



102-07636-MDD/MSC
January 26, 2018

**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 1R20**

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 Palo Verde Nuclear Generating Station (PVNGS) Unit 1 refueling outage 20 (1R20). The PVNGS Unit 1 refueling outage ended on November 6, 2017.

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 dark ink, appearing to read "Michael D. Di Lorenzo", written in a cursive style.

Michael D. Di Lorenzo
Regulatory Affairs Department Leader

MDD/MSC/CJS

Enclosure: Unit 1 Twentieth Refueling Outage Owner's Activity Report, Report
1R20

cc:	K. M. Kennedy	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

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

Report 1R20

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number: 1R20

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.: R20
(if applicable)

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

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

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 = 9/22/17 R6, Press Tests = 3/19/14 R4, IWE = 9/23/15 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-729-4, N-722-1, N-770-2, N-663, N-460, N-532-4, 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 1R20 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: 2018.01.02 10:07:39 -07'00'

Date: Jan 2, 2018

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

Hogstrom,
Robert (YH2450)
(Inspector's Signature)
Digitally signed by Hogstrom,
Robert (YH2450)
DN: cn=Hogstrom, Robert
(YH2450)
Date: 2018.01.02 14:36:52 -07'00'

Commissions N.B. 9685 "C,I,N,R" Az 264
National Board, State, Province, and Endorsements

Date: Jan 2, 2018

Table 1

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

Examination Category and Item Number	Item Description	Evaluation Description
<p>Category: L-A</p> <p>Item Number: L1.12</p>	<p>Indication found in the containment concrete during the 15th year Containment Exterior Concrete Examination. See Visual Examination Report IWL-2017-1084.</p> <p>The Detailed Visual Examination required by IWL-2310(b) determined that the indication is a result of a piece of wood embedded in the concrete since initial construction that affects an area approximately 2 inches wide x 8 inches long x 0.5 inches deep.</p>	<p>Operability Determination 17-01704-001 documents the operability of Containment.</p> <p>Evaluation 17-01704-002 documents the Acceptance by Evaluation as required by IWL-3212 and in accordance with IWL-3300.</p>

Table 2

Abstract of Repair/Replacement Activities Required for Continued Service

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
1	1JSIAPSV0469	Pressure Relief Valve swapped when it failed its Surveillance Test	10/25/2017	4793937-0
1	1MRCEX02	Replaced a nut on the Pressurizer Manway after failing its visual examination	11/02/2017	4795945-0
2	1SG011H020	Installed spacer to pipe support to achieve proper cold setting	10/31/2017	4943103-0
3	1PDGBV485	Replace broken U-bolt/support	01/20/2017	4816794-0
3	1MEWAE01	Weld Repair EW Heat Exchanger	10/21/2017	4793461-3
3	1MDGBE01A	Weld Repair Intercooler A	09/29/2016	4784036-0
3	1MDGBE01B	Weld Repair Intercooler B	09/29/2016	4784036-0
3	1MDGBE01A&B	Weld Repair Intercooler cross-connect spool	09/29/2016	4784036-0
3	1MDGBE05	Weld Repair Jacket Water Cooler	09/29/2016	4784036-0
3	1MDGBE04	Weld Repair Lube Oil Cooler	09/29/2016	4784036-0
3	1PSPAL079	Weld repair on existing spool	10/21/2017	3824445-0