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10 CFR 50.46(a)(3)(ii)

Palo Verde Nuclear
Generating Station

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

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Docket Nos. STN 50-528/529/530
Emergency Core Cooling System (ECCS) Performance
Evaluation Models, 10 CFR 50.46(a)(3)(ii) Annual Report
For Calendar Year 2006**

Pursuant to 10 CFR 50.46(a)(3)(ii), Arizona Public Service Company (APS) has enclosed (see Enclosure 3) the Westinghouse Electric Company's, "10 CFR 50.46 Annual Notification and Reporting for 2006" (LTR-LIS-07-159, dated March 14, 2007). This report describes the changes and errors in Westinghouse (formerly Combustion Engineering) models for Pressurized Water Reactors (PWRs) ECCS performance analysis in calendar year (CY) 2006. There were no significant changes or errors in CY 2006.

As shown in the tables in enclosure 1, the PVNGS large break loss of coolant accident (LBLOCA) and small break loss of coolant accident (SBLOCA) analyses used the 1999 EM and S2M evaluation models, respectively, throughout CY 2006. For CY 2006, there was one change that affected the PVNGS large break LOCA peak clad temperature (PCT) calculation by as much as 4 °F (see Enclosure 2). This was not a significant change. There were no known errors or changes that affected the small break LOCA PCT calculation. Additionally, because PCT is not calculated as part of the post loss of coolant accident (LOCA) long-term cooling (LTC) analysis, there are no changes or errors in the LTC models that affect PCT.

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ENCLOSURE 1

**Summary of Cumulative Effects on Calculated Peak Clad
Temperature (PCT) for PVNGS Due to Changes/Errors in
ECCS Performance Evaluation Models**

Table 1: Large Break LOCA Margin Summary Sheet for CY 2006

Plant Name: Palo Verde Nuclear Generating Station Units 1, 2, and 3

Utility Name: Arizona Public Service Company

Evaluation Model: Westinghouse (formerly Combustion Engineering) 1999 EM

Peak Clad Temperature: 2110 °F (Analysis-of-Record reported in PVNGS UFSAR Section 6.3)

		<u>Net PCT Effect</u>	<u>Absolute PCT Effect</u>
A.	Cumulative 10 CFR 50.46 Changes and Error Corrections – Previously Reported for CY 2005		
	1. STRIKIN-II Steam Cooling Model Error	Δ PCT = + 2 °F	+ 2 °F
B.	10 CFR 50.46 Changes and Error Corrections – New for CY 2006		
	1. Plant Modification; Addition of Containment Passive Heat Sinks (e.g., Containment Sump Strainers)	Δ PCT = + 4 °F	+ 4 °F
	2. Process Improvement; REX Utility Code Rod-to-Rod Radiation Enclosure Selection Process	Δ PCT = + 0 °F	+ 0 °F
C.	Absolute Sum of Cumulative 10 CFR 50.46 Changes and Error Corrections	Δ PCT =	+ 6 °F
D.	Licensing Basis PCT (Reported in UFSAR) Cumulative PCT Assessments (Changes and Error Corrections)		2116 °F

The sum of the PCT from the most recent Analysis-of-Record (AOR) using an acceptable evaluation model, and the estimated cumulative effects of PCT impacts for changes and error corrections made since that AOR, remains less than 2200 °F.

Table 2: Small Break LOCA Margin Summary Sheet for CY 2006

Plant Name: Palo Verde Nuclear Generating Station Units 1, 2, and 3

Utility Name: Arizona Public Service Company

Evaluation Model: Westinghouse (formerly Combustion Engineering) S2M

Peak Clad Temperature: 1618 °F (Analysis-of-Record reported in PVNGS UFSAR Section 6.3)

		<u>Net PCT Effect</u>	<u>Absolute PCT Effect</u>
A.	Cumulative 10 CFR 50.46 Changes and Error Corrections – Previously Reported for CY 2005		
	1. None identified	$\Delta PCT = + 0 \text{ }^\circ\text{F}$	+ 0 °F
B.	10 CFR 50.46 Changes and Error Corrections – New for CY 2006		
	1. None identified	$\Delta PCT = + 0 \text{ }^\circ\text{F}$	+ 0 °F
C.	Absolute Sum of Cumulative 10 CFR 50.46 Changes and Error Corrections	$\Delta PCT =$	+ 0 °F
D.	Licensing Basis PCT (Reported in UFSAR) Cumulative PCT Assessments (Changes and Error Corrections)		1618 °F

The sum of the PCT from the most recent Analysis-of-Record (AOR) using an acceptable evaluation model, and the estimated cumulative effects of PCT impacts for changes and error corrections made since that AOR, remains less than 2200 °F.

ENCLOSURE 2

Westinghouse Electric Company's, "10 CFR 50.46 Report for PVNGS Units 1,2, and 3 Changes in Containment Passive Heat Sink Data," letter number LTR-OA-06-94, dated October 19, 2006