



FirstEnergy Nuclear Operating Company

Peter P. Sena III
Site Vice President

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

October 29, 2007
L-07-143

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

**Subject: Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
Pressurizer Weld Overlay Examination Report**

By letter dated March 8, 2007 (L-07-039), as supplemented by letter dated May 31, 2007 (L-07-073), the FirstEnergy Nuclear Operating Company (FENOC) requested Nuclear Regulatory Commission (NRC) approval of a proposed alternative to American Society of Mechanical Engineers (ASME) Code Section XI requirements, in support of structural weld overlays and related nondestructive examinations for the Beaver Valley Power Station (BVPS) Unit No. 1 pressurizer nozzles. The NRC provided authorization of the proposed alternative by letter dated September 17, 2007 (TAC No. MD4828).

In the March 8, 2007 letter, FENOC committed to provide a report summarizing the ultrasonic examination results of the weld overlays within 14 days of completion of the last ultrasonic examination of the 1R18 refueling outage.

During the BVPS Unit No. 1 Refueling Outage 1R18, FENOC completed the planned pressurizer structural weld overlay workscope, which included the application of structural weld overlays to the pressurizer spray nozzle, relief nozzle, and three safety nozzles. Following the application of the overlays, ultrasonic examinations were performed using techniques and personnel qualified in accordance with the Electric Power Research Institute (EPRI) Performance Demonstration Initiative (PDI) protocol. The final weld overlay ultrasonic examinations were completed on October 15, 2007 with no recordable indications identified in any of the weld overlays or required underlying base material.

No repairs were required to any of the weld overlays or base metal as a result of the final PDI ultrasonic examinations. However, during final liquid penetrant examination, two safety nozzle locations exhibited base metal indications that exceeded the acceptance criteria of NB-2500 in the 1/2" band of material adjacent to the overlay. These indications were characteristic of indications inherent to the cast nozzle material or were likely the result of surface preparation or inadequate cleaning. The indications were removed or reduced to an acceptable size by means of light surface buffing. Final liquid penetrant examination results were acceptable.

AOH
NR

Beaver Valley Power Station, Unit No. 1
Pressurizer Weld Overlay Examination Report
L-07-143
Page 2

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager - FENOC Fleet Licensing, at (330) 761-6071.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter P. Sena III". The signature is fluid and cursive, with a long horizontal stroke at the end.

Peter P. Sena III

cc: Ms. N. S. Morgan, NRR Project Manager
Mr. D. L. Werkheiser, 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)