



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

PECO ENERGY 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 2
FACILITY OPERATING LICENSE

License No. DPR-44
Amendment No. 1

1. The Atomic Energy Commission (the Commission) having found that:
 - A. The application for license filed by PECO Energy Company, formerly Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company, and Atlantic City Electric Company (the licensees) 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 and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Peach Bottom Atomic Power Station, Unit 2 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-37 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - D. There is reasonable assurance: (1) that the activities authorized by this amended operating license can be conducted without endangering the health and safety of the public, and (2) that such activities will be conducted in compliance with the rules and regulations of the Commission;
 - E. PECO Energy Company is technically qualified and the licensees are financially qualified to engage in the activities authorized by this amended operating license in accordance with the rules and regulations of the Commission;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this amended operating license will not be inimical to the common defense and security or to the health and safety of the public;

H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental costs and considering available alternatives, the issuance of Amendment No. 1 to Facility Operating License No. DPR-44 is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D have been satisfied; and

I. The receipt, possession, and use of ^{source,} by-product and special nuclear material as authorized by this license will be in accordance with the Commission's ^{40.32,} regulations in 10 CFR Parts 30, ⁴⁰ and 70, including 10 CFR Section 30.33, ⁴⁰ and 70.23 and 70.31.

2. Amendment No. 1 to Facility Operating License No. DPR-44 issued to the PECO Energy Company (PECO), formerly the Philadelphia Electric Company, Public Service Electric and Gas Company (PSE&G), Delmarva Power and Light Company (DP&LC), and Atlantic City Electric Company (ACEC), is hereby amended in its entirety to read as follows:

A. This amended license applies to the Peach Bottom Atomic Power Station, Unit 2, a single cycle, forced circulation, boiling water nuclear reactor and associated equipment (the facility), owned by the licensees and operated by PECO Energy Company. The facility is located in Peach Bottom, York County, Pennsylvania and is described in the "Final Safety Analysis Report" as supplemented and amended (~~Amendments 1 through 29~~) and the Environmental Report as supplemented and amended (~~Supplements 1 through 6~~).

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

- (1) PECO Energy Company, pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility and PSE&G, DP&LC, and ACEC to possess the facility at the designated location in Peach Bottom, York County, Pennsylvania in accordance with the procedures and limitations set forth in this license;
- (2) PECO Energy Company, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended, as of December 15, 1975;
- (3) PECO Energy Company, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) PECO Energy Company, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or instrument calibration or when associated with radioactive apparatus or components;

(5) PECO Energy Company, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear material as may be produced by operation of the facility.

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, ^{Section 40.41 of Part 40,} Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

(1) Maximum Power Level

PECO Energy Company is authorized to operate the Peach Bottom Atomic Power Station, Unit 2, at steady state reactor core power levels not to exceed 3458 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 210, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

The Surveillance Requirements (SRs) listed in the licensee's letter dated August 4, 1995 are not required to be performed immediately upon implementation of Amendment No. 210. The SRs listed in the licensee's letter dated August 4, 1995 shall be successfully demonstrated prior to the time and condition specified below for each:

- a) Those SRs listed as Category A SRs in the licensee's August 4, 1995 letter shall be completed within a period consistent with the implementation date for Amendment 210, the specified frequency for each SR and the allowance for SR 3.0.2;
- b) Those SRs listed as Category B SRs in the licensee's August 4, 1995 letter shall be completed within a period consistent with the last completion date for the related existing SRs, the specified frequency for each SR and the allowance of SR 3.0.2.

(3) ~~The licensees may perform modifications to the Low Pressure Coolant Injection System as described in the licensees' application for license amendment dated July 9, 1975. The licensees shall not operate the facility prior to receipt of the Commission's authorization.~~

³
(4) Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Peach Bottom Atomic Power Station, Units 2 and 3, Physical Security Plan," with revisions submitted through December 16, 1987; "Peach Bottom Atomic Power Station, Units 2 and 3 Plant Security Personnel Training and Qualification Plan," with revisions submitted through July 9, 1986; and "Peach Bottom Atomic Power Station, Units 2 and 3 Safeguards Contingency Plan," with revisions submitted through March 10, 1981. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

⁴
(5) The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility, and as approved in the NRC SER dated May 23, 1979 and Supplements dated August 14, September 15,

October 10 and November 24, 1980, and in the NRC SERs dated September 16, 1993 and August 24, 1994, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

3. This amended license is subject to the following conditions for the protection of the environment:

- A. Upon completion of the licensees' "smoke tests," the licensees shall release all procedures, data, and analysis bearing on the calculation of X/Q to the Regulatory Staff as soon as possible but no later than initial fuel loading for Peach Bottom Unit 3. Using the "smoke test" results to re-calculate X/Q and using the other assumptions previously used by the Regulatory Staff (or realistic refinements thereof), the Regulatory Staff shall re-calculate the potential radioiodine thyroid dose to a child via the milk pathway at the points of maximum concentration at or beyond the site boundary where dairy cows are present or could be pastured. If this calculated dose based on the combined operation of Peach Bottom Units 2 and 3 exceeds 15 mrem/year, then the licensees shall install for operation no later than the next refueling cycle for each unit the necessary equipment to reduce the projected dose to such levels.
- B. If the actual milk sample measurements taken at the nearby farms in accordance with the Technical Specifications, predict a dose to a child's thyroid, based on actual combined operation of Unit 2 and 3, that exceeds 15 mrem/year, licensees shall install for operation no later than the next refueling cycle for each unit the necessary equipment to reduce the projected dose to such levels.
- C.A. To the extent matters related to thermal discharges are treated therein, operation of Peach Bottom Atomic Power Station Unit No. 2 will be governed by NPDES Permit No. PA 0009733, as now in effect and as hereafter amended. Questions pertaining to conformance thereto shall be referred to and shall be determined by the NPDES Permit issuing or enforcement authority, as appropriate.
- D.B. In the event of any modification of the NPDES Permit related to thermal discharges or the establishment (or amendment) of alternative effluent limitations established pursuant to Section 316 of the Federal Water Pollution Control Act, the licensees shall inform the NRC and analyze any associated changes in or to the Station, its components, its operation or in the discharge of effluents therefrom. If such change would entail any modification to this license, or any Technical Specifications which are part of this license, or present an unreviewed safety question or involve an environmental impact different than analyzed in the Final Environmental Statement, the licensees shall file with the NRC, as applicable, an appropriate analysis of any such change on facility safety, and/or an analysis of any such change on the environmental impacts and on the overall cost-benefit balance for facility operation set forth in the Final Environmental Statement and a request for an amendment to the operating license, if required

by the Commission's regulations. As used in this Condition 3.^B(d), Final Environmental Statement means the NRC Staff Final Environmental Statement related to Operation of Peach Bottom Atomic Power Station Units Nos. 2 and 3 dated April 1973, as modified by (1) the Initial Decision of the Atomic Safety and Licensing Board dated September 14, 1973, (2) the Supplemental Initial Decision of the Atomic Safety and Licensing Board dated June 14, 1974, (3) the Decision of the Atomic Safety and Licensing Appeal Board dated July 5, 1974, (4) the Memorandum and Order of the Commission dated August 8, 1974, (5) any further modification resulting from further review by the Appeal Board and by the Commission, if any, and (6) any Environmental Impact Appraisal which has been or may be issued by the NRC since the FES was published in April 1973.

4. This license is effective as of the date of issuance and shall expire at midnight on August 8, 2013.

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by R. C. DeYoung, for

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Attachments:
Appendices A and B -
Technical Specifications

Date of Issuance: October 25, 1973



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

PECO ENERGY 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 3
FACILITY OPERATING LICENSE

License No. DPR-56

1. The Atomic Energy Commission (the Commission) having found that:
 - A. The application for license filed by PECO Energy Company, formerly Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company, and Atlantic City Electric Company (the licensees) 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 and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Peach Bottom Atomic Power Station, Unit 3 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-38 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - D. There is reasonable assurance: (1) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (2) that such activities will be conducted in compliance with the rules and regulations of the Commission;
 - E. PECO Energy Company is technically qualified and the licensees are financially qualified to engage in the activities authorized by this amended operating license in accordance with the rules and regulations of the Commission;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;

- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental costs and considering available alternatives, the issuance of Facility Operating License No. DPR-56 is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D have been satisfied; and
- I. The receipt, possession, and use of ^{source,} by-product and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70, including 10 CFR Section 30.33, 40.32, and 70.23 and 70.31.
2. Facility Operating License No. DPR-56 is hereby issued to the PECO Energy Company (PECO), formerly the Philadelphia Electric Company, Public Service Electric and Gas Company (PSE&G), Delmarva Power and Light Company (DP&LC), and Atlantic City Electric Company (ACEC), is hereby amended in its entirety to read as follows:
- A. This license applies to the Peach Bottom Atomic Power Station, Unit 3, a ~~single direct~~ cycle, forced circulation, boiling water nuclear reactor and associated equipment (the facility), owned by the licensees and operated by PECO Energy Company. The facility is located in Peach Bottom, York County, Pennsylvania and is described in the "Final Safety Analysis Report" as supplemented and amended ~~(Amendments 1 through 31)~~ and the Environmental Report as supplemented and amended ~~(Supplements 1 through 6)~~.
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
- (1) PECO Energy Company, pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility and PSE&G, DP&LC, and ACEC to possess the facility at the designated location in Peach Bottom, York County, Pennsylvania in accordance with the procedures and limitations set forth in this license;
 - (2) PECO Energy Company, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended, ~~as of December 15, 1975;~~
 - (3) PECO Energy Company, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (4) PECO Energy Company, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or instrument calibration or when associated with radioactive apparatus or components;

(5) PECO Energy Company, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear material as may be produced by operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

(1) Maximum Power Level

PECO Energy Company is authorized to operate the Peach Bottom Atomic Power Station, Unit 3, at steady state reactor core power levels not in excess of 3458 megawatt thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 214, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

The Surveillance Requirements (SRs) listed in the licensee's letter dated August 4, 1995 are not required to be performed immediately upon implementation of Amendment No. 214. The SRs listed in the licensee's letter dated August 4, 1995 shall be successfully demonstrated prior to the time and condition specified below for each:

- a) Those SRs listed as Category A SRs in the licensee's August 4, 1995 letter shall be completed within a period consistent with the implementation date for Amendment 214, the specified frequency for each SR and the allowance of SR 3.0.2;
- b) Those SRs listed as Category B SRs in the licensee's August 4, 1995 letter shall be completed within a period consistent with the last completion date for the related existing SRs, the specified frequency for each SR and the allowance of SR 3.0.2.

(3) Physical Protection

The license shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Peach Bottom Atomic Power Station, Units 2 and 3, Physical Security Plan," with revisions submitted through December 16, 1987; "Peach Bottom Atomic Power Station, Units 2 and 3 Plant Security Personnel Training and Qualification Plan," with revisions submitted through July 9, 1986; and "Peach Bottom Atomic Power Station, Units 2 and 3 Safeguards Contingency Plan," with revisions submitted through March 10, 1981. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

- (4) The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility, and as approved in the NRC SER dated May 23, 1979 and Supplements dated August 14, September 15, October 10 and November 24, 1980, and in the NRC SERs dated September 16, 1993 and August 24, 1994, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

3. This license is subject to the following conditions for the protection of the environment:

A. ~~If the actual milk sample measurements taken at the nearby farms in accordance with the Technical Specifications, predict a dose to a child's thyroid, based on actual combined operation of Unit 2 and 3, that exceeds 15 mrem/year, licensees shall install for operation no later than the next refueling cycle for each unit the necessary equipment to reduce the projected dose to such levels.~~

B.A. To the extent matters related to thermal discharges are treated therein, operation of Peach Bottom Atomic Power Station Unit 2³ will be governed by NPDES Permit No. PA 0009733, as now in effect and as hereafter amended. Questions pertaining to conformance thereto shall be referred to and shall be determined by the NPDES Permit issuing or enforcement authority, as appropriate.

C.B. In the event of any modification of the NPDES Permit related to thermal discharges or the establishment (or amendment) of alternative effluent limitations established pursuant to Section 316 of the Federal Water Pollution Control Act, the licensees shall inform the NRC and analyze any associated changes in or to the Station, its components, its operation or in the discharge of effluents therefrom. If such change would entail any modification to this license, or any technical specifications which are part of this license, or present an unreviewed safety question or involve an environmental impact different than analyzed in the Final Environmental Statement, the licensees shall file with the NRC, as applicable, an appropriate analysis of any such change on facility safety, and/or an analysis of any such change on the environmental impacts and on the overall cost-benefit balance for facility operation set forth in the Final Environmental Statement and a request for an amendment to the operating license, if required by the Commission's regulations. As used in this Condition 3.(d), Final Environmental Statement means the NRC Staff Final Environmental Statement related to Operation of Peach Bottom Atomic Power Station Units Nos. 2 and 3 dated April 1973, as modified by (1) the Initial Decision of the Atomic Safety and Licensing Board dated September 14, 1973, (2) the Supplemental Initial Decision of the Atomic Safety and Licensing Board dated June 14, 1974, (3) the Decision of the Atomic Safety and Licensing Appeal Board dated July 5, 1974, (4) the Memorandum and Order of the Commission dated August 8, 1974, (5) any further modification resulting from further review by the Appeal Board and by

the Commission, if any, and (6) any Environmental Impact Appraisal which has been or may be issued by the NRC since the FES was published in April 1973.

4. This license is effective as ^{of} the date of issuance and shall expire at midnight on July 2, 2014.

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by Roger Boyd, for .

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Attachments:

Amended pages to Appendices A and B
DPR-44 & DPR-56 Technical
Specifications

Date of Issuance: July 2, 1974