



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 17, 2012

Mr. Randall K. Edington
Executive Vice President Nuclear/
Chief Nuclear Officer
Mail Station 7602
Arizona Public Service Company
P.O. Box 52034
Phoenix, AZ 85072-2034

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNIT 2 - REVIEW OF THE
2011 REFUELING OUTAGE U2R16 STEAM GENERATOR TUBE INSERVICE
INSPECTION RESULTS (TAC NO. ME7265)

Dear Mr. Edington:

By letter dated September 30, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11285A307), Arizona Public Service Company (the licensee), submitted information summarizing the results of the 2011 steam generator tube inspections performed during refueling outage 16 at Palo Verde Nuclear Generating Station, Unit 2 (PVNGS 2) for U.S. Nuclear Regulatory Commission (NRC) staff review.

The NRC staff has completed its review of the submittal and concludes that the licensee provided the information required by the PVNGS 2 technical specifications. No additional follow-up is required at this time. The results of staff's review and observations are enclosed.

If you have any questions, please contact me at (301) 415-3016 or via e-mail at balwant.singal@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Balwant K. Singal".

Balwant K. Singal, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-529

Enclosure:
As stated

cc w/encl: Distribution via Listserv

OFFICE OF NUCLEAR REACTOR REGULATION
REVIEW OF RESULTS OF 2011 STEAM GENERATOR TUBE INSPECTIONS
PERFORMED DURING REFUELING OUTAGE 16
PALO VERDE NUCLEAR GENERATION STATION, UNIT 2
DOCKET NO. STN 50-529

By letter dated September 30, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11285A307), Arizona Public Service Company (the licensee), submitted information summarizing the results of the 2011 steam generator (SG) tube inspections performed during refueling outage 16 (U2R16) at Palo Verde Nuclear Generating Station, Unit 2 (PVNGS 2) for U.S. Nuclear Regulatory Commission (NRC) staff review.

PVNGS 2 has two replacement SGs, each having 12,580 thermally treated Alloy 690 tubes that have an outside diameter of 0.75 inches and a wall thickness of 0.042 inches. Ferritic stainless steel eggcrate tube supports, diagonal bars, and/or vertical straps support the tubes at various locations.

The licensee provided the scope, extent, methods, and results of its SG tube inspections in the document referenced above. In addition, the licensee described corrective actions (i.e., tube plugging) taken in response to the inspection findings.

The following observations are noted in regard to the licensee's 2011 SG tube inspections for PVNGS 2:

- An inspection performed on the blowdown patch plate welds that were found to be cracked during outage U2R15 confirmed that the weld material in the vicinity of the cracked weld on all four patch plates was intact, and a loose parts concern was not being created.
- An inspection was performed on the feedwater box set screws in response to issues experienced in the original SGs. The inspection revealed that all set screws were in good condition and free of erosion.

Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by its technical specifications. In addition, the NRC staff concludes that there are no technical issues that warrant follow-up action at this time since the inspections appear to be consistent with the objective of detecting potential tube degradation and the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

Enclosure

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Sincerely,

/RA/

Balwant K. Singal, Senior Project Manager
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Division of Operating Reactor Licensing
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ADAMS Accession No. ML120090067

*via email

**Memo dated 12/27/11

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/DE/ESGB/BC	NRR/LPL4/BC	NRR/LPL4/PM
NAME	BSingal	JBurkhardt*	VCusmano(A)**	MMarkley	BSingal
DATE	1/12/12	1/12/12	12/27/11	1/17/12	1/17/12

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