

EXELON GENERATION COMPANY, LLC  
PSEG NUCLEAR LLC  
DOCKET NO. 50-277  
PEACH BOTTOM ATOMIC POWER STATION, UNIT 2  
RENEWED FACILITY OPERATING LICENSE

Renewed License No. DPR-44

1. The U.S. Nuclear Regulatory Commission (the Commission) having previously made the findings set forth in License No. DPR-44 issued October 25, 1973, has now found that:
  - A. The application to renew License No. DPR-44 filed by Exelon Generation Company LLC (Exelon Generation Company) and PSEG Nuclear LLC (PSEG Nuclear)(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. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by this renewed license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for Peach Bottom Atomic Power Station, Unit No. 2, and that any changes made to the plant's current licensing basis in order to comply with 10 CFR 54.29(a) are in accord with the Act and the Commission's regulations;
  - 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 renewed 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. Exelon Generation Company is technically qualified and the licensees are financially qualified to engage in the activities authorized by this renewed 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 renewed 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 Commission concludes that the issuance of Renewed Operating License No. DPR-44 is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
  - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by the renewed license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70, including 10 CFR Sections 30.33, 40.32, and 70.23 and 70.31.
2. On the basis of the forgoing findings regarding this facility, Facility Operating License No. DPR-44, issued October 25, 1973, is superseded by Renewed Facility Operating License No. DPR-44, which is hereby issued to the Exelon Generation Company and PSEG Nuclear, licensees, to read as follows:
- A. This renewed 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 Exelon Generation Company. The facility is located partly in Peach Bottom Township, York County, partly in Drumore Township, Lancaster County, and partly in Fulton Township, Lancaster County in southeastern Pennsylvania and is described in the Final Safety Analysis Report as supplemented and amended and the Environmental Report as supplemented and amended.
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
    - (1) Exelon Generation 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 PSEG Nuclear 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) Exelon Generation 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;
    - (3) Exelon Generation 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) Exelon Generation 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) Exelon Generation 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 renewed 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, Section 50.54 of Part 50, and Section 70.32 of Part 70; all applicable provisions of the Act and 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

Exelon Generation Company is authorized to operate the Peach Bottom Atomic Power Station, Unit 2, at steady state reactor core power levels not in excess of 3514 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 247, are hereby incorporated in the license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

(3) Physical Protection

The Exelon Generation Company 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) Fire Protection

The Exelon Generation Company 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 Safety Evaluation Report (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 Exelon Generation Company 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.

(5) Public Service Electric & Gas Company (PSE&G) to PSEG Nuclear License Transfer Conditions

- (a) PSEG Nuclear shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application, the requirements of the Order Approving Transfer of License and Conforming Amendment, dated August 21, 2000, and the related Safety Evaluation dated February 16, 2000.
- (b) The decommissioning trust agreement shall provide that:
  - 1) The use of assets in both the qualified and nonqualified funds shall be limited to expenses related to decommissioning of the unit as defined by the NRC in its regulations and issuances, and as provided in the unit's license and any amendments thereto. However, upon completion of decommissioning, as defined above, the assets may be used for any purpose authorized by law.
  - 2) Investments in the securities or other obligations of PSE&G or affiliates thereof, or their successors or assigns, shall be prohibited. In addition, except for investments tied to market indexes or other non-nuclear-sector mutual funds, investments in any entity owning one or more nuclear power plants shall be prohibited.
  - 3) No disbursements or payments from the trust shall be made by the trustee until the trustee has first given the NRC 30 days notice of the payment. In addition, no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation.
  - 4) The trust agreement shall not be modified in any material respect without prior written notification to the Director, Office of Nuclear Reactor Regulation.
  - 5) The trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(3) of the Federal Energy Regulatory Commission's regulations.
- (c) PSEG Nuclear shall not take any action that would cause PSEG Power LLC or its parent companies to void, cancel, or diminish the commitment to fund an extended plant shutdown as represented in the application for approval of the transfer of this license from PSE&G to PSEG Nuclear.

(6) Exelon Generation Company shall provide to the Director of the Office of

Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from Exelon Generation Company to its direct or indirect parent, or to any other affiliated company, facilities for the production, transmission, or distribution of electric energy having a depreciated book value exceeding ten percent (10%) of Exelon Generation Company's consolidated net utility plant, as recorded on Exelon Generation Company's books of account.

- (7) Exelon Generation Company shall have decommissioning trust funds for Peach Bottom, Unit 2, in the following minimum amount, when Peach Bottom, Unit 2, is transferred to Exelon Generation Company:

Peach Bottom, Unit 2	\$71,250,231
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- (8) The decommissioning trust agreement for Peach Bottom, Unit 2, at the time the transfer of the unit to Exelon Generation Company is effected and thereafter, is subject to the following:
- (a) The decommissioning trust agreement must be in a form acceptable to the NRC.
  - (b) With respect to the decommissioning trust fund, investments in the securities or other obligations of Exelon Corporation or affiliates thereof, or their successors or assigns shall be prohibited. Except for investments tied to market indexes or other non-nuclear-sector mutual funds, investments in any entity owning one or more nuclear power plants shall be prohibited.
  - (c) The decommissioning trust agreement for Peach Bottom, Unit 2, must provide that no disbursements or payments from the trust shall be made by the trustee unless the trustee has first given the Director, Office of Nuclear Reactor Regulation, 30 days prior written notice of payment. The decommissioning trust agreement shall further contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the NRC.
  - (d) The decommissioning trust agreement must provide that the agreement cannot be amended in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.
  - (e) The appropriate section of the decommissioning trust agreement shall state that the trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(a)(3) of the Federal Energy Regulatory Commission's regulations.
- (9) Exelon Generation Company shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application for approval of the transfer of the Peach Bottom, Unit 2, license and the requirements of the Order approving the transfer, and consistent with the safety evaluation supporting the Order.

(10) Additional Conditions of the Renewed License

(a) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement, as revised on January 31, 2003, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4) following the issuance of this renewed license. Until that update is complete, the Exelon Generation Company may make changes to the programs described in the supplement without prior Commission approval, provided that the Exelon Generation Company evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

(b) Future Inspection Activities

The Exelon Generation Company Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on January 31, 2003, describes certain future inspection activities to be completed before the period of extended operation. The Exelon Generation Company shall complete these activities no later than August 8, 2013, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

(c) Integrated Surveillance Program

The Exelon Generation Company shall implement an NRC staff-approved reactor vessel integrated surveillance program for the extended period of operation which satisfies the requirements of 10 CFR Part 54. Such a program will be implemented through a staff-approved Boiling Water Reactor Vessel and Internals Project program or through a staff-approved plant-specific program. Before August 8, 2013, the licensee will notify the NRC of its decision to implement the integrated surveillance program or a plant-specific program, and provide the appropriate revisions to the Updated Final Safety Analysis Report Supplement summary descriptions of the vessel surveillance material testing program.

(d) Core Shroud Inspection and Evaluation Guidelines Program

The Exelon Generation Company shall implement an NRC staff-approved core shroud inspection and evaluation guidelines program for the extended period of operation which satisfies the requirements of 10 CFR Part 54. Such a program will be implemented through a staff-approved Boiling Water Reactor Vessel and Internals Project program or through a staff-approved plant-specific program. Before August 8, 2013, the licensee will notify the NRC of its decision to implement the core shroud inspection and evaluation guidelines program or a plant-specific program, and provide the appropriate revisions to the Updated Final Safety Analysis Report Supplement summary descriptions of the core shroud inspection and evaluation guidelines program.

3. This renewed license is subject to the following conditions for the protection of the environment:
- 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.
  - 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 Exelon Generation Company 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 require NRC approval pursuant to 10 CFR 50.59 or involve an environmental impact different than analyzed in the Final Environmental Statement, the Exelon Generation Company 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, Final Environmental Statement (FES) 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 renewed license is effective as of the date of issuance and shall expire at midnight on August 8, 2033.

FOR THE UNITED STATES NUCLEAR  
REGULATORY COMMISSION

/RA/

Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

Attachments:  
Appendices A and B  
Technical Specifications

Date of Issuance: May 7, 2003