



Palo Verde Nuclear  
Generating Station

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102-05499-CDM/TNW/GAM  
May 23, 2006

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
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  
Editorial Revision to Proposed Technical Specification Changes  
Related to Steam Generator Tube Inspection**

By letter no. 102-05276, dated May 26, 2005, Arizona Public Service Company (APS) submitted an application to change PVNGS Technical Specifications (TSs) related to steam generator (SG) tube inspection. The changes would (1) establish consistency with Revision 4 to the Standard Technical Specification Change Traveler TSTF-449, "Steam Generator Tube Integrity," and (2), define the depth (C\* or C-star) of the required tube inspections and plugging criteria within the tubesheet of Alloy 600 SG tubes."

During a conference call with the NRC on March 29, 2006, the NRC suggested that APS consider making an editorial change to the May 26, 2005 amendment request to revise "and" to "or" in the last sentence in the proposed insert to TS 5.5.9, item "a" as follows in order to more clearly meet the intent of TSTF-449, Revision 4:

*"Condition monitoring assessments shall be conducted during each outage during which the SG tubes are inspected and or plugged to confirm that the performance criteria are being met."*

The revised TS markup and retyped pages are provided in Enclosure 2. A notarized affidavit is provided in Enclosure 1.

A member of the **STARS** (Strategic Teaming and Resource Sharing) Alliance

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Editorial Correction to Proposed Technical Specification Changes Related to Steam  
Generator Tube Inspection  
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The original proposed wording was not intended to deviate from the intent of TSTF-449, Revision 4. The original wording was intended to mean that condition monitoring assessments shall be conducted during each outage during which the SG tubes are inspected and during each outage during which the SG tubes are plugged to confirm that the performance criteria are being met. This editorial change does not change the intent of the proposed requirement.

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,



CDM/TNW/GAM/gt

Enclosures:

1. Notarized affidavit
2. Revised TS Markup Insert 5.5.9
3. Revised TS Retyped Page 5.5-6

cc:	B. S. Mallett	NRC Region IV Regional Administrator
	M. B. Fields	NRC NRR Project Manager
	G. G. Warnick	NRC Senior Resident Inspector for PVNGS
	A. V. Godwin	Arizona Radiation Regulatory Agency (ARRA)
	T. Morales	Arizona Radiation Regulatory Agency (ARRA)

ENCLOSURE 1

AFFIDAVIT

STATE OF ARIZONA        )  
  ) ss.  
COUNTY OF MARICOPA    )

I, David Mauldin, represent that I am Vice President, Nuclear Engineering, Arizona Public Service Company (APS), that the foregoing document has been signed by me on behalf of APS with full authority to do so, and that to the best of my knowledge and belief, the statements made therein are true and correct.

  
\_\_\_\_\_  
David Mauldin

Sworn To Before Me This 23<sup>rd</sup> Day Of May, 2006.

  
\_\_\_\_\_  
Notary Public



\_\_\_\_\_  
Notary Commission Stamp

**ENCLOSURE 2**

**Revised TS Markup Insert 5.5.9 (sheet 1 of 3)**

## **INSERT 5.5.9 (sheet 1 of 3)**

### **5.5.9 Steam Generator (SG) Program**

A Steam Generator (SG) Program shall be established and implemented to ensure that SG tube integrity is maintained. In addition, the Steam Generator Program shall include the following provisions:

- a. Provisions for condition monitoring assessments. Condition monitoring assessment means an evaluation of the "as found" condition of the tubing with respect to the performance criteria for structural integrity and accident induced leakage. The "as found" condition refers to the condition of the tubing during an SG inspection outage, as determined from the inservice inspection results or by other means, prior to the plugging of tubes. Condition monitoring assessments shall be conducted during each outage during which the SG tubes are inspected or plugged to confirm that the performance criteria are being met.
- b. Performance criteria for SG tube integrity. SG tube integrity shall be maintained by meeting the performance criteria for tube structural integrity, accident induced leakage, and operational LEAKAGE.
  1. Structural integrity performance criterion: All in-service SG tubes shall retain structural integrity over the full range of normal operating conditions (including startup, operation in the power range, hot standby, and cool down and all anticipated transients included in the design specification) and design basis accidents. This includes retaining a safety factor of 3.0 against burst under normal steady state full power operation primary-to-secondary pressure differential and a safety factor of 1.4 against burst applied to the design basis accident primary-to-secondary pressure differentials. Apart from the above requirements, additional loading conditions associated with the design basis accidents, or combination of accidents in accordance with the design and licensing basis, shall also be evaluated to determine if the associated loads contribute significantly to burst or collapse. In the assessment of tube integrity, those loads that do significantly affect burst or collapse shall be determined and assessed in combination with the loads due to pressure with a safety factor of 1.2 on the combined primary loads and 1.0 on axial secondary loads.
  2. Accident induced leakage performance criterion: The primary to secondary accident induced leakage rate for any design basis accident, other than a SG tube rupture, shall not exceed the leakage rate assumed in the accident analysis in terms of total leakage rate for all SGs and leakage rate for an individual SG. Leakage is not to exceed 0.5 gpm per SG and 1 gpm through both SGs.

**ENCLOSURE 3**

**Revised Retyped TS Page 5.5-6**

## 5.5 Programs and Manuals (continued)

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  2. Accident induced leakage performance criterion: The primary to secondary accident induced leakage rate for any design basis accident, other than a SG tube rupture,

(continued)