



Palo Verde Nuclear
Generating Station

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EA-03-009

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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-2004-003
Report of Boron Deposit at Control Element Drive
Mechanism Vent**

Dear Sirs:

Attached please find Special Report 1-SR-2004-003 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 June 14, 2004. 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 Dan Marks, Section Leader, Compliance, at (623) 393-6492.

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 "M".

CDM/DFH/kg

Attachment

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

Attachment
Palo Verde Nuclear Generating Station Unit 1
Special Report No. 1-SR-2004-003
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 June 14, 2004, Palo Verde Unit 1 tripped due to an offsite grid perturbation. Subsequent to the reactor trip, routine visual inspections were performed in accordance with the Boric Acid Corrosion Prevention Program (APS procedure 70TI-9ZC01). APS implemented the Boric Acid Corrosion Prevention Program to prevent boric acid corrosion of reactor pressure boundary components and to ensure the requirements contained in USNRC Generic Letter No. 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants" are met.

Report Detailing Inspection Results:

During boric acid walk-downs on June 15, 2004, seven Unit 1 boric acid residue sites were identified above the RPV head. The sites were located on the Versa Vents for control element drive mechanisms (CEDM) no. 18, 26, 58, 62, 75, 82 and 86. None of the sites exhibited evidence of an active leak, nor did the boric acid residue contact the RPV head or related insulation.

Since no carbon steel was affected and none of the leak sites were active, no non-conforming condition exists. Versa Vent no. 58, 62, 75, 82, and 86 were cleaned prior to restarting Unit 1. CEDM Versa Vent no. 18 and 26 were not cleaned, as this would have required a major disassembly of the CEDM main power and position indication cables.

Unit 1 was returned to operation (Mode 1) on June 18, 2004.