

Peter P. Sena III
Site Vice President

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

September 24, 2008
L-08-207

10 CFR 50.55a(a)(3)(i)

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
Proposed Alternative to American Society of Mechanical Engineers Boiler and Pressure Vessel Code Section XI Inspection Period Extension Requirement
(Request No. 1-TYP-3-IWB-2412)

Pursuant to 10 CFR 50.55a(a)(3)(i), FirstEnergy Nuclear Operating Company (FENOC) requests approval of a proposed alternative to American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) Section XI, paragraph IWB-2412(b). Events leading to the request and a description of the proposed alternative are provided below.

The Eighteenth Refueling Outage Inservice Inspection Report for Beaver Valley Power Station Unit No. 1 (BVPS-1), submitted January 21, 2008, incorrectly states that all examinations requiring plant shutdown conditions have been completed for the current 10-year interval. The third of three scheduled inservice inspections of an area containing a flaw indication was inadvertently removed from the BVPS-1 third interval Inservice Inspection Plan and consequently was not performed. The missed inservice inspection has been addressed in accordance with the FENOC Corrective Action Program.

Plant shutdown conditions are required to access the area to be examined, and the next refueling outage when plant conditions would permit the examination is scheduled to begin 20 days after the end of the allowed inspection period. Therefore, pursuant to 10 CFR 50.55a(a)(3)(i), FENOC hereby requests Nuclear Regulatory Commission (NRC) approval of an alternative to extend the inspection period so that inservice inspection of the area containing the flaw indication can be performed during the BVPS-1 spring 2009 refueling outage (1R19). FENOC requests approval prior to March 31, 2009, which is the end of the one year inspection period extension permitted by ASME Code Section XI, paragraph IWB-2412(b).

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The proposed alternative provides an acceptable level of quality and safety and is described in detail in the enclosure.

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 – 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

Enclosure:

10 CFR 50.55a Request Number 1-TYP-3-IWB-2420, Revision 0

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. K. L. Howard, NRC DLR Project Manager
Mr. D. J. Allard, Director BRP/DEP
Mr. L. E. Ryan (BRP/DEP)

Proposed Alternative
in Accordance with 10 CFR 50.55a(a)(3)(i)

1.0 ASME Code Component Affected

Reactor Coolant System 'C' loop cold leg pipe weld DLW-LOOP3-7-S-02 at Beaver Valley Power Station, Unit No. 1 (BVPS-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

3.0 Applicable Code Requirement

Paragraph IWB-2420(b) states that if flaw indications are evaluated in accordance with IWB-3132.4, and the component qualifies as acceptable for continued service, the areas containing such flaw indications shall be reexamined during the next three inspection periods listed in the schedules of the inspection programs of IWB-2410.

Paragraph IWB-2412(b) states that the inspection period may be extended by as much as one year to enable an inspection to coincide with a plant outage.

4.0 Reason for Request

During a BVPS-1 inservice inspection of reactor coolant system piping performed in the spring 1996 refueling outage (1R11, March - May, 1996), an indication was identified on cold leg pipe weld DLW-LOOP3-7-S-02 that exceeded the ASME Code, Section XI, Subsection IWB-3500 acceptance criteria. Subsequently, an evaluation was performed to ensure that this indication would remain within ASME Code, Section XI, Appendix C evaluation acceptance standards. This evaluation concluded that the postulated flaw met the applicable requirements with significant margins of safety to the end of the service lifetime. The NRC concluded in the Safety Evaluation regarding the flaw indication in the reactor coolant system cold leg pipe weld, dated May 1, 1996 (Reference 7.1), that the reported flaw was acceptable for continued service until the end of the service lifetime provided the weld was reexamined during each of the next three inspection periods. Paragraph IWB-2420(b) also states that areas containing such flaw indications shall be reexamined during the next three inspection periods.

The successive weld examinations were performed during each of the two subsequent 40-month periods. However, the third successive examination was inadvertently deleted from the schedule during a program revision associated with the implementation of the risk-informed inservice inspection methodology, and was not performed within the third 40-month period, which ended on March 31, 2008. Implementation of the one year period extension permitted in ASME Code Section XI, paragraph IWB-2412(b), extends

the required completion date of this examination to March 31, 2009. Examination of this weld requires plant shutdown conditions. The next BVPS-1 refueling outage (1R19) is currently scheduled to begin April 20, 2009, twenty days after the end of the extended period.

5.0 Proposed Alternative and Basis for Use

The proposed alternative is to extend the third 40-month inspection period as necessary to enable the final successive examination on weld DLW-LOOP3-7-S-02 during the spring 2009 refueling outage (1R19), which is scheduled to begin 20 days after the 1 year inspection period extension permitted by paragraph IWB-2412(b). The examination would be performed during 1R19, when plant conditions allow access to this reactor coolant loop pipe weld.

The initial analytical evaluation of the identified flaw concluded that the indication was acceptable for further service without repair (Reference 7.2). A subsequent analytical evaluation of the flaw was performed recently, in association with BVPS-1 license renewal. This evaluation likewise concluded the reported flaw was acceptable for continued service through the end of the extended license period. The analytical evaluations are supported by the results of the two successive 40-month examinations that found no evidence of flaw growth. Based on the above, completion of the examination prior to startup from 1R19 would provide an acceptable level of quality and safety.

6.0 Duration of Proposed Alternative

The duration of the proposed alternative is from March 31, 2009 until the examination is performed during 1R19.

7.0 References

1. Letter from D. S. Brinkman, Senior Project Manager, Office of Nuclear Reactor Regulation, to J. E. Cross, Senior Vice President and Chief Nuclear Officer, Duquesne Light Company, Subject: "Evaluation of Flaw Indication in Reactor Coolant System (RCS) Cold Leg Pipe Weld, Beaver Valley Power Station, Unit No. 1 (BVPS-1) (TAC No. M95232)," dated May 1, 1996.
2. Letter from S. C. Jain, Division Vice President, Duquesne Light Company to U. S. Nuclear Regulatory Commission, Document Control Desk, Subject: "Beaver Valley Power Station, Unit No. 1, Docket No. 50-334, License No. DPR-66, Analysis of Flaw Indications: 1989 Edition of ASME XI, Article IWB-3640," dated April 23, 1996.