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L-00-021

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
Deferral of a Steam Generator Tube Pull During the BV-1 1R13 Outage

References:
1. Nuclear Energy Institute letter, "Steam Generator Degradation Specific Management Database, Addendum 3," David J. Modeen to Document Control Desk dated September 22, 1999.
2. NRC letter, "Industry Recommended Steam Generator Tube Pull Program," Jack R. Strosnider to David J. Modeen (NEI) dated January 31, 2000.

This letter requests NRC approval for deferral of a steam generator tube pull during the Beaver Valley Unit 1 (BV-1) Thirteenth Refueling Outage (1R13) which began on February 15, 2000. BV-1 previously committed to comply with the guidance of Generic Letter 95-05, Section 4.0 regarding a steam generator tube pull program. This guidance allowed for plant participation in an NRC endorsed industry sponsored tube pull program. By Reference 1, the industry submitted recommended requirements for pulling tubes for NRC endorsement. By Reference 2, the NRC provided a response to the proposed industry program which indicated NRC acceptance of several industry proposals. FirstEnergy Nuclear Operating Company (FENOC) requests NRC approval to implement one of the NRC accepted industry proposals during the BV-1 1R13 outage. Specifically, FENOC requests NRC approval for deferral of a steam generator tube pull during the BV-1 1R13 outage provided that results of the steam generator inspections do not reveal tube support plate (TSP) outside diameter stress corrosion cracking (ODSCC) indications greater than 3.0 volts. This request has been discussed by telecon with Mr. D. S. Collins and Mr. E. J. Sullivan of the NRC staff on February 7, 2000. Expedited NRC review of this matter is requested in order to support the BV-1 1R13 steam generator inspection activities which are scheduled to begin on February 26, 2000.

The following information provides the background of the BVPS commitment to the Generic Letter 95-05, Section 4.0 tube pull program, as well as the basis for the deferral.

A001

BV-1 Commitment to GL 95-05, Section 4.0

BV-1 submitted License Amendment Request 1A-229 dated December 7, 1995, which stated in the basis for the request that the Beaver Valley program for steam generator tube removal and examination would comply with the guidance of Section 4 of GL 95-05. This request was approved by BV-1 License Amendment No. 198 dated April 1, 1996.

Section 4.a of GL 95-05 states, in part, the following regarding the number and frequency of ongoing tube pulls:

> "On an ongoing basis, an additional (follow-up) pulled tube specimen with an objective of retrieving as many intersections as is practical (minimum of two intersections) should be obtained at the refueling outage following accumulation of 34 effective full power months of operation or at a maximum interval of three refueling outages, whichever is shorter, following a previous tube pull.
>
> Alternatively, the request to acquire pulled tube specimens may be met by participating in an industry sponsored tube pull program endorsed by the NRC that meets the objectives of this guidance."

Industry Recommended Tube Pull Program

The Nuclear Energy Institute, on behalf of the nuclear utility industry, submitted EPRI Report NP-7480-L, "EPRI SGDSM at TSPs Database," Addendum 3 (TR-113861) to the NRC via Reference 1 for the NRC's review and endorsement. Section 8.2 of this report describes the industry recommended requirements for pulling tubes. Section 8.2.3 specifically details the requirements for the number and frequency of tube pulls. For ongoing tube pulls the industry has established the following:

> "On an ongoing basis, an additional (follow-up) pulled tube specimen with an objective of retrieving as many intersections as is practical (minimum of two intersections) should be obtained at the refueling outage following accumulation of three operating cycles following the previous tube pull. However, if no pullable tube indications are found in this inspection that would satisfy the industry database target indications, the tube removal may be delayed (utility option) to the next planned inspection with the goal of obtaining indications satisfying the database target. The tube pulls may not be delayed more than one planned outage following the required time for an additional pulled tube specimen. Consequently, the maximum interval between tube removals is four operating cycles to provide a periodic confirmation of crack morphology."

The target numbers for pulled tube intersections are provided in Table 8-3 of the subject EPRI report. The Table 8-3 results show that no additional data is needed in the ≤ 1.0, $> 1.0 - 2.0$, and $> 2.0 - 3.0$ volt bins for 7/8 inch tubing.

BV-1 Basis for Deferment of Tube Pull During 1R13

The current GL 95-05 guidance for ongoing tube pulls, without NRC endorsement of the industry recommended program would require BV-1 to remove steam generator tube specimens during the 1R13 outage which began on February 15, 2000. The industry recommended program discussed above (Section 8.2.3) would allow for deferment of tube pulls if no pullable tube indications are found during an inspection that would satisfy the industry database target indications. The highest TSP ODSCC voltage call during the last BV-1 steam generator inspections (1R12 outage) was 2.5 volts. If similar results are obtained during the steam generator inspections in 1R13, then acquiring additional tube pull specimens would provide very little value to the industry database.

By Reference 2, the NRC provided a response to the proposed industry program which indicated NRC acceptance of several industry proposals in Reference 1 including Section 8.2.3 discussed above.

FENOC requests NRC approval to implement the industry guidance of Section 8.2.3 for the BV-1 1R13 outage. Implementation of this guidance would preclude the expenditure of significant man rem of exposure to steam generator inspection and repair personnel to obtain tube pull specimens with TSP ODSCC indications of 3.0 volts or less.

FENOC recognizes that the NRC and the industry are pursuing resolution of the following concerns with the industry guidance provided in Reference 1 in the following areas (Note: These concerns are not related to Section 8.2.3 of the industry proposal):

1. waiving the tube pull requirements for a plant's last scheduled outage before steam generator replacement.
2. not performing leak tests on small indications (< 1.5 volt for 3/4" tubing and < 2.5 volt for 7/8" tubing) when field and post NDE data clearly show crack depths not greater than 85%.

The first concern is not applicable to BV-1 since tube pulls to implement GL 95-05 have already been performed. In addition, even with the deferment of the tube pull in the 1R13 outage, the tube pull must occur during the 1R14 outage since BV-1 steam generator replacement is not scheduled for the 1R15 outage.

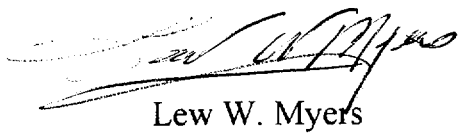
With regards to the second concern, BV-1 will continue to follow the GL 95-05 guidance for the examination and testing requirements on removed tube intersections.

Conclusion

In conclusion, FENOC requests NRC approval for deferral of a steam generator tube pull during the upcoming BV-1 1R13 outage provided that results of the steam generator inspections do not reveal TSP ODSCC indications greater than 3.0 volts. This deferral applies only to BV-1 1R13 outage, which began on February 15, 2000. BV-1 intends to continue to participate in an NRC endorsed industry tube pull program as discussed in GL 95-05, Section 4.a. Expedited NRC review of this matter is requested in order to support the BV-1 1R13 steam generator inspection activities which are scheduled to begin on February 26, 2000.

If there are any questions concerning this request, please contact Mr. J. J. Maracek at (412) 393-5232.

Sincerely,



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