



102-07533-TNW/CJS  
June 30, 2017

**Palo Verde  
Nuclear Generating Station**  
P.O. Box 52034  
Phoenix, AZ 85072  
Mail Station 7636  
Tel: (623) 393-5764

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 2, Docket No. STN 50-529  
Third 10-Year Interval, Third Period:  
Owner's Activity Report Number U2R20**

Pursuant to 10 CFR 50.55a and in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Case N-532-4, Arizona Public Service Company (APS) hereby submits the Owner's Activity Report (Form OAR-1) for Unit 2 refueling outage 20 (U2R20). The outage ended on May 8, 2017.

No commitments are being made to the NRC by this letter. Should you need further information regarding this submittal, please contact me at (623) 393-5764.

Sincerely,

Weber,  
Thomas  
N(Z00499)

Digitally signed by Weber, Thomas  
N(Z00499)  
DN: cn=Weber, Thomas N(Z00499)  
Reason: I am approving this  
document  
Date: 2017.06.30 15:53:36 -07'00'

Thomas N. Weber  
Department Leader, Regulatory Affairs

TNW/CJS/msa

Enclosure: Unit 2 Twentieth Refueling Outage Owner's Activity Report, Report U2R20

cc:	K. M. Kennedy	NRC Region IV Regional Administrator
	S. P. Lingam	NRC NRR Project Manager for PVNGS
	M. M. Watford	NRC NRR Project Manager
	C. A. Peabody	NRC Senior Resident Inspector for PVNGS

**ENCLOSURE**

**Unit 2**

**Twentieth Refueling Outage Owner's Activity  
Report**

**Report U2R20**

## FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number: 2R20

Plant: Palo Verde Nuclear Generating Station, 5801 S. Wintersburg Road, Tonopah, Arizona 85354-7529

Unit No.: 2 Commercial service date: Sep 19, 1986 Refueling Outage No.: 20  
(if applicable)

Current inspection interval IWB, IWC, IWD, IWF = 3rd, IWE, IWL = 2nd  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, other)

Current inspection period IWB, IWC, IWD, IWE, IWF = 3rd, IWL = 2nd  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>)

Edition and Addenda of Section XI applicable to the inspection plans 2001 Ed., 2003 Ad., IWL = 2007 Ed. 2008 Ad.

Date and revision of inspection plans ISI = 11/4/15 R5, Press Test = 3/19/14 R4, IWE = 9/22/15 R1, IWL = 8/26/15 R3

Edition and Addenda of Section XI applicable to repair/replacement activities,  
if different than the inspection plans 2001 Ed. 2003 Ad.

Code Cases used: N-532-4  
(if applicable)

### CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of U2R20 conform to the requirements of Section XI.  
(refueling outage number)

Lehman, William  
T(Z60076)

Digitally signed by Lehman, William T(Z60076)  
DN: cn=Lehman, William T(Z60076)  
Reason: I am the author of this document  
Date: 2017.06.15 08:12:23 -07'00'

Signed \_\_\_\_\_

Date: \_\_\_\_\_

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by The Hartford Steam Boiler \* of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

\*Inspection and Insurance Company

\_\_\_\_\_  
(Inspector's Signature)

Commissions NB 9685 "A,N,I,C" Az 264  
National Board, State, Province, and Endorsements

Date: \_\_\_\_\_

**Palo Verde Nuclear Generating Station**  
**Owners Activity Report - Unit 2 Refueling Outage 20**

**Table 1**

Items with Flaws or Relevant Conditions that Required Evaluation for Continued Service

Examination Category	Item Number	Description of Work	Evaluation Description
None	None	None	None



**Table 2**

Abstract of Repair/Replacement Activities Required for Continued Service

<b>Code Class</b>	<b>Item Description</b>	<b>Description of Work</b>	<b>Date Completed</b>	<b>Repair/Replacement Plan Number</b>
1	2MRCEE01A	Plug tubes in SG 1 Hot Leg side	5/2/2017	4737753
1	2MRCEE01A	Plug tubes in SG 1 Cold Leg side	5/2/2017	4737754
1	2MRCEE01B	Plug tubes in SG 2 Hot Leg side	5/2/2017	4737755
1	2MRCEE01B	Plug tubes in SG 2 Cold Leg side	5/2/2017	4737756
1	2CH005H022	Cotter pin missing on strut to hanger welded attachment	4/29/2017	4881924
2	2SI067H003	Lock nut found loose during visual inspection	4/25/2017	4880175
3	2SP104H009	Spring Can was found out of acceptable setting range	4/1/2016	4748775
3	2PSPAL079	Fabricate and install new spool, orifice and bypass lines.	4/25/2017	3824468
3	2MDGBE01A	Perform weld repairs due to corrosion on intercooler A	3/25/2016	4712015
3	2MDGBE01A/B	Perform weld repairs due to corrosion on the intercooler cross connect spools	3/25/2016	4712015
3	2MDGBE01B	Perform weld repairs due to corrosion on intercooler B	3/25/2016	4712015
3	2MDGBE04	Perform weld repairs due to corrosion on lube oil heat exchanger	3/25/2016	4712015
3	2MDGBE05	Perform weld repairs due to corrosion on jacket water heat exchanger	3/25/2016	4712015
3	2PC005H015	Snubber failed functional test	2/15/2017	4713370
3	2MEWAE01	Weld repairs required due to corrosion	4/24/2017	4730997