



102-08720-MS/CJS
January 19, 2024

**Palo Verde
Nuclear Generating Station**
P.O. Box 52034
Phoenix, AZ 85072
Mail Station 7636
Tel: (623) 393-5753

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

**Subject: Palo Verde Nuclear Generating Station Unit 1
Renewed Operating License No. NPF-41
Docket No. STN 50-528
Fourth 10-Year Interval, Second Period
Owner's Activity Report Number 1R24**

Pursuant to Title 10 of the Code of Federal Regulations 50.55a and in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code Case N-532-5, *Repair/Replacement Activity Documentation Requirements and Inservice Inspection Summary Report Preparation and Submission Section XI, Division 1*, Arizona Public Service Company hereby submits the Owner's Activity Report (Form OAR-1) for Unit 1 refueling outage 24 (1R24). The outage ended on November 11, 2023.

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

Sincerely,

**Cox, Matthew
S(Z05628)**

Digitally signed by Cox,
Matthew S(Z05628)
Date: 2024.01.19 14:48:47 -07'00'

Matthew S. Cox
Department Leader, Nuclear Regulatory Affairs

MSC/CJS/cr

Enclosure: Unit 1 Twenty-Fourth Refueling Outage Owner's Activity Report, Report 1R24

cc: J. D. Monninger NRC Region IV Regional Administrator
W. T. Orders NRC NRR Project Manager for PVNGS
L. N. Merker NRC Senior Resident Inspector for PVNGS

ENCLOSURE

Unit 1

Twenty-Fourth Refueling Outage Owner's Activity Report

Report 1R24

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number: 1R24

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

Unit No.: 1 Commercial service date: Jan 28, 1986 Refueling Outage No.: 24
(if applicable)

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

Current inspection period IWB,IWC,IWD,IWF = 2nd ; IWE = 2nd ; IWL = 1st ; SPT = 2nd
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans 2013 Edition (IWE = 2007 Ed., '08 Ad.)

Date and revision of inspection plans ISI = 4/09/22 R1 ; SPT = 6/21/18 R0 ; IWE = 10/3/18 R0 ; IWL = 6/17/22 R0

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-638-10, N-716-1, N-722-1, N-729-6, N-770-5
(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 U1R24 conform to the requirements of Section XI.
(refueling outage number)

Signed **Folley, Roy C(Z07131)** Digitally signed by Folley, Roy C(Z07131)
Date: 2024.01.10 07:53:02 -07'00' Date: Jan 10, 2024

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)
Date: 2024.01.11 20:27:43 -07'00' * The Hartford Steam Boiler Inspection and Insurance Company
Commissions N.B. 9685 "A, N, I, C" AZ 264
(Inspector's Signature) National Board, State, Province, and Endorsements

Date: Jan 11, 2024

Table 1

1R24 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 1R24 Repair/Replacement Activities Required for Continued Service

Code Class	Component ID	Description of Work	Date Complete	Repair/Replacement Plan Number
1	1JRCEPSV0200	PRESSURIZER SAFETY RELIEF VALVE Replace the pressurizer safety relief valve with a reconditioned spare	11/09/2023	5458721-0
1	1JRCEPSV0201	PRESSURIZER SAFETY RELIEF VALVE Replace the pressurizer safety relief valve with a reconditioned spare	11/09/2023	5458722-0
1	1JRCEPSV0202	PRESSURIZER SAFETY RELIEF VALVE Replace the pressurizer safety relief valve with a reconditioned spare	11/09/2023	5458723-0
1	1JRCEPSV0203	PRESSURIZER SAFETY RELIEF VALVE. Replace the pressurizer safety relief valve with a reconditioned spare	11/09/2023	5458724-0
1	1JSIBPSV0169	B TRAIN SDC RELIEF VALVE TO RDT Replace existing relief valve with a new valve due to cap leakage	11/01/2023	5565730-0
1	1JRCETW0101	PRESSURIZER TEMPERATURE NOZZLE Replace the existing pressurizer thermowell nozzle and supporting nickel base alloy weld pad, per AWA APS-2023-0052 Framatome traveler	11/09/2023	5570390-0
2	1PSGEL011	FEEDWATER HEADER TO STEAM GEN RCEE01B REPLACE SGE-L011, SPOOL S-003	11/09/2023	5314233-0
2	1JSGEPSV0554	S/G #2 LINE 1 SAFETY RELIEF VALVE Replacement of main steam safety valve with reconditioned and tested spare.	11/09/2023	5458642-0
2	1SI174H005	SNUBBER SIS LP/HP LOOP E Snubber replaced due to testing failure	10/24/2023	5465829-0
2	1PSGEL008	FEEDWATER HEADER ST GEN TO RCEE01A Weld replace SGE-L008 Spool S-006.	11/09/2023	5466656-0
2	1PSIEL230	SAFE INJEC TK SIEX01D TO SAFETY VLV PSV241 Apply 2:1 weld taper to both sides of the installed 45° socket weld elbows.	11/06/2023	5478281-0
2	1SI230H00D	RESTRAINT ON LINE FROM SIE-X01D TO PSV-241 Remove and reinstall Item 72 to support 2:1 weld of SIE-L230	11/06/2023	5478281-0

Table 2

Abstract of 1R24 Repair/Replacement Activities Required for Continued Service

Code Class	Component ID	Description of Work	Date Complete	Repair/Replacement Plan Number
2	1PSIEL230	SAFE INJEC TK SIEX01D TO SAFETY VLV PSV241 Remove and replace N-00B between Reducing tee and 45 degree elbow for failure analysis of Item 72	11/09/2023	5478281-5
2	1SI230H00D	RESTRAINT ON LINE FROM SIE-X01D TO PSV-241 Remove item 72 from service due to indication found during NDE	11/09/2023	5478281-5
2	1SG042H011	STEAM GEN 2 MAIN STEAM LN1 CONSTANT SPRING HANGER Replace failed constant spring support.	11/09/2023	5570282-0
3	1MDGBE01A	DG B AIR INTERCOOLER A Weld repair of corroded areas	10/01/2022	5351143-0
3	1MDGBE04	LUBE OIL COOLER Weld repair of corroded areas	10/01/2022	5351143-0
3	1MDGBE01B	DG B AIR INTERCOOLER B Weld repair of corroded areas	10/01/2022	5351143-0
3	1MDGBE05	JACKET WATER COOLER Weld repair of corroded areas	10/01/2022	5351143-0
3	1MDGBE01A/B	EDG INTERCOOLER CROSS CONNECT SPOOLS (5, 6, 7, and 8) Weld repair of corroded areas	10/01/2022	5351143-0
3	1JEWBPCV174	4" REGULATING CONTROL VALVE FOR THE ESSENTIAL CHILLER Base metal repair to pipe spool	9/27/2022	5353044-0
3	1PSPBL106	LUBE OIL CLR DGBE04 TOSPRAY POND TRAIN B Spool 001 Base metal repair to pipe spool	9/29/2022	5353125-5
3	1PSPBL032	SP PUMP SPB P01 TO DG CLG WTR HT EXCH DGB-E01 Spool 014 Base metal repair of pipe spool	9/29/2022	5353125-5
3	1PSPBL032	SP PUMP SPB P01 TO DG CLG WTR HT EXCH DGB-E01 Spool 015 Base metal repair of pipe spool	9/29/2022	5353125-5
3	1PSPBL104	ESS SPRAY POND P SPB-P01 TO LUBE OIL CLR DGBE04 Spool 003 Base metal repair of pipe spool	9/29/2022	5353125-5

Table 2

Abstract of 1R24 Repair/Replacement Activities Required for Continued Service

Code Class	Component ID	Description of Work	Date Complete	Repair/Replacement Plan Number
3	1PSPBL106	LUBE OIL CLR DGBE04 TO SPRAY POND TRAIN B Spool 004 Base metal repair of pipe spool	9/29/2022	5353125-5
3	1PSPBL049	DG CLG WTR HT EXCH DGB-E01 TO TRAIN B SPRAY POND Spool 001 Base metal repair of pipe spool	9/29/2022	5353125-5
3	1MEWAE01	ECWS HTEXCH A Perform base material repairs to the heat exchanger	10/25/2023	5458620-4
3	1MEWAE01	ECWS HTEXCH A Tack weld temporary machining fixture to cover and machine coating/gasket seating surfaces flat	10/25/2023	5458620-8
3	1PSPAV041	A SPRAY POND PUMP DISCHARGE CHECK VALVE Valve replacement to support Selective Leaching Inspections. (CR 23-00451)	10/24/2023	5530596-0