

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

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION CORP.

OHIO EDISON COMPANY

THE TOLEDO EDISON COMPANY

DOCKET NO. 50-412

BEAVER VALLEY POWER STATION, UNIT 2

FACILITY OPERATING LICENSE

License No. NPF-73

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for license filed by FirstEnergy Nuclear Operating Company (FENOC)\* acting on its own behalf and as agent for FirstEnergy Nuclear Generation Corp., Ohio Edison Company, and The Toledo Edison Company (the licensees), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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 Beaver Valley Power Station, Unit 2 (the facility), has been substantially completed in conformity with Construction Permit No. CPPR-105 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
  - D. There is reasonable assurance: (i) that the activities authorized by this operating license 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 set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below);

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\*FENOC is authorized to act as agent for FirstEnergy Nuclear Generation Corp., Ohio Edison Company, and The Toledo Edison Company and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

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- E. FENOC is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
  - 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 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 and other costs and considering available alternatives, the issuance of this Facility Operating License No. NPF-73 is subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations, and all applicable requirements have been satisfied;
  - I. The receipt, possession and use of source, byproduct 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.
2. Based on the foregoing findings, review by the Nuclear Regulatory Commission at a meeting on July 8, 1987, and approval by the Commission on August 13, 1987, the License for Fuel Loading and Low Power Testing, License No. NPF-64, issued on May 28, 1987, is superseded by Facility Operating License NPF-73, hereby issued to FENOC, FirstEnergy Nuclear Generation Corp., Ohio Edison Company, and The Toledo Edison Company (the licensees) to read as follows:
- A. This amended license applies to the Beaver Valley Power Station, Unit 2, a pressurized water reactor and associated equipment (the facility), owned by FirstEnergy Nuclear Generation Corp. (owner), Ohio Edison Company (lessee), and The Toledo Edison Company (lessee) (collectively the licensees) and operated by FENOC. The facility is located on the licensees' site on the southern shore of the Ohio River in Beaver County, Pennsylvania, approximately 22 miles northwest of Pittsburgh and 5 miles east of East Liverpool, Ohio, and is described in FENOC's Final Safety Analysis Report, as supplemented and amended, and in its Environmental Report, as supplemented and amended;
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
    - (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, FENOC to possess, use, and operate the facility at the designated location in Beaver County, Pennsylvania, in accordance with the procedures and limitations set forth in this license;

- (2) Pursuant to the Act and 10 CFR Part 50, FirstEnergy Nuclear Generation Corp., Ohio Edison Company, and The Toledo Edison Company to possess the facility at the designated location in Beaver County, Pennsylvania, in accordance with the procedures and limitations set forth in the license;
- (3) Pursuant to the Act and 10 CFR Part 70, FENOC, 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;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FENOC to receive, possess, and use at any time any byproduct, source, and special nuclear material such 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;
- (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FENOC 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 other activity associated with radioactive apparatus or components;
- (6) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FENOC to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein.
- (7) (a) Ohio Edison Company and The Toledo Edison Company are authorized to transfer any portion of their respective leased interests in BVPS Unit 2 and a proportionate share of their leased interests in the BVPS common facilities to certain potential investors identified in their submittals of July 14, 16, 22 and 31, and September 14, 17 and 18, 1987, and at the same time to lease back from such purchasers such interest transferred in the BVPS Unit 2 facility. The term of the lease is for approximately 29-1/2 years subject to a right of renewal. Such sale and leaseback transactions are subject to the representations and conditions set forth in the aforementioned submittals. Specifically, a lessor and anyone else who may acquire an interest under these transactions are prohibited from exercising directly or indirectly any control over the license of BVPS Unit 2. For purposes of this condition the limitations in 10 CFR 50.81, as now in effect and as may be subsequently amended, are fully applicable to the lessor and any successor in interest to that lessor as long as the license for BVPS Unit 2 remains in effect; these financial

## 1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of nonradiological environmental values during operation of the Beaver Valley Power Station, Unit 2 (facility). The principal objectives of the EPP are as follows:

- (1) Verify that the facility is operated in an environmentally acceptable manner, as established by the Final Environmental Statement - Operating License Stage (FES-OL) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State, and local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES-OL (September 1985, NUREG-1094) which relate to water quality matters are regulated by way of the licensee's\* NPDES permit.

## 2.0 Environmental Protection Issues

In the FES-OL (NUREG-1094, September 1985), the staff considered the environmental impacts associated with the operation of the Beaver Valley Power Station, Unit 2. No aquatic/water quality, terrestrial, or noise issues were identified.

## 3.0 Consistency Requirements

### 3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP\*. Changes in station design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this Section.

Before engaging in additional construction or operational activities which may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological environmental effects are confined to the on-site areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain prior NRC approval. Such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

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\*"Licensee" refers to FirstEnergy Nuclear Operating Company, operator of the facility, and acting as agent for FirstEnergy Nuclear Generation Corp., Ohio Edison Company, and The Toledo Edison Company, owners of the facility.

APPENDIX D

ADDITIONAL CONDITIONS  
OPERATING LICENSE NO. NPF-73

FirstEnergy Nuclear Operating Company, FirstEnergy Nuclear Generation Corp., Ohio Edison Company, and The Toledo Edison Company shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
83	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated September 9, 1996, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from April 14, 1997
87	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated March 14, 1997, as supplemented July 29 and August 13, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from December 10, 1997
88	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated September 11, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 30 days from January 20, 1998
98	The licensee commits to perform visual acceptance examinations of sleeve welds; post weld heat treatment of sleeve welds; and the NRC-recommended inspections of repaired tubes as described in the licensee's application dated March 10, 1997, as supplemented July 28, 1997, September 17, 1997, April 30, 1998, and January 29, 1999, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from March 26, 1999

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FirstEnergy Nuclear Operating Company, FirstEnergy Nuclear Generation Corp., Ohio Edison Company, and The Toledo Edison Company shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
102	<p>The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these Technical Specification requirements to the appropriate documents as described in the licensee's application dated December 24, 1998, as supplemented June 15, June 17, and July 7, 1999, and evaluated in the staff's evaluation attached to this amendment.</p> <p>On the closing date(s) of the transfers to FENGenCo of their interests in Beaver Valley Power Station, Unit No. 2, Pennsylvania Power Company, The Cleveland Electric Illuminating Company, Ohio Edison Company, and The Toledo Edison Company shall transfer to FENGenCo all of each transferor's respective accumulated decommissioning funds for Beaver Valley Power Station, Unit No. 2, except for funds associated with the leased portions of Beaver Valley Power Station, Unit No. 2, and tender to FENGenCo additional amounts equal to remaining funds expected to be collected in 2005, as represented in the application dated June 1, 2005, but not yet collected by the time of closing. All of the funds shall be deposited in a separate external trust fund for the reactor in the same amount as received with respect to the unit to be segregated from other assets of FENGenCo and outside its administrative control, as required by NRC regulations, and FENGenCo shall take all necessary steps to ensure that this external trust fund is maintained in accordance with the requirements of the order approving the transfer of the license and consistent with the safety evaluation supporting the order and in accordance with the requirements of 10 CFR Section 50.75, "Reporting and recordkeeping for decommissioning planning."</p>	<p>The amendment shall be implemented within 60 days from August 30, 1999</p> <p>The amendment shall be implemented within 30 days from</p>

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FirstEnergy Nuclear Operating Company, FirstEnergy Nuclear Generation Corp., Ohio Edison Company, and The Toledo Edison Company shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
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	By the date of closing of the transfer of the ownership interests in Beaver Valley Power Station, Unit No. 2 from Pennsylvania Power Company to FENGenCo, FENGenCo shall obtain a parent company guarantee from FirstEnergy in an initial amount of at least \$80 million (in 2005 dollars) to provide additional decommissioning funding assurance regarding such ownership interests. Required funding levels shall be recalculated annually and, as necessary, FENGenCo shall either obtain appropriate adjustments to the parent company guarantee or otherwise provide any additional decommissioning funding assurance necessary for FENGenCo to meet NRC requirements under 10 CFR 50.75.	
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	The Support Agreements described in the applications dated May 18, 2005 (up to \$80 million), and June 1, 2005 (up to \$400 million), shall be effective consistent with the representations contained in the applications. FENGenCo shall take no action to cause FirstEnergy, or its successors and assigns, to void, cancel, or modify the Support Agreements without the prior written consent of the NRC staff, except, however, the \$80 million Support Agreement in connection with the transfer of the Pennsylvania Power Company interests may be revoked or rescinded if and when the \$400 million support agreement described in the June 1, 2005, application becomes effective. FENGenCo shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than ten days after any funds are provided to FENGenCo by FirstEnergy under either Support Agreement.	
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