



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

July 26, 2017

Mr. Robert S. Bement
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 1 – REVIEW OF THE
STEAM GENERATOR TUBE INSPECTION REPORT FOR THE SPRING 2016
REFUELING OUTAGE (CAC NO. MF8699)

Dear Mr. Bement:

By letter dated October 26, 2016 (Agencywide Documents Access and Management System Accession No. ML16308A232), Arizona Public Service Company (the licensee) submitted information to the U.S. Nuclear Regulatory Commission (NRC) summarizing the results of the spring 2016 steam generator (SG) tube inservice inspections performed at the Palo Verde Nuclear Generating Station (PVNGS), Unit 1 during the 19th refueling outage.

The NRC staff has completed its review of the information and concludes that the licensee has provided the information required by the PVNGS, Unit 1, technical specifications. No additional followup is required at this time. The NRC staff's review of the SG inspection report is enclosed.

If you have any questions, please contact me at (301) 415-1564 or via e-mail at Siva.Lingam@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Siva P. Lingam".

Siva P. Lingam, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. STN 50-528

Enclosure:
Review of SG Tube Inspection Report

cc w/encl: Distribution via Listserv

OFFICE OF NUCLEAR REACTOR REGULATION

REVIEW OF RESULTS OF THE SPRING 2016 STEAM GENERATOR TUBE INSPECTIONS

ARIZONA PUBLIC SERVICE COMPANY

PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

DOCKET NO. STN 50-528

By letter dated October 26, 2016 (Agencywide Documents Access and Management System Accession No. ML16308A232), Arizona Public Service Company (the licensee) submitted information to the U.S. Nuclear Regulatory Commission (NRC) summarizing the results of the spring 2016 steam generator (SG) tube inservice inspections performed at the Palo Verde Nuclear Generating Station (PVNGS), Unit 1 during the 19th refueling outage.

PVNGS, Unit 1, has two replacement SGs designed by Combustion Engineering and manufactured by Ansaldo. Each SG contains 12,580 thermally treated Alloy 690 tubes with a nominal outside diameter of 0.750 inches and a nominal 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 NRC staff noted that the licensee performed inspections of the blowdown patch plate welds in SG 11 and SG 12. The licensee initially found these patch plate welds to be cracked in PVNGS, Unit 2, during the 15th refueling outage. The inspections in PVNGS, Unit 1, confirmed that the weld material near the cracked welds on the four patch plates (2 per SG) is intact, and a loose parts concern is not being created.

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 staff concludes that there are no technical issues that warrant followup 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.

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNIT 1 – REVIEW OF THE STEAM GENERATOR TUBE INSPECTION REPORT FOR THE SPRING 2016 REFUELING OUTAGE (CAC NO. MF8699) DATED JULY 26, 2017

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***via memo**

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