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102-05457-SAB/TNW/RJR  
April 4, 2006

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

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 2  
Docket No. STN 50-529  
Reactor Vessel Material Surveillance Capsule at 230°**

Pursuant to 10 CFR 50, Appendix H, this letter transmits the attached report of the analysis of a PVNGS Unit 2 reactor vessel material surveillance capsule. The report presents the results of the examination of the Unit 2 surveillance capsule removed from the 230° location. This is the second capsule to be removed from the reactor in accordance with the reactor vessel material surveillance program identified in Technical Requirements Manual Surveillance Requirement TSR 3.4.200.1 and the PVNGS Updated Final Safety Analysis Report (UFSAR), Section 5.3.1.6.6.

The 230° capsule was removed from the reactor vessel during Unit 2's 11<sup>th</sup> refueling outage after 14.35 effective full power years (EFPY) of plant operation (exposure). Westinghouse Science and Technology Center Hot Cell Facility performed the post irradiation mechanical testing of the Charpy V-notch impact, tensile and precracked Charpy V-notch surveillance specimens. The removal of the capsule was performed in accordance with the PVNGS UFSAR Table 5.3-19, which lists capsule number 5, vessel location 230°, as having a withdrawal time of between 12 and 15 EFPY.

The surveillance results presented in the enclosed report do not change the value of  $RT_{(PTS)}$  calculated for Palo Verde pursuant to 10 CFR 50.55a and IWA-6230 of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 1992 Edition, 1992 Addenda. APS completed Unit 2's Refueling Outage

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on May 20, 2005. No changes to the current PVNGS Technical Specification are required as a result of this analysis.

This letter does not make any commitments to the NRC. Please contact Thomas N. Weber at (623) 393-5764 if you have any questions or require additional information.

Sincerely,



SAB/TNW/RJR/ca

Attachment: WCAP-16524-NP, "Analysis of Capsule 230° from Arizona Public Service Company Palo Verde Unit 2 Reactor Vessel Radiation Surveillance Program", dated February 2006.

This attachment may be included as a CD. 10 CFR 171.9, Appendix A, Section 4.0 required information:

File: WCAP-16524-NP.pdf, 14,680,000 bytes, publicly available

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## **ATTACHMENT**

**WCAP-16524-NP, "Analysis of Capsule 230° from Arizona  
Public Service Company Palo Verde Unit 1 Reactor Vessel  
Radiation Surveillance Program," dated February 2006**