NRC Revised Order EA-03-009

A subsidiary of Pinnacle West Capital Corporation

Palo Verde Nuclear Generating Station

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

Subject: **Palo Verde Nuclear Generating Station (PVNGS)**
Unit 1
Docket No. STN 50-528
Special Report 1-SR-2007-001
Report of Boron Deposit at Control Element Drive Mechanism Vent

Dear Sirs:

Attached please find Special Report 1-SR-2007-001 prepared and submitted by Arizona Public Service (APS) pursuant to NRC Revised Order EA-03-009, dated February 20, 2004. Section IV.D of the Order requires licensees to perform certain visual inspections to identify potential boric acid leaks from pressure-retaining components above the Reactor Pressure Vessel head. Section IV.E of the Order requires licensees to submit reports detailing the inspection results within sixty (60) days after returning plants to operation.

This special report details the results of visual inspections performed at PVNGS Unit 1 subsequent to a reactor shutdown on October 22, 2007, for a short notice outage. The visual inspections were performed in accordance with the Boric Acid Corrosion Prevention Program which APS implements to identify and prevent boric acid corrosion of reactor pressure boundary components.

In accordance with 10 CFR 50.4(b)(1), copies of this report are being provided to the Region IV Administrator and the Palo Verde NRC Senior Resident Inspector.

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No commitments are being made to the NRC by this letter.

If you have questions regarding this submittal, please contact Ray Buzard, Section Leader, Compliance, at (623) 393-5317.

Sincerely,

JHH/TNW/REB/DFH/gt

Attachment

cc: E. E. Collins NRC Region IV Regional Administrator
M. T. Markley NRC NRR Project Manager
G. G. Warnick NRC Senior Resident Inspector for Palo Verde
Assistant General Counsel for Materials Litigation and Enforcement
Rulemaking and Adjudication Staff

Attachment
Palo Verde Nuclear Generating Station (PVNGS) Unit 1
Special Report No. 1-SR-2007-001
Boron Deposit Found at Control Element Drive Mechanism Vent
Docket No. STN 50-528

Reporting Requirement:

The NRC Revised Order EA-03-009, "Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors," dated February 20, 2004, Section IV.D requires that certain visual inspections be performed to identify potential boric acid leaks from pressure-retaining components above the reactor pressure vessel head.

Additionally, Section IV.E of the NRC Order requires that licensees submit reports detailing the inspection results performed per section IV.D within sixty (60) days after returning the plant to operation if a leak or boron deposit was found during the inspection.

Background:

On October 22, 2007, Palo Verde Unit 1 was shutdown for a short notice outage. The unit was returned to service on November 2, 2007. Subsequent to the reactor shutdown, routine visual inspections were performed in accordance with the Boric Acid Corrosion Prevention Program (PVNGS procedure 70TI-9ZC01). PVNGS implemented the Boric Acid Corrosion Prevention Program to prevent boric acid corrosion of reactor pressure boundary components and to ensure the provisions of USNRC Generic Letter No. 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants" were met.

Report Detailing Inspection Results:

During boric acid walk-downs on October 23, 2007, one new indication was found on the Versa Vent for control element drive mechanism (CEDM) number 28.

The new Unit 1 boric acid residue site was identified above the Reactor Pressure Vessel (RPV) head. The site did not exhibit evidence of an active leak, nor did the boric acid residue from the site contact the RPV head or related insulation and no carbon steel was affected.

Versa Vent number 28 was not cleaned and was left as is since rework would have required a major disassembly of the CEDM main power and position indication cables. A work order was generated in accordance with the corrective action program to rework Versa Vent 28. Unit 1 was returned to operation (Mode 1) from the short notice outage on November 2, 2007.