

**Peter P. Sena III**  
Site Vice President724-682-5234  
Fax: 724-643-8069October 24, 2008  
L-08-292

10 CFR 54.21(b)

ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001**SUBJECT:**

Beaver Valley Power Station, Unit Nos. 1 and 2  
BV-1 Docket No. 50-334, License No. DPR-66  
BV-2 Docket No. 50-412, License No. NPF-73  
License Renewal Application Amendment No. 29 (Annual Update) (TAC Nos. MD6593 and MD6594) and Revised License Renewal Application Boundary Drawing

Reference 1 provided the FirstEnergy Nuclear Operating Company (FENOC) License Renewal Application (LRA) for the Beaver Valley Power Station (BVPS). Each year following submittal of a license renewal application and at least 3 months before scheduled completion of the NRC review, 10 CFR 54.21(b) requires an amendment to the renewal application be submitted that identifies any change to the current licensing basis (CLB) of the facility that materially affects the contents of the license renewal application, including the FSAR supplement. This letter provides the amendment to the BVPS LRA required by 10 CFR 54.21(b).

The Attachment provides a summary of the CLB changes that materially affect the LRA. Enclosure A provides Amendment 29 to the BVPS License Renewal Application. Enclosure B provides a revised License Renewal Application Boundary Drawing.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Clifford I. Custer, Fleet License Renewal Project Manager, at 724-682-7139.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 24, 2008.

Sincerely,



Peter P. Sena III

A108  
NCR

Beaver Valley Power Station, Unit Nos. 1 and 2  
L-08-292  
Page 2

References:

1. FENOC Letter L-07-113, "License Renewal Application," August 27, 2007.
2. FENOC Letter L-08-212, "Reply to Request for Additional Information for the Review of the Beaver Valley Power Station, Units 1 and 2, License Renewal Application (TAC Nos. MD6593 and MD6594), and License Renewal Application Amendment No. 17," July 21, 2008

Attachment:

Current Licensing Basis (CLB) Changes that Materially Affect the Beaver Valley Power Station, Units 1 and 2, License Renewal Application

Enclosures:

- A. Amendment No. 29 to the BVPS License Renewal Application
- B. Revised BVPS License Renewal Application Boundary Drawing

cc: Mr. K. L. Howard, NRC DLR Project Manager  
Mr. S. J. Collins, NRC Region I Administrator

cc: w/o Attachment or Enclosures  
Mr. B. E. Holian, NRC DLR Director  
Mr. D. L. Werkheiser, NRC Senior Resident Inspector  
Ms. N. S. Morgan, NRC DORL Project Manager  
Mr. D. J. Allard, PA BRP/DEP Director  
Mr. L. E. Ryan, PA BRP/DEP

ATTACHMENT  
L-08-292

Current Licensing Basis (CLB) Changes that Materially Affect the  
Beaver Valley Power Station, Units 1 and 2, License Renewal Application,  
Page 1 of 1

1. In order to assist local manual operation of atmospheric steam dump valves credited for regulated events, FENOC installed manual air isolation valves and quick disconnect fittings in the air supply lines to the pneumatic valve operators for each Unit 1 atmospheric steam dump valve (ASDV). These valves will isolate the normal air vent paths and allow nitrogen supply bottles to be directly connected to the pneumatic valve operator through the quick disconnect fittings. FENOC also permanently staged nitrogen bottles in the Main Steam Valve Room along with the required tubing, regulators and fittings to connect the nitrogen supply to the quick disconnect fittings to assist the local operation of the ASDVs. The newly-added nitrogen tanks, valves, and tubing components, and the air supply tubing to the valve operators have been added to the scope of License Renewal for their support of the 10 CFR 54.4(a)(3) Main Steam System function: "Cools the Reactor Core via the RCS by removing decay heat using steam from the Steam Generators through the safety valves, atmospheric steam dump valves, and the residual heat release valve (FP and SBO)." LRA Table 2.3.4-7, Section 3.4.2.1.7, and Table 3.4.2-7 are revised to address these components. LR drawing 1-21-1 is revised to show the additional components that have been added to scope. The flexible hoses in the new nitrogen supply flow path shown on LR 1-21-1 are within the scope of License Renewal, but will be periodically replaced in accordance with LRA Appendix A, Table A.4-1, Item 21 (as amended in Reference 2), and are not subject to aging management review.
2. FENOC replaced the Reactor Vessel Internals System control rod guide tube support pins at Unit 1 and Unit 2. The replacements changed the support pin material from Alloy X-750 (nickel alloy) to Type 316 Stainless Steel to reduce the susceptibility of these components to stress corrosion cracking. LRA Table 3.1.2-2 (Reactor Vessel Internals) is revised to address the material change from nickel alloy to stainless steel. No changes to aging effects, program assignments, or NUREG-1801, "Generic Aging Lessons Learned (GALL) Report," comparisons result.

See Enclosure A to this letter for the revision to the BVPS LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawing.

## ENCLOSURE A

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

Letter L-08-292

**Amendment No. 29 to the  
BVPS License Renewal Application**

Page 1 of 6

**License Renewal Application  
Sections Affected**

Table 2.3.4-7

Table 3.1.2-2

Section 3.4.2.1.7

Table 3.4.2-7

The Enclosure identifies the correction by Affected License Renewal Application (LRA) Section, LRA Page No., and Affected Paragraph and Sentence. The count for the affected paragraph, sentence, bullet, etc. starts at the beginning of the affected Section or at the top of the affected page, as appropriate. Below each section the reason for the change is identified, and the sentence affected is printed in *italics* with deleted text ~~lined-out~~ and added text underlined.

<u>Affected LRA Section</u>	<u>LRA Page No.</u>	<u>Affected Paragraph and Sentence</u>
<b>Table 2.3.4-7</b>	<b>Page 2.3-149</b>	<b>New Row</b>

A new Component Type, "Tank (N2 supply)" is added to Table 2.3.4-7, "Main Steam System Components Subject to Aging Management Review," to address the aging management of the nitrogen tanks that are permanently staged in the Main Steam Valve Room to assist local operation of the atmospheric steam dump valves, with an Intended Function of "Pressure boundary". LRA Table 2.3.4-7 is revised to include:

<b><i>Component Type</i></b>	<b><i>Intended Function</i></b>
<u><i>Tank (N2 supply)</i></u>	<u><i>Pressure boundary</i></u>

**Affected Paragraph and Sentence**

**Affected LRA Section**

**LRA Page No.**

**Table 3.1.2-2**

**Page 3.1-102**

**Rows 108-112**

FENOC replaced the Reactor Vessel Internals System control rod guide tube support pins at Unit 1 and Unit 2. The replacements changed the support pin material from Alloy X-750 (nickel alloy) to Type 316 Stainless Steel to reduce the susceptibility of these components to stress corrosion cracking. Table 3.1.2-2, "Reactor Vessel, Vessel Internals, and Reactor Coolant System – Reactor Vessel Internals – Summary of Aging Management Evaluation," is revised to read:

Row No.	Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801 Volume 2 Item	Table 1 Item	Notes
108	RCCA guide tube assembly (support pin)	Structural/Functional support	<i>Stainless steel</i> <i>Nickel alloy</i>	Reactor coolant	Change in dimensions	PWR Vessel Internals (B.2.33)	IV.B2-27 (R-119)	3.1.1-33	A
109	RCCA guide tube assembly (support pin)	Structural/Functional support	<i>Stainless steel</i> <i>Nickel alloy</i>	Reactor coolant	Cracking	PWR Vessel Internals (B.2.33)	IV.B2-28 (R-118)	3.1.1-37	A
110	RCCA guide tube assembly (support pin)	Structural/Functional support	<i>Stainless steel</i> <i>Nickel alloy</i>	Reactor coolant	Cracking	Water Chemistry (B.2.42)	IV.B2-28 (R-118)	3.1.1-37	A
111	RCCA guide tube assembly (support pin)	Structural/Functional support	<i>Stainless steel</i> <i>Nickel alloy</i>	Reactor coolant	Cumulative fatigue damage	TLAA	IV.B2-31 (R-53)	3.1.1-05	A
112	RCCA guide tube assembly (support pin)	Structural/Functional support	<i>Stainless steel</i> <i>Nickel alloy</i>	Reactor coolant	Loss of material	Water Chemistry (B.2.42)	IV.B2-32 (RP-24)	3.1.1-83	A

<u>Affected LRA Section</u>	<u>LRA Page No.</u>	<u>Affected Paragraph and Sentence</u>
<b>Table 3.4.2.1.7</b>	<b>Page 3.4-10</b>	<b>Materials, New Bullet</b>
A new material, "Copper alloy >15% Zn", for components added to license renewal scope needs to be included in the "Materials" list of LRA Section 3.4.2.1.7, "Main Steam System." LRA Section 3.4.2.1.7, "Materials" list, is revised to read:		

*Main Steam System components are constructed of the following materials.*

- *Cast austenitic stainless steel*
- *Copper alloy >15% Zn*
- *Nickel alloy*
- *Stainless steel*
- *Steel*

<u>Affected LRA Section</u>	<u>LRA Page No.</u>	<u>Affected Paragraph and Sentence</u>
<b>Table 3.4.2.1.7</b>	<b>Page 3.4-10</b>	<b>Environment, New Bullets</b>
Two new environments, "Dried air" and "Gas", for components added to license renewal scope are added to the "Environment" list of LRA Section 3.4.2.1.7, "Main Steam System." LRA Section 3.4.2.1.7, "Environment" list, is revised to read:		

*Main Steam System components are exposed to the following environments.*

- *Air-indoor uncontrolled*
- *Air-outdoor*
- *Air with borated water leakage*
- *Dried air*
- *Gas*
- *Treated water*
- *Treated water >60°C (>140°F)*
- *Treated water >250°C (>482°F)*

**Affected Paragraph and Sentence**

**Affected LRA Section**

**LRA Page No.**

**Table 3.4.2-7**

**Page 3.4-141 through 154  
(as appropriate for alphabetical sort)**

**New Rows**

FENOC installed manual air isolation valves and quick disconnect fittings in the air supply lines to the pneumatic valve operators for each Unit 1 atmospheric steam dump valve (ASDV). These valves will isolate the normal air vent paths and allow nitrogen supply bottles to be directly connected to the pneumatic valve operator through the quick disconnect fittings. FENOC also permanently staged nitrogen bottles (tanks) in the Main Steam Valve Room along with the required tubing, regulators and fittings to connect the nitrogen supply to the quick disconnect fittings to assist the local operation of the ASDVs. The newly-added nitrogen tanks, valves, and tubing components, and the air supply tubing to the valve operators have been added to the scope of License Renewal. Table 3.4.2-7, "Steam and Power Conversion Systems – Main Steam System – Summary of Aging Management Evaluation," is revised to include the following additional rows:

<b>Component Type</b>	<b>Intended Function</b>	<b>Material</b>	<b>Environment</b>	<b>Aging Effect Requiring Management</b>	<b>Aging Management Program</b>	<b>NUREG-1801 Volume 2 Item</b>	<b>Table 1 Item</b>	<b>Notes</b>
<i><u>Tank (N2 supply)</u></i>	<i><u>Pressure boundary</u></i>	<i><u>Steel</u></i>	<i><u>Gas</u></i>	<i><u>None</u></i>	<i><u>None</u></i>	<i><u>VIII.I-15 (SP-4)</u></i>	<i><u>3.4.1-44</u></i>	<i><u>A</u></i>
<i><u>Tank (N2 supply)</u></i>	<i><u>Pressure boundary</u></i>	<i><u>Steel</u></i>	<i><u>Air - indoor uncontrolled-EXT</u></i>	<i><u>Loss of material</u></i>	<i><u>External Surfaces Monitoring (B.2.15)</u></i>	<i><u>VIII.H-7 (S-29)</u></i>	<i><u>3.4.1-28</u></i>	<i><u>A</u></i>
<i><u>Tank (N2 supply)</u></i>	<i><u>Pressure boundary</u></i>	<i><u>Steel</u></i>	<i><u>Air with borated water leakage-EXT</u></i>	<i><u>Loss of material</u></i>	<i><u>Boric Acid Corrosion (B.2.7)</u></i>	<i><u>VIII.H-9 (S-30)</u></i>	<i><u>3.4.1-38</u></i>	<i><u>A</u></i>

<b>Component Type</b>	<b>Intended Function</b>	<b>Material</b>	<b>Environment</b>	<b>Aging Effect Requiring Management</b>	<b>Aging Management Program</b>	<b>NUREG-1801 Volume 2 Item</b>	<b>Table 1 Item</b>	<b>Notes</b>
<u>Tubing</u>	<u>Pressure boundary</u>	<u>Stainless steel</u>	<u>Dried air</u>	<u>None</u>	<u>None</u>	<u>VII.J-18 (AP-20)</u>	<u>3.3.1-98</u>	<u>A</u>
<u>Tubing</u>	<u>Pressure boundary</u>	<u>Stainless steel</u>	<u>Gas</u>	<u>None</u>	<u>None</u>	<u>VIII.I-12 (SP-15)</u>	<u>3.4.1-44</u>	<u>A</u>
<u>Valve body</u>	<u>Pressure boundary</u>	<u>Copper alloy &gt;15% Zn</u>	<u>Gas</u>	<u>None</u>	<u>None</u>	<u>VIII.I-3 (SP-5)</u>	<u>3.4.1-44</u>	<u>A</u>
<u>Valve body</u>	<u>Pressure boundary</u>	<u>Copper alloy &gt;15% Zn</u>	<u>Air - indoor uncontrolled-EXT</u>	<u>None</u>	<u>None</u>	<u>VIII.I-2 (SP-6)</u>	<u>3.4.1-41</u>	<u>A</u>
<u>Valve body</u>	<u>Pressure boundary</u>	<u>Copper alloy &gt;15% Zn</u>	<u>Air with borated water leakage-EXT</u>	<u>Loss of Material</u>	<u>Boric Acid Corrosion (B.2.7)</u>	<u>VII.I-12 (AP-66)</u>	<u>3.3.1-88</u>	<u>A</u>
<u>Valve body</u>	<u>Pressure boundary</u>	<u>Stainless steel</u>	<u>Dried air</u>	<u>None</u>	<u>None</u>	<u>VII.J-18 (AP-20)</u>	<u>3.3.1-98</u>	<u>A</u>
<u>Valve body</u>	<u>Pressure boundary</u>	<u>Stainless steel</u>	<u>Gas</u>	<u>None</u>	<u>None</u>	<u>VIII.I-12 (SP-15)</u>	<u>3.4.1-44</u>	<u>A</u>

**ENCLOSURE B**

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

**Letter L-08-292**

**Revised BVPS License Renewal Application Boundary Drawing**

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Page 1 of 2

The following License Renewal Application Boundary Drawing  
is revised and is enclosed:

**LR Drawing 1-21-1    Revision 7**

**THIS PAGE IS AN  
OVERSIZED DRAWING OR  
FIGURE,  
THAT CAN BE VIEWED AT THE RECORD  
TITLED:**

**LR Drawing 1-21-1, Rev. 7  
“Main Steam System (MS)”**

**WITHIN THIS PACKAGE... OR  
BY SEARCHING USING THE**

**D-01X**