



102-07863-MDD/MSC
February 15, 2019

**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 U2R21**

Pursuant to 10 CFR 50.55a and in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Case N-532-5, Arizona Public Service Company (APS) hereby submits the Owner's Activity Report (Form OAR-1) for Unit 2 refueling outage 21 (U2R21). The outage ended on December 3, 2018.

No commitments are being made to the NRC by this letter. Should you need further information regarding this submittal, please contact Matthew S. Cox, Licensing Section Leader, at (623) 393-5753.

Sincerely,

A handwritten signature in black ink, appearing to read "Micheal D. DiLorenzo".

Micheal D. DiLorenzo, Department Leader
Nuclear Regulatory Affairs - Licensing

MDD/MSC/mg

Enclosure: Unit 2 Twenty-First Refueling Outage Owner's Activity Report, Report U2R21

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

ENCLOSURE

Unit 2

**Twenty-First Refueling Outage Owner's Activity
Report**

Report U2R21

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number: 2R21

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.: 21
(if applicable)

Current inspection interval IWB, IWC, IWD, IWE, IWF = 3rd / IWL = 2nd / S.P.T. = 3rd and 4th
(1st, 2nd, 3rd, 4th, other)

Current inspection period IWB, IWC, IWD, IWF = 3rd / IWE = 1st / IWL = 2nd / S.P.T. = 3rd and 1st
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans 2001 Ed/'03 Ad (IWE, IWL = 2007 Ed. / '08 Ad.)

Date and revision of inspection plans ISI=8/1/18 R7, SPT=3/15/18 R5 and 6/21/18 R0, IWE=10/3/18 R0, IWL=8/8/18 R4

Edition and Addenda of Section XI applicable to repair/replacement activities,
if different than the inspection plans 2013 Edition (2013 Ed. also used for 4th Interval S.P.T. during plant startup)

Code Cases used for inspection and evaluation:

N-532-5, N-722-1, N-770-2, N-460

(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 U2R21 conform to the requirements of Section XI.
(refueling outage number)

Toone, Spencer
(Z07074)
Signed _____
Digitally signed by Toone, Spencer (Z07074)
DN: cn=Toone, Spencer (Z07074)
Date: 2019.02.06 11:16:09 -07'00'

Date: _____

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by The Hartford Steam Boiler Inspection and Insurance Company 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.

Hogstrom, Robert (YH2450)
Digitally signed by Hogstrom, Robert (YH2450)
DN: cn=Hogstrom, Robert (YH2450)
Date: 2019.02.06 11:26:24 -07'00'

(Inspector's Signature)

Commissions N.B. 9685 °C, I, N, R*
National Board, State, Province, and Endorsements

Date: _____

Table 1

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

Examination Category and Item Number	Item Description	Evaluation Description
None	None	None

Table 2

Abstract of Repair/Replacement Activities Required for Continued Service

Code Class	Item Description	Description of Work	Date Complete	Repair/Replacement Plan Number
1	2MRCEE01A	Replace steam generator hand-hole studs and nuts.	11/09/18	4970281-0
2	2SG206H001	Adjust spring can cold setting.	11/15/18	4223921-0
2	2CH010H0AA	Replace snubber.	08/15/18	4916998-0
2	2PSGEL002B	Replace pipe spool due to FAC program requirements.	12/01/18	5024637-0
2	2PSGEL014A	Replace pipe spool due to FAC program requirements.	12/01/18	5024646-0
3	2PSPAL098	Replace pipe spool.	09/29/17	4702374-0
3	2PSPAL099	Replace pipe spool.	09/29/17	4703243-0
3	2PSPAL065A	Replace pipe spool.	09/29/17	4703270-0
3	2MDGBE01A/B	Replace intercooler cross-connect spools.	03/22/18	4777055-0
3	2MDGBE... 01A, 01B, 04, 05, 01A/B	Weld repair DG heat exchangers due to localized corrosion.	03/22/18	4784034-0
3	2MDGAE... 01A, 01B, 04, 05	Weld repair DG heat exchangers due to localized corrosion.	09/29/17	4784035-0
3	2JDGATCV0269	Weld build-up on valve body due to erosion.	09/28/17	4790856-0

Code Class	Item Description	Description of Work	Date Complete	Repair/Replacement Plan Number
3	2PSPBL032A	Base metal weld repair on pipe spool.	03/22/18	4847671-5
3	2PSPBL104, ...105, ...106	Base metal weld repairs on pipe spools.	03/22/18	4847671-8
3	2PSPAL065A	Weld repair pipe spool due to localized corrosion.	9/29/17	4933055-0
3	2MEWBE01	Base metal weld repair on heat exchanger flanges.	10/27/18	4909517-0
3	2MDGAH01	Modify and replace 1-inch fuel-line bracket.	09/29/17	4933194-0