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Fax: 724-643-8069November 5, 2004
L-04-148U. 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
1R16 Steam Generator C-3 Report

In accordance with Beaver Valley Power Station Unit No. 1 Technical Specification 4.4.5.5.c, the NRC is required to be notified with the results of steam generator tube inspections which fall into Category C-3. The following information documents the C-3 examination category for steam generators A, B & C (RC-E-1A, B and C, respectively) which were inspected during the 1R16 refueling outage.

As of November 3, 2004, a total of fifty two tubes (52) in RC-E-1C, were found to be defective from the eddy current examinations (bobbin coil and plus point probes). This represents greater than 1% of the inspected tubes being defective. A total of one hundred four (104) tubes in RC-E-1A and forty (40) tubes in RC-E-1B were found to be defective from the eddy current examinations. The examinations were 100%, 99% and 99% complete, respectively for RC-E-1A, RC-E-1B, RC-E-1C, as of November 3, 2004. All defective tubes will be removed from service through tube plugging.

The primary degradation mechanism affecting the Beaver Valley Power Station Unit #1 steam generators is Outside Diameter Stress Corrosion Cracking (ODSCC) at or near the hot leg top-of-tubesheet and at tube support plate intersections. The ODSCC observed at the hot leg top-of-tubesheet has historically been located in the sludge pile region. The majority of this sludge pile was removed during the secondary side chemical cleaning process performed during a previous refueling outage (1R14).

Boric acid addition to the secondary water is continuing in an effort to reduce the propensity of ODSCC. Additionally, secondary water chemistry molar ratio control has been implemented to further mitigate the growth and propagation of ODSCC. Sludge lancing the secondary side top-of-tubesheet has been performed to remove accumulated sludge that contributes to the formation of the aggressive environment that can result in the initiation of ODSCC in this region. Furthermore, secondary water chemistry control is optimized to keep corrosion product transport to the steam generators as low as possible to minimize the accumulation of new sludge during the operating cycle.

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Beaver Valley Power Station, Unit No. 1
Steam Generator C-3 Report
L-04-148
Page 2

No new regulatory commitments are contained in this submittal. If there are any questions concerning this matter, please contact Mr. Larry R. Freeland, Manager, Regulatory Compliance at 724-682-4284.

Sincerely,



L. William Pearce

c: Mr. T. G. Colburn, NRR Senior Project Manager
Mr. P. C. Cataldo, NRC Sr. Resident Inspector
Mr. S. J. Collins, NRC Region I Administrator