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April 18, 2008
L-08-048

10 CFR 50.55a(g)(5)(iii)
10 CFR 2.390

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
Impractical American Society of Mechanical Engineers Code Section XI Weld Examination Requirement (Request No. 1-TYP-3-RC-P-1A-1)

Pursuant to 10 CFR 50.55a(g)(5)(iii), if the licensee has determined that conformance with certain code requirements is impractical for its facility, the licensee shall notify the Nuclear Regulatory Commission (NRC) and submit information to support the determinations. Pursuant to 10 CFR 50.55a(g)(5)(iv), the basis for this determination must be demonstrated to the satisfaction of the NRC not later than 12 months after the expiration of the ten-year inservice inspection interval. The Beaver Valley Power Station (BVPS) Unit No. 1 third ten-year inservice inspection interval ends on March 31, 2008.

Pursuant to 10 CFR 50.55a(g)(5)(iii), FirstEnergy Nuclear Operating Company (FENOC) hereby notifies the NRC that inservice examination of "essentially 100% of the length of the attachment weld" for reactor coolant pump welded attachment RC-P-1A-A-2, as specified by the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) Section XI, Table IWB-2500-1 has been determined to be impractical. This determination is based on experience obtained during the BVPS Unit No. 1 third ten-year inservice inspection interval.

Consistent with 10 CFR 50.55a(g)(4) requirements, as modified by ASME Code Case N-460, FENOC performed the weld examination during the third ten-year interval to the extent practical within the limitations of design, geometry and materials of construction, but with coverage less than essentially 100 percent. Therefore, it is requested that the NRC grant relief in accordance with 10 CFR 50.55a(g)(6) for the fourth ten-year interval. The details of the determinations of impracticality and the associated relief request are provided in Enclosure 1.

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Westinghouse Drawing 1098J73, "Outline" (Proprietary) is being submitted for the purpose of showing components (pump casing supports) that interfered with the required weld examination. Enclosure 2 presents Westinghouse letter LTR-NRC-08-10 to the NRC, that provides a proprietary copy of Westinghouse Drawing 1098J73.

As Drawing 1098J73 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. Enclosure 3 provides a Westinghouse Application for Withholding of the drawing with an accompanying affidavit AW-08-2386, Proprietary Information Notice, and Copyright Notice. The affidavit sets forth the basis on which the drawing may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the drawing which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or the proprietary aspects of the drawing or the supporting Westinghouse Affidavit should reference AW-08-2386 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance and Plant Licensing, Westinghouse Electric Company LLC, P. 0 . Box 355, Pittsburgh, PA 15230- 0355.

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,

Kevin L. Ostrowski for

Peter P. Sena III

Enclosures:

1. 10 CFR 50.55a Request Number 1-TYP-3-RC-P-1A-1, Revision 0
2. Westinghouse letter LTR-NRC-08-10, and Westinghouse Drawing 1098J73, "Outline" (Proprietary)
3. Westinghouse Application for Withholding, Accompanying Affidavit AW-08-2386, Proprietary Information Notice, and Copyright Notice

cc: Mr. S. J. Collins, NRC Region I Administrator
Mr. D. L. Werkheiser, NRC Senior Resident Inspector
Ms. N. S. Morgan, NRR Project Manager
Mr. D. J. Allard, Director BRP/DEP
Mr. L. E. Ryan (BRP/DEP)

Determination of Inservice Inspection Impracticality
In Accordance with 10 CFR 50.55a(g)(5)(iii)

1.0 ASME Code Components Affected

Reactor Coolant Pump welded attachment RC-P-1A-A-2 at Beaver Valley Power Station (BVPS) Unit No. 1

2.0 Applicable Code Edition And Addenda

American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) Section XI, 1989 Edition, no Addenda (third ten-year inservice inspection interval)

ASME Code Section XI, 2001 Edition, 2003 Addenda (fourth ten-year inservice inspection interval)

3.0 Applicable Code Requirements

The examination coverage requirements for weld RC-P-1A-A-2 applicable during the fourth ten-year inservice inspection interval are the same as those applicable during the third ten-year inservice inspection interval. ASME Code Case N-509, "Alternative Rules for the Selection and Examination of Class 1, 2 and 3 Integrally Welded Attachments, Section XI, Division 1," was applicable during the third inservice inspection interval and has been incorporated into the ASME Code noted above that is applicable during the fourth ten-year inservice inspection interval.

Table IWB-2500-1, "Examination Category B-K, Integral Attachments for Class 1 Vessels, Piping, Pumps and Valves," Note 2, specifies that the extent of examination includes essentially 100 percent of the length of the attachment weld.

ASME Code Case N-460, "Alternative Examination Coverage for Class 1 and Class 2 Welds," as an alternative approved for use by the NRC Staff, states that a reduction in examination coverage due to part geometry or interference by another component for any Class 1 and 2 weld is acceptable provided that the reduction is less than 10 percent (that is, greater than 90 percent coverage is obtained).

4.0 Impracticality of Compliance

Per Table IWB-2500-1, the sample size for Class 1 pump welded attachments is 10 percent of welded attachments associated with component supports selected for

examination under the 1990 Addenda, IWF-2510. The 1990 Addenda of IWF-2510 states that component and piping supports shall be examined in accordance with Table IWF-2500-1. Table IWF-2500-1 specifies that for multiple components other than piping, the supports of only one of the multiple components are required to be examined. There are three welded attachments associated with the support of each reactor coolant pump. Therefore the welded attachment sample requirement is 10 percent of three or one welded attachment. Reactor Coolant Pump welded attachment RC-P-1A-A-2 was examined.

Surface examination of reactor coolant pump welded attachment RC-P-1A-A-2 during the third ten-year inspection interval was limited by interference with the installed fasteners that connect the pump casing to the support structure, and the support structure itself. Approximately 80 percent of the required area was successfully examined during the third ten-year inspection interval. Examination of the remaining area is impractical, because it would require redesign and installation of new or modified supports, or disassembly of the support structure and installation of temporary support members, for the sole purpose of providing greater accessibility to the welds. Redesign and modification of supports is contrary to the intent of the code, and actions to install temporary supports along with actions to return a temporary support structure to the normal configuration creates the potential to cause damage to the structure and/or misalignment of support members.

A typical pump casing with welded attachment is shown in the figure on page 4. The pump support structure causing the interference is shown in Westinghouse Drawing 1098J73, provided in Enclosure 2.

Relief is being requested because the actual coverage experienced during the third interval indicates that 100 percent coverage during the fourth interval would be impractical.

5.0 Burden Caused by Compliance

Examination of the remaining weld area to obtain greater than 90 percent coverage would require redesign and installation of new or modified supports or disassembly of the support structure and installation of temporary support members. Redesign and modification of components to permit examination of the remaining area is contrary to the intent of the code. Disassembly of the support structure to permit the examination would require installation of temporary supports to ensure the structure remains stable under potential loads that could be encountered during refueling and maintenance outage conditions. Any disassembly of mechanical connections, partial disassembly of the support structure, and actions required to return the temporary support structure to the normal configuration, pose a risk of damage to the remaining structure and/or misalignment of support members.

6.0 Proposed Alternative And Basis For Use

As an alternative to the extent of examination specified in Table IWB-2500-1, Examination Category B-K-1, surface examination of welded attachment RC-P-1A-A-2 to the maximum extent practicable is proposed. Additionally, it is proposed that two other welded attachments on Reactor Coolant Pump 1RC-P-1A (attachments RC-P-1A-A-1 and RC-P-1A-A-3) be added to the examination scope. Surface examination of the two additional welded attachments is to be performed to the maximum extent practicable.

The surface examination of reactor coolant pump welded attachment RC-P-1A-A-2 was performed to the extent practical within the limitations of design, geometry and materials of construction (approximately 80 percent of the required weld area) during the third ten-year inspection interval, in October of 2007.

The two additional welded attachments (RC-P-1A-A-1, and RC-P-1A-A-3) were not required to be examined. However, these additional welded attachments were also examined to the extent practical (approximately 80 percent of the required weld area) in October of 2007. The two additional welded attachments were found to have the same examination coverage limitations as the original welded attachment. The examination results were satisfactory.

The proposed alternative examination adds two welded attachments to the examination scope that would not otherwise be examined. When compared to the specified examination requirement of 100 percent coverage of the length of one attachment weld, the additional weld examinations, along with the alternative examination of attachment RC-P-1A-A-2 welds, would provide adequate assurance of the continued reliability of these welds .

7.0 Duration of the Relief Request and Proposed Alternative

The proposed alternative is requested for the fourth ten-year inservice inspection interval at BVPS Unit No. 1.

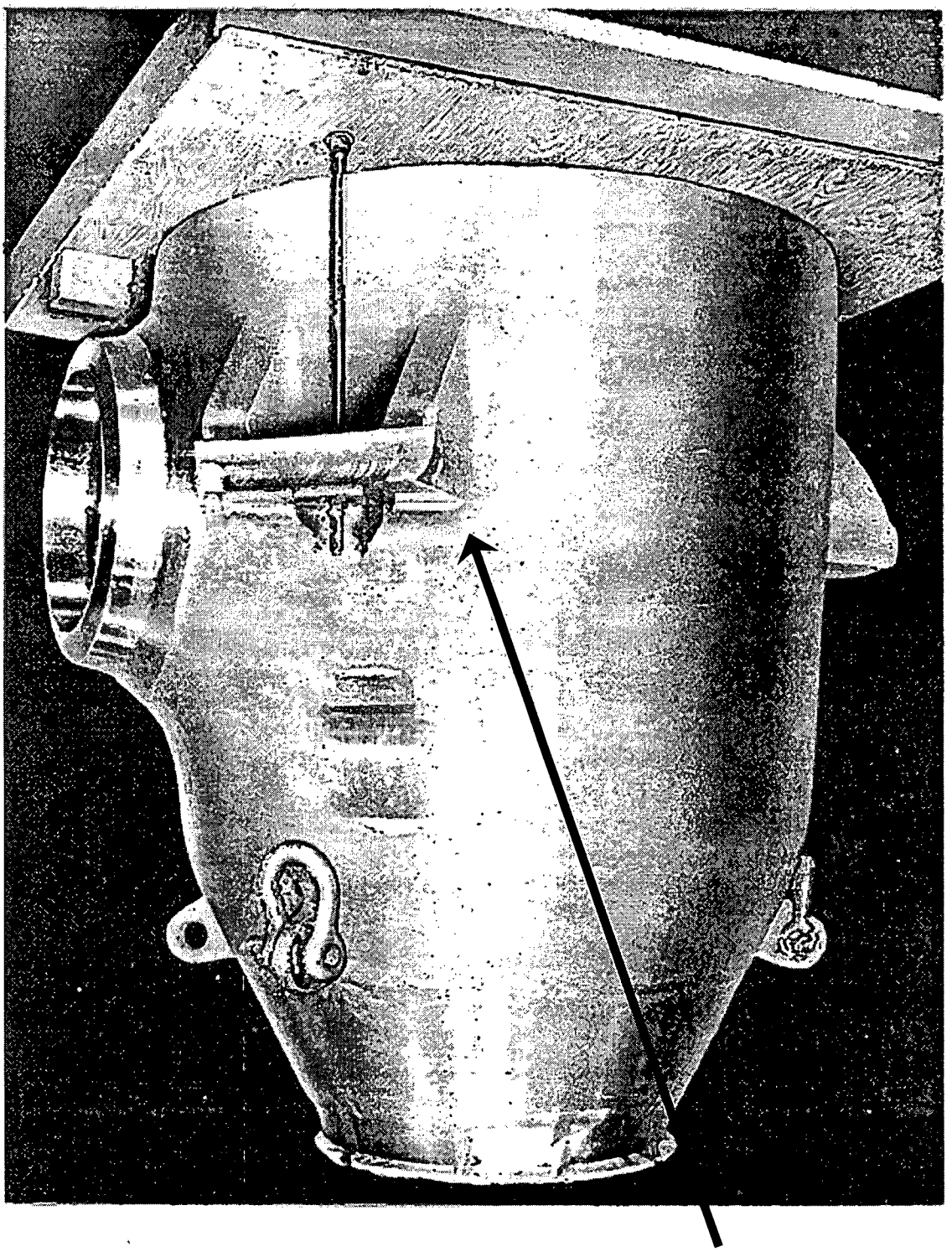

Figure: View Of Typical Pump Casing With Welded Attachment