



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-2006-003
Report of Boron Deposit at Control Element Drive
Mechanism Vent**

Dear Sirs:

Attached please find Special Report 1-SR-2006-003 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 September 19, 2006 for a short notice outage and a reactor trip on October 21, 2006. 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 James Proctor, Section Leader, Compliance, at (623) 393-5730.

Sincerely,

A handwritten signature in black ink that reads "David Mauldin". The signature is written in a cursive style with a large initial "D" and a long, sweeping underline.

CDM/SAB/JAP/DFH/gt

Attachment

cc: B. S. Mallet, Region IV Administrator
M. B. Fields, PVNGS Project Manager
G. G. Warnick, Sr. Resident Inspector
Assistant General Counsel for Materials Litigation and Enforcement
Rulemaking and Adjudication Staff

Attachment
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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 September 19, 2006, Palo Verde Unit 1 was shutdown for a short notice outage. The unit was returned to service on October 15, 2006. On October 21, 2006, Palo Verde Unit 1 tripped due to an indication of a control element assembly deviation from the remainder of its group. Subsequent to the reactor shutdown, and trip, 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 September 19, 2006, no new indication was found from what was previously reported on 1-SR-2006-002. Prior to restarting the unit on October 15, 2006, two new indications were identified on Versa Vents 1 and 75.

During boric acid walk-downs following the Unit 1 reactor trip on October 21, 2006, three new indications were identified on Versa Vents 13, 14, and 83.

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

Versa Vent number 75 was cleaned prior to the unit restart on October 15, 2006 and Versa Vent number 83 was cleaned prior to the restart on October 23, 2006. Versa Vents number 1, 13, and 14 were not cleaned and were left as is since rework would

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have required a major disassembly of the CEDM main power and position indication cables. Work orders were generated in accordance with the corrective action program to rework the Versa Vents. Unit 1 was returned to operation (Mode 1) from the short notice outage on October 15, 2006 and from the reactor trip on October 23, 2006.