

July 19, 2006

Mr. James H. Lash  
Vice President  
FirstEnergy Nuclear Operating Company  
Beaver Valley Power Station  
P.O. Box 4  
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 (BVPS-1 AND 2) -  
ISSUANCE OF AMENDMENT REGARDING THE 8-PERCENT EXTENDED  
POWER UPRATE (TAC NOS. MC4645 AND MC4646)

Dear Mr. Lash:

The Commission has issued the enclosed Amendment No. 275 to Facility Operating License No. DPR-66 and Amendment No. 156 to Facility Operating License No. NPF-73 for the BVPS-1 and 2. These amendments consist of changes to the Facility Operating Licenses and the Technical Specifications (TSs) in response to your application dated October 4, 2004, as supplemented by letters dated February 23, May 26, June 14, July 8 and 28, August 26, September 6, October 7, 28, and 31, November 8, 18, and 21, and December 2, 6, 9, 16, and 30, 2005, and January 25, February 14 and 22, March 10 and 29, May 12, and July 6, 2006.

These amendments revise the Facility Operating Licenses and TSs to authorize an approximately 8-percent increase in the licensed rated thermal power from 2,689 megawatts thermal (MWt) to 2,900 MWt. This increase is considered an extended power uprate (EPU). Additionally, these amendments approve full implementation of an alternative source term in accordance with Title 10 of the *Code of Federal Regulations*, Section 50.67, and using Regulatory Guide 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors." The NRC also approved other TS changes which you requested, which are not directly related to the EPU, including deletion of the power range neutron-flux high-negative rate trip, removal of the boron injection tank boron concentration for BVPS-1, renaming the boron injection flow path for BVPS-1, addition of a footnote to Table 3.3-3 for BVPS-1, and correction of an inconsistency regarding a referenced permissive for BVPS-1.

In your letter dated February 22, 2006, you requested to withdraw certain changes to your application for BVPS-1, which had previously been approved in Amendment No. 273 dated February 9, 2006, as these changes were no longer necessary. Additionally, your requested change to delete the amendment number from paragraph 2.C(2) of each Facility Operating License so that number would be left blank for these and all future Amendments will not be evaluated as part of these amendments and will be the subject of a future licensing action.

J. Lash

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A copy of our safety evaluation is also enclosed. The Notice of Issuance is enclosed and is being forwarded to the Office of the *Federal Register* for publication.

Sincerely,

**/RA/**

Timothy G. Colburn, Senior Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosures:

1. Amendment No. 275 to DPR-66
2. Amendment No. 156 to NPF-73
3. Safety Evaluation
4. Notice of Issuance

cc w/encls: See next page

J. Lash

- 2 -

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Sincerely,

**/RA/**

Timothy G. Colburn, Senior Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

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1. Amendment No. 275 to DPR-66
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3. Safety Evaluation
4. Notice of Issuance

cc w/encls: See next page

Package No. ML061720274

Safety Evaluation No. ML061720376

ACCESSION NO. ML061720248

\*Input received. No substantive changes made.

|        |           |           |             |          |          |            |            |
|--------|-----------|-----------|-------------|----------|----------|------------|------------|
| OFFICE | LPLI-1/PM | LPLI-1/LA | AFPB/BC     | CSGB/BC  | CPNB/BC  | EQVA/BC    | CVIB/BC    |
| NAME   | TColburn  | SLittle   | SWeerakody* | LLund*   | TChan*   | DThatcher* | MMitchell* |
| DATE   | 7/13/06   | 7/13/06   | 06/09/05    | 09/08/05 | 08/03/05 | 11/15/05   | 12/28/05   |

|        |           |            |                |          |          |          |           |
|--------|-----------|------------|----------------|----------|----------|----------|-----------|
| OFFICE | EEEB/BC   | AADB/BC    | IHPB/BC(A)     | ACVB/BC  | APLA/BC  | ACVB/BC  | SBPB/BC   |
| NAME   | RJenkins* | MKotzalas* | SKlementowicz* | RDennig* | MRubin*  | RDennig* | DSolorio* |
| DATE   | 01/05/06  | 01/13/06   | 01/18/06       | 02/01/06 | 02/28/06 | 03/01/06 | 03/09/06  |

|        |          |          |             |           |           |           |          |
|--------|----------|----------|-------------|-----------|-----------|-----------|----------|
| OFFICE | EEMB/BC  | EICB/BC  | REBB/BC     | IOLB/BC   | SPWB/BC   | SPWB/BC   | TechEd   |
| NAME   | KManoly* | AHowe*   | RFranovich* | NO'Keefe* | JNakoski* | JNakoski* | HChang   |
| DATE   | 03/10/06 | 03/15/06 | 03/15/06    | 03/22/06  | 04/04/06  | 04/13/06  | 06/26/06 |

|        |          |           |          |         |
|--------|----------|-----------|----------|---------|
| OFFICE | OGC      | LPLI-1/BC | DORL/D   | NRR/D   |
| NAME   | JMoore   | RLaufer   | CHaney   | JDyer   |
| DATE   | 07/12/06 | 07/17/06  | 07/18/06 | 7/19/06 |

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| OGC            | RidsOgcRp              |
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| G. Hill (4)    |                        |
| R. Bellamy, RI | RidsRgn1MailCenter     |
| B. Singal      | DORL DPR               |

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION CORP.

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 275  
License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by FirstEnergy Nuclear Operating Company, et al. (the licensee), dated October 4, 2004, as supplemented by letters dated February 23, May 26, June 14, July 8 and 28, August 26, September 6, October 7, 28, and 31, November 8, 18, and 21, and December 2, 6, 9, 16, and 30, 2005, and January 25, February 14 and 22, March 10 and 29, May 12, and July 6, 2006, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications and license as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 275, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance. A phased approach to power uprate may be taken. Full implementation will be completed prior to startup from the fall 2007 refueling outage. Items (a) and (c) below shall be completed prior to increasing power above 2689 MWt. Completion of item (b) shall follow the schedule in 10 CFR 50.71(e). Appropriate plant modifications as described in the licensee's application and the NRC staff's safety evaluation dated July 19, 2006, shall be made prior to exceeding 2689 MWt. Implementation shall include: (a) applicable revisions to plant operating procedures and the completion of operator training for the phases of the proposed power uprate being implemented, (b) incorporation of licensing basis changes into the next revision of the Updated Final Safety Analysis Report required by 10 CFR 50.71(c), and (c) inclusion of the commitments, as described in the licensee's application, as supplemented, and the staff's safety evaluation dated July 19, 2006, in the licensee's commitment tracking program.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

J. E. Dyer, Director  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License  
and Technical Specifications

Date of Issuance: July 19, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 275

FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Replace the following page of the Facility Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove

3

Insert

3

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

Remove

VI

1-1

3/4 1-16

3/4 3-2

3/4 3-7

3/4 3-11

3/4 3-15

3/4 3-18

3/4 4-6

3/4 4-18

3/4 4-20

3/4 4-21

3/4 5-3

3/4 5-6

3/4 5-7

3/4 5-7a

3/4 7-1

3/4 7-2

3/4 7-4

3/4 7-7

3/4 7-8

Insert

VI

1-1

3/4 1-16

3/4 3-2

3/4 3-7

3/4 3-11

3/4 3-15

3/4 3-18

3/4 4-6

3/4 4-18

3/4 4-20

3/4 4-21

3/4 5-3

3/4 5-6

3/4 5-7

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3/4 7-1

3/4 7-2

3/4 7-4

3/4 7-7

3/4 7-8

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

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 156  
License No. NPF-73

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by FirstEnergy Nuclear Operating Company, et al. (the licensee), dated October 4, 2004, as supplemented by letters dated February 23, May 26, June 14, July 8 and 28, August 26, September 6, October 7, 28, and 31, November 8, 18, and 21, and December 2, 6, 9, 16, and 30, 2005, and January 25, February 14 and 22, March 10 and 29, May 12, and July 6, 2006, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.



2. Accordingly, the license is amended by changes to the Technical Specifications and license as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-73 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 156, 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.

3. This license amendment is effective as of the date of its issuance. A phased approach to power uprate may be taken except that BVPS-2 shall not increase power levels beyond its previously licensed power level of 2689 megawatts thermal until startup from the fall 2006 refueling outage. Full implementation will be completed prior to startup from the spring 2008 refueling outage. Items (a) and (c) below shall be completed prior to increasing power above 2689 MWt. Completion of item (b) shall follow the schedule in 10 CFR 50.71(e). Appropriate plant modifications as described in the licensee's application and the NRC staff's safety evaluation dated July 19, 2006, shall be made prior to exceeding 2689 MWt. Implementation shall include: (a) applicable revisions to plant operating procedures and the completion of operator training for the phases of the proposed power uprate being implemented, (b) incorporation of licensing basis changes into the next revision of the Updated Final Safety Analysis Report required by 10 CFR 50.71(c), and (c) inclusion of the commitments, as described in the licensee's application, as supplemented, and the staff's safety evaluation dated July 19, 2006, in the licensee's commitment tracking program.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

J. E. Dyer, Director  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License  
and Technical Specifications

Date of Issuance: July 19, 2006

ATTACHMENT TO LICENSE AMENDMENT NO.175

FACILITY OPERATING LICENSE NO. NPF-73

DOCKET NO. 50-412

Replace the following page of the Facility Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove

3a

Insert

3a

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

Remove

1-1

2-1

3/4 1-15

3/4 3-2

3/4 3-10

3/4 4-9

3/4 4-14a

3/4 4-14b

3/4 5-1

3/4 5-7

3/4 7-1

3/4 7-2

3/4 7-3

3/4 7-6

6-20

Insert

1-1

2-1

3/4 1-15

3/4 3-2

3/4 3-10

3/4 4-9

3/4 4-14a

3/4 4-14b

3/4 5-1

3/4 5-7

3/4 7-1

3/4 7-2

3/4 7-3

3/4 7-6

6-20

Beaver Valley Power Station, Unit Nos. 1 and 2

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Beaver Valley Power Station, Unit Nos. 1 and 2 (continued)

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