.6.b by the proposed change. In addition, the newer helium-immune hydrogen analyzers calibration requirements, which by error, are not referenced in the current TSs, would now be referenced also in the revised Section 4.8.C.6.c. The specific gas concentrations needed for the calibration of each instrument type would be contained in the ODCM by reference. The staff in its guidance (NUREG-0473) permitted the placement of certain specific technical data in the ODCM by reference. The licensee's proposed placement of the specific gas calibration concentrations in the ODCM is in accordance with the staff's guidance. Therefore, we conclude

that the proposed change is acceptable because it does not affect existing TS requirements, and would add additional surveillance requirements, inadvertently omitted in a previous amendment.

(3) Upon implementation of the RETS, the licensee found that the daily instrument check of the main stack flow rate monitor was difficult because of the relative inaccessibility of the base of the main stack. The licensee proposes to replace this daily "physical" instrument check with a pressure-sensitive sample-system-operability monitor that would alarm in the main control room in the event of main stack sample flow trouble. In turn, the "physical" instrument check would be reduced to once a week. These proposed changes provide increased conservatism for this instrument surveillance, and we therefore find these changes acceptable.

In conclusion, we find that the above changes, as proposed, meet the intent of the NRC staff's model RETS for BWRs (NUREG-0473, Revision 2, February 1, 1980) and are, therefore, acceptable.

## 3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve changes in surveillance requirements. We have 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these 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 or environmental assessment need be prepared in connection with the issuance of these amendments.

## 4.0 CONCLUSION

We have 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: December 10, 1985

Principal Contributor: W. Meinke