



102-07957-MDD/CJS
July 24, 2019

**Palo Verde
Nuclear Generating Station**
P.O. Box 52034
Phoenix, AZ 85072
Mail Station 7636
Tel: (623) 393-3495

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

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station
Unit 1, Docket No. STN 50-528
Third 10-Year Interval, Third Period:
Owner's Activity Report Number U1R21**

Pursuant to 10 CFR 50.55a and in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code Case N-532-5, Arizona Public Service Company hereby submits the Owner's Activity Report (Form OAR-1) for Unit 1 refueling outage 21 (U1R21). The outage ended on May 9, 2019.

No commitments are being made to the NRC by this letter. Should you have any questions concerning the content of this letter, please contact me at (623) 393-3495.

Sincerely,

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

FOR MICHAEL D. DILORRENZO

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

MDD/CJS/mg

Enclosure: Unit 1 Twenty-First Refueling Outage Owner's Activity Report, Report U1R21

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 1

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

Report U1R21

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number: 1R21

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

Unit No.: 1 Commercial service date: Jan 28, 1986 Refueling Outage No.: R21
(if applicable)

Current inspection interval IWB, IWC, IWD, IWF, IWE, Pressure Test (SPT) = 3rd Interval / IWL = 2nd Interval
(1st, 2nd, 3rd, 4th, other)

Current inspection period IWB, IWC, IWD, IWF, SPT = 3rd / IWE = 1st / IWL = 2nd
(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 = 08/01/18 R7, SPT = 03/15/18 R5, IWE = 10/03/18 R0, IWL = 08/08/18 R4

Edition and Addenda of Section XI applicable to repair/replacement activities,
if different than the inspection plans 2013 Edition

Code Cases used for inspection and evaluation:
N-532-5, N-729-4, N-722-1, N-770-2, N-460, N-733

(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 1R21 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: 2019.07.16 14:42:01 -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 _____ 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: 2019.07.17 10:23:05 -07'00'

(Inspector's Signature)

*The Hartford Steam Boiler Inspection and Insurance Company

Commissions N.B. 9685, Az 264 "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

<u>Examination Category and Item Number</u>	<u>Item Description</u>	<u>Evaluation Description</u>
None	None	None

Table 2

Abstract of Repair/Replacement Activities Required for Continued Service

<u>Code Class</u>	<u>Item Description</u>	<u>Description of Work</u>	<u>Date Completed</u>	<u>Repair/Replacement Plan Number</u>
1	1MRCEE01A	SG 1, COLD LEG TUBE PLUGGING	04/26/2019	5006122
1	1MRCEE01B	SG 2, COLD LEG TUBE PLUGGING	04/26/2019	5006123
1	1MRCEE01B	SG 2, HOT LEG TUBE PLUGGING	04/26/2019	5111730
1	1MRCEE01A	SG 1, HOT LEG TUBE PLUGGING	04/26/2019	5111731
2	1SG039H012	SWAY STRUT WAS REWORKED DUE TO BEARING WALKING OUT OF PINNED END. BEARING WAS REPOSITIONED AND STAKED.	05/03/2019	5123606
2	1SI174H005	SNUBBER REPLACED DUE TO LEAKAGE FROM HVAC ABOVE. SNUBBER PASSED TESTING UPON REMOVAL.	04/20/2019	5117754
2	1PCHNL558	GRIND OUT IDENTIFIED WELD DEFECTS ON LINE CHN-L558 THEN REPAIR WELD. REF REPORT 18-1184	05/03/2019	5073016
2	1SI106H019	REPLACE SNUBBER. FAILED INITIAL DRAG TEST. REF CR 19-03367.	03/06/2019	4975071
3	1PDFAL006	REPLACE BENT SECTION OF PIPE	03/02/2018	4762680
3	1MDGAE01A/B	SWAP INTERCOOLER CROSS-CONNECT SPOOLS WITH PRE-FABRICATED SPOOLS	03/03/2018	4777050
3	1MDGAE... 01A, 01B, 05	BASE METAL WELD REPAIR HEAT EXCHANGERS AS NECESSARY DUE TO COATING FAILURES	03/03/2018	4784037
3	1PSPAL065A	BASE METAL WELD REPAIR OF SPRAY POND PIPE SPOOL	03/03/2018	4840850

<u>Code Class</u>	<u>Item Description</u>	<u>Description of Work</u>	<u>Date Completed</u>	<u>Repair/Replacement Plan Number</u>
3	1MDGBE01A	SWAP INTERCOOLER CROSS-CONNECT SPOOLS WITH PRE-FABRICATED SPOOLS	09/28/2018	4906648
3	1MDGBE01B	SWAP INTERCOOLER CROSS-CONNECT SPOOLS WITH PRE-FABRICATED SPOOLS	09/28/2018	4906649
3	1PSPBL... 032A, 049A, 105	BASE METAL WELD REPAIR OF SPRAY POND PIPE SPOOL	09/27/2018	4906682
3	1MDGBE... 01A, 01B, 04, 05, 01A/B	BASE METAL WELD REPAIR HEAT EXCHANGERS AS NECESSARY DUE TO COATING FAILURES	09/27/2018	4906683
3	1MDGBE01A/B	REPLACE BROKEN BOLT AT BRACKET THAT SUPPORTS THE INTERCOOLER CROSS-CONNECT SPOOLS	09/26/2018	4943273
3	1MEWBE01	BASE METAL WELD REPAIR HEAT EXCHANGER AS NECESSARY DUE TO COATING FAILURES	05/03/2019	4962719
3	1PC005H016	REPLACE BEARING RETAINER NUT ON SNUBBER DUE TO WEAR	02/20/2019	4974929