

Mr. L. W. Myers  
Executive Vice President-Generation Group  
FirstEnergy Nuclear Operating Company  
Post Office Box 4  
Shippingport, PA 15077

December 3, 1999

TEMPLATE = NRA-058

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 - ISSUANCE OF CONFORMING AMENDMENTS RE: TRANSFER OF LICENSES FROM DUQUESNE LIGHT COMPANY TO PENNSYLVANIA POWER COMPANY AND FIRSTENERGY NUCLEAR OPERATING COMPANY (TAC NOS. MA5370 AND MA5371)

Dear Mr. Myers:

By Order dated September 30, 1999, the Nuclear Regulatory Commission (NRC) approved the transfer of Duquesne Light Company's (DLC) ownership interests in Beaver Valley Power Station, Units 1 and 2 (BVPS-1 and 2), to Pennsylvania Power Company (Penn Power), and transfer of DLC's operating authority under the licenses to FirstEnergy Nuclear Operating Company (FENOC) pursuant to Sections 50.80 and 50.90 of Title 10 of the Code of Federal Regulations. The Order was published in the Federal Register on October 7, 1999 (64 FR 54650). By letter dated November 2, 1999, FENOC notified the NRC that all required regulatory approvals of the transfers have been received. By letters dated November 17, and November 30, 1999, FENOC notified the NRC that the closing of the transfers would occur on December 2, 1999, and provided proof that the required insurance has been obtained. On December 2, 1999, DLC and FENOC notified the NRC that the closing of the transfer would be postponed until December 3, 1999. Your letters of November 2, November 17, November 30, and December 2, 1999, satisfied required conditions of the Order.

Accordingly, the Commission has issued the enclosed Amendment No. 226 to Facility Operating License No. DPR-66 and Amendment No. 104 to Facility Operating License No. NPF-73 for BVPS-1 and 2. These conforming amendments reflect the transfer of DLC's ownership interests in BVPS-1 and 2, to Penn Power, and transfer of DLC's operating authority under the licenses to FENOC. The safety evaluation supporting the conforming amendments was attached to the above mentioned Order, issued on September 30, 1999.

The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by:

Daniel S. Collins, Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosures: 1. Amendment No. 226 to DPR-66  
2. Amendment No. 104 to NPF-73

cc w/encls: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 3, 1999

Mr. L. W. Myers  
Executive Vice President-Generation Group  
FirstEnergy Nuclear Operating Company  
Post Office Box 4  
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 - ISSUANCE OF CONFORMING AMENDMENTS RE: TRANSFER OF LICENSES FROM DUQUESNE LIGHT COMPANY TO PENNSYLVANIA POWER COMPANY AND FIRSTENERGY NUCLEAR OPERATING COMPANY (TAC NOS. MA5370 AND MA5371)

Dear Mr. Myers:

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Accordingly, the Commission has issued the enclosed Amendment No. 226 to Facility Operating License No. DPR-66 and Amendment No. 104 to Facility Operating License No. NPF-73 for BVPS-1 and 2. These conforming amendments reflect the transfer of DLC's ownership interests in BVPS-1 and 2, to Penn Power, and transfer of DLC's operating authority under the licenses to FENOC. The safety evaluation supporting the conforming amendments was attached to the above mentioned Order, issued on September 30, 1999.

The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script, appearing to read "Daniel S. Collins".

Daniel S. Collins, Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosures: 1. Amendment No. 226 to DPR-66  
2. Amendment No. 104 to NPF-73

cc w/encls: See next page

Beaver Valley Power Station, Units 1 and 2

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Shaw, Pittman, Potts & Trowbridge  
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Washington, DC 20037

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Mark S. Ackerman, Manager (2 Copies)  
Beaver Valley Power Station  
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Shippingport, PA 15077

Commissioner Roy M. Smith  
West Virginia Department of Labor  
Building 3, Room 319  
Capitol Complex  
Charleston, WV 25305

Director, Utilities Department  
Public Utilities Commission  
180 East Broad Street  
Columbus, OH 43266-0573

Director, Pennsylvania Emergency  
Management Agency  
Post Office Box 3321  
Harrisburg, PA 17105-3321

Ohio EPA-DERR  
ATTN: Zack A. Clayton  
Post Office Box 1049  
Columbus, OH 43266-0149

Dr. Judith Johnsrud  
National Energy Committee  
Sierra Club  
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State College, PA 16803

Mr. L. W. Myers  
Executive Vice President - Generation  
Group  
First Energy Nuclear Operating Company  
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First Energy Nuclear Operating Company  
Beaver Valley Power Station  
PO Box 4  
Shippingport, PA 15077  
ATTN: Kevin L. Ostrowski, Division Vice  
President, Nuclear Operations Group  
and Plant Manager (BV-SOSB-7)

Bureau of Radiation Protection  
Pennsylvania Department of  
Environmental Protection  
ATTN: Michael P. Murphy  
Post Office Box 2063  
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Mayor of the Borough of  
Shippingport  
Post Office Box 3  
Shippingport, PA 15077

Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Resident Inspector  
U.S. Nuclear Regulatory Commission  
Post Office Box 298  
Shippingport, PA 15077

First Energy Nuclear Operating Company  
Beaver Valley Power Station  
PO Box 4  
Shippingport, PA 15077  
ATTN: F. von Ahn, Senior Vice President  
Nuclear Services (BV-A)

Mr. J. A. Hultz, Manager  
Projects & Support Services  
First Energy  
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Akron, OH 44308

First Energy Nuclear Operating Company  
Beaver Valley Power Station  
J. J. Maracek  
P. O. Box 4, BV-A  
Shippingport, PA 15077



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

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 226  
License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Duquesne Light Company and FirstEnergy Nuclear Operating Company (FENOC)<sup>1</sup> dated May 5, 1999, as supplemented June 22 and July 30, 1999, 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.

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<sup>1</sup> FENOC is authorized to act as agent for Ohio Edison Company and Pennsylvania Power Company.

2. Accordingly, Facility Operating License No. DPR-66 is hereby amended as indicated in the attachments hereto.
3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

Attachments: Changes to the License

Date of Issuance: December 3, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 226

FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Replace the following pages of the operating license with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

1  
2  
3  
4  
6  
6a

Insert

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6a

Replace the following pages of Appendix C with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

1  
2

Insert

1  
2



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

FIRSTENERGY NUCLEAR OPERATING COMPANY  
OHIO EDISON COMPANY  
PENNSYLVANIA POWER COMPANY

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

FACILITY OPERATING LICENSE

Amendment No. ~~A~~ 226  
License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) having found that:
  - A. The application for license filed by FirstEnergy Nuclear Operating Company (FENOC) acting on its own behalf and as agent for Ohio Edison Company, and Pennsylvania Power 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 Beaver Valley Power Station, Unit No. 1 (facility), has been substantially completed in conformity with Construction Permit No. CPPR-75 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: (i) that the activities authorized by this amended 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 rules and regulations of the Commission;
  - E. FENOC 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;

\* FENOC is authorized to act as agent for Ohio Edison Company and Pennsylvania Power Company, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- 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 and other costs and considering available alternatives, the issuance of Amendment No. 4 to Facility Operating License No. DPR-66 is in accordance with 10 CFR Part 51 (formerly Appendix D of 10 CFR Part 50) 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 this amended 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, 70.23, and 70.31.
2. Facility Operating License No. DPR-66 issued to FENOC, Ohio Edison Company, and Pennsylvania Power Company is hereby amended in its entirety to read as follows:
- A. This amended license applies to the Beaver Valley Power Station, Unit No. 1, a pressurized water nuclear reactor and associated equipment (the facility), owned by Ohio Edison Company and Pennsylvania Power Company, and operated by FENOC. The facility is located in Beaver County, Pennsylvania, on the southern shore of the Ohio River, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 1 through 21) and the Environmental Report as amended (Supplements I through 6).
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
    - (1) FENOC, 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 Ohio Edison Company, and Pennsylvania Power Company to possess the facility at the designated location in Beaver County, Pennsylvania in accordance with the procedures and limitations set forth in this amended license;
    - (2) FENOC, 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) FENOC, 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) FENOC, 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 associated with radioactive apparatus or components;
  - (5) FENOC, pursuant to the Act and 10 CFR Parts 30, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the 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; and 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 or incorporated below:
- (1) Maximum Power Level  
FENOC is authorized to operate the facility at a steady state reactor core power level of 2652 megawatts thermal.
  - (2) Technical Specifications  
The Technical Specifications contained in Appendix A, as revised through Amendment No. , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.
  - (3) Auxiliary River Water System  
(Deleted by Amendment No. 8)

(3) Less Than Three Loop Operation

FENOC shall not operate the reactor at power levels above P-7 (as defined in Table 3.3-1 of Specification 3.3.1.1 of the Technical Specifications, Appendix A) with less than three (3) reactor coolant loops in operation until safety analyses for less than three loop operation have been submitted by the licensees and approval for less than three loop operation at power levels above P-7 has been granted by the Commission by amendment of this license.

(4) Steam Generator Water Rise Rate

Deleted per License Amendment No. 24.

(5) Fire Protection Program

FENOC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report (UFSAR) for the facility, subject to the following provision: FENOC 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.

(6) Systems Integrity

FENOC shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
2. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

(7) Iodine Monitoring

FENOC shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel,
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

(8) Backup Method for Determining Subcooling Margin

FENOC shall implement a program which will ensure the capability to accurately monitor the Reactor Coolant System subcooling margin. This program shall include the following:

1. Training of personnel, and
2. Procedures for monitoring.

(9) Steam Generator Surveillance Interval Extension

The performance interval for the steam generator surveillance requirement identified in the licensee's request for surveillance interval extension dated November 11, 1998, shall be extended to coincide with the Cycle 13 refueling outage or the end of 500 effective full power days, whichever is sooner. This surveillance will not extend beyond June 15, 2000.

(10) Additional Conditions

The Additional Conditions contained in Appendix C, as revised through Amendment No. , are hereby incorporated into this license. FENOC shall operate the facility in accordance with the Additional Conditions.

2. D. Physical Protection

FENOC shall fully implement and maintain in effect all provisions of the following Commission approved documents, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). These approved documents consist of information withheld from public disclosure pursuant to 10 CFR 2.790(d):

- (1) "Beaver Valley Power Station, Unit No. 1, Physical Security Plan", Revision 1, dated October 31, 1977, as supplemented by Revision 2 dated May 15, 1978, Revision 3 dated February 21, 1979.
- (2) The NRC approved Safeguards Contingency Plan as transmitted by letter of March 22, 1980.
- (3) "Beaver Valley Power Station Guard Training and Qualification Plan", submitted by letter, dated August 16, 1979, as revised by letter dated September 26, 1980. This Plan shall be fully implemented in accordance with 10 CFR 73.55(b)(4), within 60 days of this approval by the Commission. All security personnel shall be qualified within two years of this approval.

E. All work and activities in connection with this project shall be performed pursuant to the provisions of the Commonwealth of Pennsylvania Clean Streams Acts of June 24, 1913, as amended and of June 22, 1937, as amended, and in accordance with all permits issued by the Department of Environmental Resources of the Commonwealth of Pennsylvania.

2. F. This amended license is effective as of the date of issuance and shall expire at midnight on January 29, 2016.

FOR THE NUCLEAR REGULATORY COMMISSION

**ORIGINAL SIGNED BY  
R. S. BOYD**

Roger S. Boyd, Director  
Division of Project Management  
Office of Nuclear Reactor Regulation

Date of Issuance: July 2, 1976

APPENDIX C

ADDITIONAL CONDITIONS  
OPERATING LICENSE NO. DPR-66

FirstEnergy Nuclear Operating Company, Ohio Edison Company, and Pennsylvania Power Company shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
202	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
208	The licensee commits to perform the post weld heat treatment of sleeve welds and the NRC-recommended inspections for repaired tubes as described in the licensee's application dated March 10, 1997, as supplemented July 28 and September 17, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from November 25, 1997
209	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
210	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

APPENDIX C

ADDITIONAL CONDITIONS  
OPERATING LICENSE NO. DPR-66

FirstEnergy Nuclear Operating Company, Ohio Edison Company, and Pennsylvania Power Company shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
225	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 safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from August 30, 1999



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

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

THE TOLEDO EDISON COMPANY

DOCKET NO. 50-412

BEAVER VALLEY POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 104  
License No. NPF-73


1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Duquesne Light Company and FirstEnergy Nuclear Operating Company (FENOC)<sup>1</sup> dated May 5, 1999, as supplemented June 22, and July 30, 1999, 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.

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<sup>1</sup> FENOC is authorized to act as agent for Ohio Edison Company, The Cleveland Electric Illuminating Company, The Toledo Edison Company, and Pennsylvania Power Company.

2. Accordingly, Facility Operating License No. NPF-73 is hereby amended as indicated in the attachments hereto.
3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

Attachments: Changes to the License

Date of Issuance: December 3, 1999



ATTACHMENT TO LICENSE AMENDMENT NO. 104

FACILITY OPERATING LICENSE NO. NPF-73

DOCKET NO. 50-412

Replace the following pages of the operating license with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

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3a  
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Insert

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Replace the following pages of Appendix B with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

Appendix B Cover Page  
1

Insert

Appendix B Cover Page  
1

Replace the following pages of Appendix D with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

1  
2

Insert

1  
2



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

FIRSTENERGY NUCLEAR OPERATING COMPANY  
PENNSYLVANIA POWER COMPANY  
OHIO EDISON COMPANY  
THE CLEVELAND ELECTRIC ILLUMINATING 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 Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating 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);

\* FENOC is authorized to act as agent for Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- 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, Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating 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 Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company 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, Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating 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) Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company are authorized to transfer any portion of their respective 13.74%, 41.88%, 24.47%, and 19.91% ownership interests in BVPS Unit 2 and a proportionate share of their ownership 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

transactions shall have no effect on the license for the BVPS Unit 2 facility throughout the term of the license.

- (b) Further, the licensees are also required to notify the NRC in writing prior to any change in: (i) the term or conditions of any lease agreements executed as part of these transactions; (ii) the BVPS Operating Agreement, (iii) the existing property insurance coverage for BVPS Unit 2, and (iv) any action by a lessor or others that may have adverse effect on the safe operation of the facility.

- C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations set forth in 10 CFR Chapter I and 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 or incorporated below:

(1) Maximum Power Level

FENOC is authorized to operate the facility at reactor core power levels not in excess of 2652 megawatts thermal (100 percent power) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. \_\_\_\_\_, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. FENOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(8) Detailed Control Room Design Review (DCRDR)

Deleted

(9) Safety Parameter Display System (SPDS)

Deleted

(10) Fire Protection Modifications (Section 9.5.1 of SER Supplement 6)

Deleted

(11) Additional Conditions

The Additional Conditions contained in Appendix D, as revised through Amendment No. , are hereby incorporated into this license. FENOC shall operate the facility in accordance with the Additional Conditions.

D. Exemptions

The following exemptions are authorized by law and will not endanger life or property or the common defense and security, and certain special circumstances are present. With the granting of these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- (1) The facility requires an exemption from the requirements of General Design Criterion (GDC) 4, Appendix A to 10 CFR 50. The staff has described in detail in Supplement 4 and Supplement 5 to the Safety Evaluation Report the technical basis and "special circumstances" associated with this exemption. The staff's environmental assessment was published on March 27, 1987 (52 FR 9979). Therefore, pursuant to 10 CFR 50.12(a)(1), 10 CFR 50.12(a)(2)(ii) and (iv), Beaver Valley Power Station, Unit 2 is exempt from the requirements of GDC 4, Appendix A to 10 CFR 50 with respect to the dynamic loading effects associated with the postulated pipe breaks described in detail in Section 3.6.3 of Supplement 4 to the Safety Evaluation Report. These dynamic loading effects include pipe whip, jet impingement, and break-associated dynamic transients. Specifically, this eliminates the need to install jet impingement barriers and pipe whip restraints associated with postulated pipe breaks in the pressurizer surge line, reactor coolant bypass system,

safety injection system, and residual heat removal system. This exemption will expire when the current GDC 4 rulemaking changes have been completed.

- (2) The facility requires an exemption from the requirements of 10 CFR 50, Appendix J, Section III.D.2(b)(ii). The justification of this exemption is contained in Section 6.2.6 of Supplement 5 to the Safety Evaluation Report and modified by a letter dated July 26, 1995. The staff's environmental assessment was published on May 12, 1987 (52 FR 17651) and on June 9, 1995 (60 FR 30611). Therefore, pursuant to 10 CFR 50.12(a)(1) and 10 CFR 50.12(a)(2)(ii) and (iii), Beaver Valley Power Station, Unit 2 is exempt from the quoted requirements and instead, is required to perform the overall air lock leak test at pressure  $P_a$  before establishing containment integrity if air lock maintenance has been performed that could affect the air lock sealing capability. Local leak rate testing at a pressure of not less than  $P_a$  may be substituted for an overall air lock test where the design permits.
- (3) The facility was previously granted an exemption from the criticality alarm requirements of 10 CFR 70.24 (see License No. SNM-1954) dated April 9, 1986, which granted this exemption). Beaver Valley Power Station, Unit 2 is hereby exempted from the criticality alarm system provisions of 10 CFR 70.24 so far as this section applies to the storage of fuel assemblies held under this license.

E. Physical Security

FENOC shall fully implement and maintain in effect all provisions of the physical security, guard training and qualification, and safeguards contingency plans previously approved by the Commission and all amendments and revisions to such plans made pursuant 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:

“Beaver Valley Power Station Security Plan,” with revisions submitted through April 15, 1987; “Beaver Valley Power Station Security Training and Qualification Plan,” with revisions submitted through April 15, 1987; and Beaver Valley Power Station Security Contingency Plan, “ with revisions submitted through February 19, 1987.

F. Fire Protection Program (Section 9.5.1 of SER Supplement 3)

FENOC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report through Amendment No. 17, and submittals dated May 18, May 20, May 21, June 24 and July 6, 1987, and as described in the Safety Evaluation Report dated October 1985, and Supplements 1 through 6, subject to the following provision:

FENOC 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.

G. Reporting to the Commission

DELETED

H. Financial Protection

The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

I. Expiration

This license is effective as of the date of issuance and shall expire at midnight on May 27, 2027.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY:

Thomas E. Murley, Director  
Office of Nuclear Reactor Regulation

Enclosures:

1. Appendix A - Technical Specifications (NUREG-1279)
2. Appendix B - Environmental Protection Plan

Date of Issuance: August 14, 1987



**APPENDIX B  
TO FACILITY OPERATING LICENSE NO. NPF-73  
BEAVER VALLEY POWER STATION  
UNIT 2**

**FIRSTENERGY NUCLEAR OPERATING COMPANY, ET AL  
DOCKET NO. 50-412**

**ENVIRONMENTAL PROTECTION PLAN  
(NONRADIOLOGICAL)**

**August 1987**

## 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 Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company, owners of the facility.

APPENDIX D

ADDITIONAL CONDITIONS  
OPERATING LICENSE NO. NPF-73

FirstEnergy Nuclear Operating Company, Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating 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

APPENDIX D

ADDITIONAL CONDITIONS  
OPERATING LICENSE NO. NPF-73

FirstEnergy Nuclear Operating Company, Pennsylvania Power Company, Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
102	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.	The amendment shall be implemented within 60 days from August 30, 1999