



**Palo Verde  
Nuclear Generating Station**  
5871 S. Wintersburg Road  
Tonopah, AZ 85354

102-08378-KJG/MS  
January 18, 2022

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

**Subject: Palo Verde Nuclear Generating Station  
Unit 2, Docket No. STN 50-529  
Fourth 10-Year Interval, First Period  
Owner's Activity Report Number 2R23**

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, *Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000, Section XI, Division 1*, Arizona Public Service Company hereby submits the Owner's Activity Report (Form OAR-1) for Unit 2 refueling outage 23 (2R23). The outage ended on November 11, 2021.

No commitments are being made to the NRC by this letter. Should you have any questions concerning the content of this letter, please contact Matthew S. Cox, Licensing Section Leader, at (623) 393-5753.

Sincerely,

A handwritten signature in black ink that reads "Katherine J. Gil". The signature is fluid and cursive, with the first name "Katherine" and last name "Gil" clearly distinguishable.

Digitally signed by Gil,  
Katherine J(Z05492)  
Date: 2022.01.18 10:37:18  
-07'00'

Katherine J. Gil  
Nuclear Regulatory Affairs Director

KJG/MS/mg

Enclosure: Unit 2 Twenty-Third Refueling Outage Owner's Activity Report, Report 2R23

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

**ENCLOSURE**

**Unit 2**

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

**Report 2R23**

## FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number: 2R23

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.: 23  
(if applicable)

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

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

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

Date and revision of inspection plans ISI=9/16/21 R1, SPT=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

Code Cases used for inspection and evaluation:  
N-532-5, 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 U2R23 conform to the requirements of Section XI.  
(refueling outage number)

**Folley, Roy**  
**C(Z07131)**  
Signed \_\_\_\_\_  
Digitally signed by Folley,  
Roy C(Z07131)  
Date: 2022.01.06 11:49:09  
-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 \_\_\_\_\_\* 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.

**Robert G**  
**Hogstrom**  
Digitally signed by  
Robert G Hogstrom  
Date: 2022.01.06  
12:34:44 -07'00'

\* The Hartford Steam Boiler Inspection and Insurance Company

Commissions NB 9685 "A, N, I, C"

(Inspector's Signature)

National Board, State, Province, and Endorsements

Date: Jan 6, 2022

**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	Component ID	Description of Work	Date Complete	Repair/Replacement Plan number
3	00142964, 00142965, 00142966, 00142967	2B DG AREVA INTERCOOLER CROSS CONNECT SPOOLS (5,6,7,8) WELD REPAIR OF CORRODED AREAS	10/28/2021	5231422-0
1	2JCHAHV0205	PRESSURIZER AUX SPRAY CONTROL VALVE REPLACE VALVE	11/09/2021	5236720-0
3	2MDGAE01A	EDG INTERCOOLER CROSS CONNECT SPOOLS 5 AND 7 REPLACE INTERCOOLER CROSS CONNECT SPOOLS	10/01/2021	5254521-0
3	2MDGAE01B	EDG INTERCOOLER CROSS CONNECT SPOOLS 6 AND 8 REPLACE INTERCOOLER CROSS CONNECT SPOOLS	10/01/2021	5254522-0
3	2PSPAL098-3	ESS SPRAY POND P SPAP01 TO JACKET WTR CLR HT EXCH WELD REPAIR PIPE SPOOL	10/01/2021	5254567-4
3	2PSPAL098-4	ESS SP RAY POND P SPAP01 TO JACKET WTR CLR HT EXCH WELD REPAIR PIPE SPOOL	10/01/2021	5254567-4
3	2PSPAL099-1	ESS SPRAY POND P SPAP01 TO AIR AFTERCLRS HT EXCH WELD REPAIR PIPE SPOOL	10/01/2021	5254567-4
3	2PSPAL100-1	JACKET WTR CLR HT EXCH TO SPRAY POND TRAIN A WELD REPAIR PIPE SPOOL	10/01/2021	5254567-4
3	2PSPAL101-1	AIR AFTERCORS HT EXCH TO SPRAY POND TRAIN A WELD REPAIR PIPE SPOOL	10/01/2021	5254567-4
3	2PSPAL80-15	ESP PP SPAP01 TO DG CLG WTR EXCH DGA-E01 WELD REPAIR PIPE SPOOL	10/01/2021	5254567-7
3	2MDGAE01A	EDG A INTERCOOLER A WELD REPAIR OF CORRODED AREAS	10/01/2021	5254569-0
3	2MDGAE01B	EDG A INTERCOOLER B WELD REPAIR OF CORRODED AREAS	10/01/2021	5254569-0
3	2MDGAE04	EDG LUBE OIL COOLER WELD REPAIR OF CORRODED AREAS	10/01/2021	5254569-0
3	2MDGAE05	EDG JACKET WATER COOLER WELD REPAIR OF CORRODED AREAS	10/01/2021	5254569-0

**Table 2**  
Abstract of Repair/Replacement Activities Required for Continued Service

Code Class	Component ID	Description of Work	Date Complete	Repair/Replacement Plan number
3	2MEWBE01	EW HT EXCH B PERFORM BASE MATERIAL REPAIRS	10/30/2021	5257992-1
2	2JSGEPSV0560	S/G #2 LINE 2 SAFETY RELIEF VALVE REPLACE VALVE	11/09/2021	5258010-0
2	2JSGEPSV0561	S/G #1 LINE 2 SAFETY RELIEF VALVE REPLACE VALVE	11/09/2021	5258010-0
2	2JSGEPSV0575	Replace Main Steam Safety Relief Valve	11/09/2021	5258010-0
1	2JRCEPSV0200	PRESSURIZER SAFETY VALVE REPLACE WITH RECONDITIONED SPARE	11/09/2021	5258083-0
1	2JRCEPSV0201	PRESSURIZER SAFETY VALVE REPLACE WITH RECONDITIONED SPARE	11/09/2021	5258084-0
1	2JRCEPSV0202	PRESSURIZER SAFETY VALVE REPLACE WITH RECONDITIONED SPARE	11/09/2021	5258085-0
1	2JRCEPSV0203	PRESSURIZER SAFETY VALVE REPLACE WITH RECONDITIONED SPARE	11/09/2021	5258086-0
2	2SG002H009	SNUBBER MSS MAIN FW REPLACE SNUBBER	10/23/2021	5263203-0
2	2SI072H021	SNUBBER CS/LPSI DISCH OUTCONTA REPLACE SNUBBER	8/18/2021	5263218-0
2	2SI100H020	1/4 KIP SNUBBER REPLACE SNUBBER	8/31/2021	5263221-0
2	2SI120H00G	LPSI PUMP TRAIN B DISCHARGE LINE REPLACE SNUBBER	8/20/2021	5263225-0
2	2SI159H003	SNUBBER SIS LP/HP LOOP A REPLACE SNUBBER	10/22/2021	5263232-0
1	2JCHBHV0203	PRESSURIZER AUX SPRAY CONTROL VALVE REPLACE VALVE	11/09/2021	5362502-0
3	2MDGAE01A	DG A AIR INTERCOOLER A PERFORM TUBESHEET PLUGGING	10/02/2021	5364367-0