



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

April 29, 2015

MEMORANDUM TO: File

FROM: Margaret M. Watford, Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

A handwritten signature in black ink, appearing to read "M Watford", written over the typed name.

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNIT 3 -  
SUMMARY OF TELEPHONE CONFERENCE ON APRIL 24, 2015, TO  
VERBALLY AUTHORIZE RELIEF REQUEST 53 (TAC NO. MF6083)

This memorandum summarizes the telephone discussion on April 24, 2015, between the U.S. Nuclear Regulatory Commission (NRC) staff and Arizona Public Service Company (APS, the licensee) regarding the licensee's request for Relief Request 53 for Palo Verde Nuclear Generating Station, Unit 3 (PVNGS 3). Participants in the discussion included George Andrews, Thomas Weber, Ken House, et al. (APS), and Michael T. Markley, David Alley, John Tsao, Margaret Watford, James Drake, John Klos, Eliza Mitchell, and Russell Haskell (NRC).

By two letters dated April 17, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML15111A422 and ML15111A289), as supplemented by letter dated April 24, 2015 (ADAMS Accession No. ML15114A431), APS requested relief from the requirements of the American Society of Mechanical Engineers *Boiler and Pressure Vessel Code* (ASME Code), Section XI, IWA-4421, at PVNGS 3.

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(1), the licensee submitted Relief Request 53, which proposed to repair the degraded pressure instrument nozzle attached to the safe end on the suction side of reactor coolant pump 2A using the half-nozzle repair method in accordance with NRC-approved Topical Report, WCAP-15973-P-A, "Low-Alloy Steel Component Corrosion Analysis Supporting Small-Diameter Alloy 600/690 Nozzle Repair/Replacement Programs," Revision 0, dated February 2005 (ADAMS Accession No. ML050700431). The NRC staff has reviewed the half-nozzle repair procedures, the evaluation of a postulated flaw in the existing J-groove weld that propagates into the safe end of the reactor coolant pump, the evaluation of loose parts from the existing J-groove weld falling into primary system components, the corrosion evaluation of the bore of the safe end exposed to primary coolant, and ASME Code, Section III calculations of the replacement half-nozzle and new J-groove weld.

The NRC staff concluded that the replacement half-nozzle and new J-groove weld will satisfy the requirements of the ASME Code, Section III for 18 months of operation during the next fuel cycle. The licensee's flaw and corrosion evaluations provide assurance that the structural integrity of the repaired nozzle will not be challenged for one fuel cycle of operation.

Based on the above, the NRC staff has concluded that the proposed repair will restore the primary system pressure boundary and provide reasonable assurance that the structural integrity of the repaired pressure instrument nozzle will be maintained for one fuel cycle. Therefore, the NRC staff concluded that the proposed alternative for the repair of the subject pressure instrument nozzle provides an acceptable level of quality and safety and that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, on April 24, 2015, the NRC verbally authorized the use of Relief Request 53 at PVNGS 3 until the end of the 19<sup>th</sup> refueling outage for PVNGS 3, which is currently scheduled for fall 2016.

All other requirements of ASME Code, Section XI, for which relief was not specifically requested and authorized by the NRC staff remain applicable, including the third-party review by the Authorized Nuclear Inservice Inspector.

This verbal authorization does not preclude the NRC staff from asking additional clarification questions regarding the proposed relief request while preparing the subsequent written safety evaluation.

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Based on the above, the NRC staff has concluded that the proposed repair will restore the primary system pressure boundary and provide reasonable assurance that the structural integrity of the repaired pressure instrument nozzle will be maintained for one fuel cycle. Therefore, the NRC staff concluded that the proposed alternative for the repair of the subject pressure instrument nozzle provides an acceptable level of quality and safety and that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, on April 24, 2015, the NRC verbally authorized the use of Relief Request 53 at PVNGS 3 until the end of the 19<sup>th</sup> refueling outage for PVNGS 3, which is currently scheduled for fall 2016.

All other requirements of ASME Code, Section XI, for which relief was not specifically requested and authorized by the NRC staff remain applicable, including the third-party review by the Authorized Nuclear Inservice Inspector.

This verbal authorization does not preclude the NRC staff from asking additional clarification questions regarding the proposed relief request while preparing the subsequent written safety evaluation.

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\*via email

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