



FirstEnergy Nuclear Operating Company

Beaver Valley Power Station
P.O. Box 4
Shippingport, PA 15077

Peter P. Sena III
Site Vice President

724-682-5234
Fax: 724-643-8069

April 28, 2009

L-09-119

10 CFR 50.55a

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

SUBJECT:

Beaver Valley Power Station, Unit No. 1
BV-1 Docket No. 50-334, License No. DPR-66
10 CFR 50.55a Request Number BV1-IWE-2-2

In accordance with the provisions of 10 CFR 50.55a(a)(3)(i), the FirstEnergy Nuclear Operating Company (FENOC) hereby requests Nuclear Regulatory Commission (NRC) approval of a proposed alternative for implementation during the current Beaver Valley Power Station (BVPS) Unit No. 1 maintenance and refueling outage (1R19). FENOC proposes a visual examination (VT-1) of the containment liner pressure boundary repair weld as an alternative to the detailed visual examination requirement of ASME Code Section XI, sub-article IWE-5240 during the pressure test. The details of the alternative are described in the enclosure.

There are no regulatory commitments contained in this letter. FENOC requests approval of the proposed alternative by May 4, 2009 to support restart from BVPS Unit No. 1 maintenance and refueling outage (1R19). If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager – Fleet Licensing, at 330-761-6071.

Sincerely,

Peter P. Sena III

Enclosure:

10 CFR 50.55a Request Number BV1-IWE-2-2, Revision 0

cc: NRC Region I Administrator
NRC Senior Resident Inspector
NRC Project Manager
Director BRP/DEP
BRP/DEP Site Representative

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NRR

L-09-119 Enclosure

10CFR 50.55a Request Number BV1-IWE-2-2, Revision 0

Proposed Alternative provides an acceptable level of quality and safety
in accordance with 10 CFR 50.55a(a)(3)(i)

1.0 ASME CODE COMPONENTS AFFECTED

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

2.0 APPLICABLE CODE ADDITION AND ADDENDA

ASME Code Section XI, 2001 Edition, 2003 Addenda.

3.0 APPLICABLE CODE REQUIREMENTS

Article IWE-5000, "System Pressure Tests," sub-article IWE-5240, "Visual Examination," states:

During the pressure test required by IWE-5220, a detailed visual examination (IWE-2310) shall be performed on areas affected by repair/replacement activities.

4.0 REASON FOR REQUEST

During the 2009 maintenance and refueling outage for BVPS Unit No. 1, a scheduled examination of the containment liner plate identified a surface defect on the containment side of the painted surface of the containment liner plate. Subsequent surface cleaning revealed the surface defect as a through-wall hole in the containment liner plate. The shape of the through-wall hole was rectangular, approximately 1 inch long and 3/8 inch high. Repairs include removing the degraded portion of the liner plate and welding a replacement plate in place. Following the repairs a pneumatic leakage test is required in accordance with sub-article IWE-5221.

A local leak rate test is planned to be performed on the repaired area. The local leak rate test requires the use of a test rig. However, the test rig will make the areas affected by the repair activities inaccessible during the local leak rate test. The outside surface of the repair area is covered with concrete.

Relief is requested from the direct visual examination requirement specified in sub-article IWE-5240 during the leakage test required by sub-article IWE-5221.

5.0 PROPOSED ALTERNATIVE AND BASIS FOR USE

In accordance with 10 CFR 50.55a(a)(3)(i), FENOC requests approval of an alternative to the detailed visual examination requirement of ASME Code Section XI, sub-article IWE-5240 during the pressure test. FENOC proposes to perform a visual examination (VT-1) of the affected area both prior to and following the local leak rate test.

Visual examination (VT-1) prior to the performance of the local leak rate testing provides assurance that the affected area has been properly prepared for testing and no abnormalities exist in the affected area. The local leak rate test will provide an accurate and direct method of assuring the leak-tight integrity of the repair welds. Post leak rate test visual examination (VT-1) provides assurance that the tested area is free of abnormalities that may be exposed by the local leak rate test.

The required nondestructive examinations of the repair will provide additional assurance of the integrity of the repair welds. The proposed visual examination (VT-1) provides an adequate level of quality and safety prior to and following the local leak rate test even though the concrete side of the repair area is not accessible.

6.0 DURATION OF PROPOSED ALTERNATIVE

The proposed alternative is requested in support of containment liner repairs made during the current BVPS Unit No. 1 maintenance and refueling outage (1R19).