NRC Generic Letter 2003-01



Palo Verde Nuclear

Generating Station

David Mauldin Vice President Nuclear Engineering Fax: 623-393-6077

Tel: 623-393-5553

Mail Station 7605 PO Box 52034 Phoenix, Arizona 85072-2034

10205556-CDM/SAB/GAM August 28, 2006

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, 50-529, and 50-530 Supplement to Response to NRC Generic Letter 2003-01, "Control **Room Habitability**"

By letter no. 102-05018, dated December 5, 2003, Arizona Public Service Company (APS) submitted to the NRC a 180-day response to NRC Generic Letter (GL) 2003-01, "Control Room Habitability." In that response, APS provided the results of PVNGS Unit 2 control room habitability tracer gas inleakage testing which confirmed that the control room habitability (CRH) system met the design basis requirement.

By letter no. 102-05312, dated July 19, 2005, APS committed to perform tracer gas testing in PVNGS Units 1 and 3. The tests were completed in August 2005. The testing was performed in accordance with ASTM Standard E741. The test results confirmed that unfiltered inleakage into the control room envelope in Units 1 and 3 was below the 61 cubic feet per minute (CFM) maximum inleakage to meet control room habitability design basis and regulatory requirements.

Mr. Mel Fields, NRC Senior Project Manager for PVNGS, requested that APS submit the results of the Units 1 and 3 tracer gas tests to the NRC using a similar tabular format as provided in APS' December 5, 2003, submittal showing the Unit 2 results. In response to that request, the Units 1 and 3 results are provided on the following table.

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	Unit 1	Unit 3
Train "B" Outside Air Flow	780 ± 11 scfm	735 ± 10 scfm
Train "B" Recirculation Flow	Not Measured ⁽¹⁾	Not Measured ⁽¹⁾
Train "B" Isolation Flow	Not Measured ⁽¹⁾	Not Measured ⁽¹⁾
Train "A" Outside Air Flow	592 ± 35 scfm	666 ± 11 scfm
Train "B", Total Inleakage from Constant Injection	792 ± 11 scfm	735 ± 10 scfm
Train "B" Concentration Decay Test	5 ± 15 scfm ⁽²⁾	$5 \pm 15 \text{scfm}^{(2)}$
Train "B" CRE Inleakage, (Constant Injection – Outside Air Flow)	12 ± 11 scfm ⁽²⁾	0 ± 10 scfm ⁽²⁾
Train "A" Total Inleakage from Constant Injection	596 ± 35 scfm	666 ± 11 scfm
Train "A" Concentration Decay Test	$2 \pm 6 \text{ scfm}^{(2)}$	$0 \pm 30 \text{ scfm}^{(2)}$
Train "A" CRE Inleakage, (Constant Injection – Outside Airflow)	4 ± 35 scfm ⁽²⁾	0 ± 11 scfm ⁽²⁾
CRE Volume Estimate from "PUFF" Test	189,019 ± 2522 ft ³	189,325 ± 2939 ft ³

Units 1 and 3 Tracer Gas Testing Results, August 2005

(1) Recirculation and Isolation air flowrates for the system were not measured in Units 1 and 3 because they were not utilized to determine unfiltered inleakage.

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(2) Acceptance criteria for unfiltered inleakage is less than or equal to 61 scfm, which includes 10 scfm for ingress and egress (calculation 13-NC-ZY-287, Revision 1, August 2002).

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No commitments are being made to the NRC by this letter. If you have any questions, please contact Thomas N. Weber at (623) 393-5764.

Sincerely, David Mauldin

CDM/SAB/GAM/

cc: B. S. Mallett M. B. Fields G. G. Warnick NRC Region IV Regional Administrator NRC NRR Project Manager NRC Senior Resident Inspector for PVNGS