



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

September 20, 2012

LICENSEE: ARIZONA PUBLIC SERVICE COMPANY  
FACILITY: PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3  
SUBJECT: SUMMARY OF AUGUST 30, 2012, MEETING WITH ARIZONA PUBLIC SERVICE COMPANY TO DISCUSS THE RELIEF REQUEST RELATED TO PHASED ARRAY ULTRASONIC EXAMINATION TECHNIQUES (TAC NOS. ME9171, ME9172, ME9173)

On August 30, 2012, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Arizona Public Service at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss the licensee's relief request dated August 1, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12229A046), to use Phased Array Ultrasonic Examination (UT) Techniques as an alternative to radiography to satisfy American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code), Section III non-destructive examination requirements. A list of attendees is provided in the Enclosure.

The NRC staff briefly summarized the history of ASME Code cases related to ultrasonic testing (UT) in lieu of radiographic testing (RT) and the concerns, the licensee's submittal, and the NRC's research activities provided in a slide presentation entitled, "UT vs. RT Discussions" (ADAMS Accession No. ML12243A438). Next, a member of the NRC's Office of Research provided a more detailed presentation on the NRC's research activities related to the effectiveness and reliability of ultrasonic examination techniques in comparison to radiography. This is an ongoing effort with PNNL (Pacific Northwest National Laboratory) scheduled to be completed in 2013. The presenter also discussed the U.S. Navy program entitled, "Ultrasonics as an Alternative to Radiography (UT/RT) for Submarine Hull Weld Inspection." The program concluded that ultrasonic weld inspection was an acceptable alternative under certain conditions for submarine hull welds (ADAMS Accession No. ML12243A447).

The licensee presented information (ADAMS Accession No. ML12243A435) on its relief request dated August 1, 2012. The licensee reviewed the applicable codes, the scope of the request, the reasons for the request, process/technique validation, and ASME Code Case N-659-2. The scope of the relief request is limited to ASME Code Class 2 piping circumferential butt welds. The licensee's reasons for submitting the request include reducing the radiation exposure risk to personnel, easing schedule concerns for outages, and the increased quality in examination.

The NRC staff discussed several aspects of the relief request with the licensee, most notably the training and qualification for examiners. The licensee affirmed that personnel demonstrations would be blind. Certain specific concerns identified by the staff during the meeting will be conveyed to the licensee as requests for additional information if the relief request is accepted for review.

A member of the public was in attendance by teleconference. Public Meeting Feedback forms were not received.

Please direct any inquiries to me at 301-415-1056 or [lauren.gibson@nrc.gov](mailto:lauren.gibson@nrc.gov).

*Lauren Kate Gibson*

Lauren K. Gibson, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-528, 50-529, and 50-530

Enclosure:  
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES

AUGUST 30, 2012, MEETING WITH ARIZONA PUBLIC SERVICE COMPANY

RELIEF REQUEST RELATED TO PHASED ARRAY ULTRASONIC TECHNIQUES

PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3

DOCKET NOS. 50-528, 50-529, AND 50-530

<b>Name</b>	<b>Affiliation</b>
Lauren Gibson	Nuclear Regulatory Commission (NRC)/Office of Nuclear Reactor Regulation (NRR)
Carol Nove	NRC/Office of Nuclear Regulatory Research (RES)
Douglas Hansen	Arizona Public Service Co (APS)/Palo Verde Nuclear Generating Station (PVNGS)
Mark Bradish	APS/PVNGS
Bryan Thiele	APS/PVNGS
Thomas N. Weber	APS/PVNGS
Michael Markley	NRC/NRR
Stephen Cumblidge	NRC/NRR
Tim Lupold	NRC/NRR
J. Fred Hall	ANATEC-LMT
Eric Reichelt	NRC/Office of New Reactors (NRO)
Jon Honcharik	NRC/NRO
Wallace Norris	NRC/RES
Bob Davis	NRC/NRO
Rusty Stroud	APS/PVNGS, by teleconference
Sean Pobst	APS/PVNGS, by teleconference
Jennifer Cox	APS/PVNGS, by teleconference
Carl Stephenson	APS/PVNGS, by teleconference
Jeff Devers	Curtiss Wright, by teleconference
Billy Wolfe	Member of the Public, by teleconference

Enclosure

A member of the public was in attendance by teleconference. Public Meeting Feedback forms were not received.

Please direct any inquiries to me at 301-415-1056 or [lauren.gibson@nrc.gov](mailto:lauren.gibson@nrc.gov).

*/RA/*

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**ADAMS Accession Nos.** Meeting Notice ML12227A856 Meeting Summary ML12244A215  
Handouts ML12243A447, ML12243A438, ML12243A435

OFFICE	DORL/LPL4/PM	DORL/LPL4/LA	DORL/LPL4/BC	DORL/LPL4/PM
NAME	LKGibson	JBurkhardt	MMarkley	LKGibson
DATE	9/17/12	9/17/12	9/19/12	9/20/12

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