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Fax: 724-643-8069July 27, 2005  
L-05-127

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

**Subject: Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, License No. DPR-66  
Proposed Alternative to American Society of Mechanical Engineers Code  
Section XI Visual Examination Requirements Associated With Third Ten-  
Year Interval Inservice Inspection Program  
(Request No. BV3-IWE1-4)**

Pursuant to 10 CFR 50.55a(a)(3)(i), FirstEnergy Nuclear Operating Company (FENOC) hereby requests NRC approval to use the following alternative for the Beaver Valley Power Station (BVPS) Unit No. 1 third ten-year interval inservice inspection program.

The American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) year of record for the current interval is the 1992 Edition, 1992 Addenda. Paragraph IWE-5240, "Visual Examination," of Section XI of the ASME Code provides visual examination requirements for pressure retaining components typically performed during a pressure test. In lieu of these ASME Code requirements, this submittal is requesting to use alternative visual examinations prior to the pressure test.

The visual examinations are associated with the containment steel liner pressure test that will be performed as part of steam generator replacement project containment opening restoration. The proposed alternative provides an acceptable level of quality and safety. The details of the 10 CFR 50.55a request are enclosed.

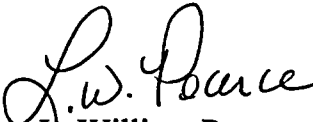
FENOC requests approval by January 2006 to support the BVPS Unit No. 1 maintenance and refueling outage, scheduled for mid-February 2006, that will include steam generator replacement.

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No new regulatory commitments are contained in this submittal. If there are any questions concerning this matter, please contact Mr. Henry L. Hegrat, Supervisor, Licensing at 330-315-6944.

Sincerely,



L. William Pearce

Enclosure: 10 CFR 50.55a Request - Proposed Alternative in Accordance with 10  
CFR 50.55a(a)(3)(i)

c: Mr. T. G. Colburn, NRR Senior Project Manager  
Mr. P. C. Cataldo, NRC Senior Resident Inspector  
Mr. S. J. Collins, NRC Region I Administrator  
Mr. D. A. Allard, Director BRP/DEP  
Mr. L. E. Ryan (BRP/DEP)

**ENCLOSURE**

**10 CFR 50.55a REQUEST**

**Proposed Alternative  
In Accordance With 10 CFR 50.55a(a)(3)(i)**

**Request No. BV3-IWE1-4**

10 CFR 50.55A REQUEST BV3-IWE1-4

Proposed Alternative  
In accordance with 10 CFR 50.55a(a)(3)(i)

Alternative Provides Acceptable Level of Quality and Safety

ASME Code Component Affected

The affected component for this request is the Beaver Valley Power Station (BVPS) Unit No. 1 containment steel liner, which is not an American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) pressure vessel. The containment steel liner is included, however, in the BVPS ASME Code Section XI Repair / Replacement Program.

Applicable Code Edition and Addenda

The 1992 Edition, 1992 Addenda of ASME Code Section XI, Article IWA 4000 for Repairs, Replacements, or Modifications to Class CC Primary Containment Components is applicable.

Applicable Code Requirement

The 1992 Edition, 1992 Addenda of ASME Code Section XI, Paragraph IWE-5240, "Visual Examination" states that:

"The requirements of IWA-5246 [sic] for visual examinations are applicable."

Reason for Request

A temporary construction opening in the BVPS Unit No. 1 containment will be created to support reactor vessel closure head and steam generator replacement. The requirement for visual examination is associated with the performance of a pressure test (Type A pneumatic leakage) in accordance with Paragraph IWE-5200 following restoration of the containment steel liner.

The 1992 Edition, 1992 Addenda of ASME Code Section XI does not contain Paragraph IWA-5246. Based on 1993 Errata, this is a typographical error and the intended reference is Paragraph IWA-5240.

Paragraph IWA-5240 addresses VT-2 visual examination requirements for pressure retaining components. VT-2 examinations typically apply to systems containing fluids and are performed during the pressure test. As such, VT-2 examinations require access to the external exposed surfaces of the repaired area (otherwise, access to floor areas / equipment surfaces located underneath the tested components) to look for evidence of leakage.

Access to the repaired area will not be available, nor will leakage be visible, when the 10 CFR 50, Appendix J, Type A pneumatic leakage test of the containment pressure retaining boundary is performed.

#### Proposed Alternative and Basis for Use

The proposed alternative to the VT-2 examinations is performance of VT-1 examinations of the welds and surrounding areas of the restored containment liner plate prior to the pressure test. Per Paragraph IWA-2211, VT-1 examinations are conducted to detect discontinuities and imperfections on the surfaces of components, including such conditions as cracks, wear, corrosion, or erosion.

The performance of VT-1 examinations prior to the pressure test is an acceptable alternative to performance of VT-2 examinations during the pressure test. The VT-1 examination of the area affected by the repair/replacement activity verifies there are no conditions that could affect future leak tightness of the containment vessel, such as cracks, wear, or corrosion (the portion of the liner plate surface involved is not subject to erosion mechanisms). The Type A test confirms pressure boundary integrity following restoration of the containment opening.

Therefore, performance of VT-1 examinations prior to a Type A test of the containment pressure boundary is an appropriate alternative to VT-2 examinations performed during the test as required by the 1992 Edition, 1992 Addenda of ASME Code Section XI, Paragraph IWE-5240, "Visual Examination." This alternative provides an acceptable level of quality and safety.

#### Duration of Proposed Alternative

The duration of the proposed alternative is through completion and approval of all testing associated with restoration of the containment opening created to support the BVPS Unit No. 1 reactor vessel closure head and/or steam generator replacement.