

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 1600 EAST LAMAR BOULEVARD ARLINGTON, TEXAS 76011-4511

August 5, 2022

Mr. Adam Heflin, Executive Vice President and Chief Nuclear Officer Arizona Public Service P.O. Box 52034, MS 7602 Phoenix, AZ 85072-2034

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION – INTEGRATED INSPECTION

REPORT 05000528/2022002 AND 05000529/2022002 AND 05000530/2022002

Dear Mr. Heflin:

On June 30, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Palo Verde Nuclear Generating Station. On July 8, 2022, the NRC inspectors discussed the results of this inspection with Mr. T. Horton, Senior Vice President, Site Operations, and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Signed by Dixon, John on 08/05/22

John L. Dixon, Jr., Chief Reactor Projects Branch D Division of Operating Reactor Safety

Docket Nos. 05000528, 05000529, 05000530 License Nos. NPF-41, NPF-51, NPF-74

Enclosure: As stated

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SUBJECT: PALO VERDE NUCLEAR GENERATING STATION - INTEGRATED

INSPECTION REPORT 05000528/2022002 AND 05000529/2022002 AND

05000530/2022002 DATED - AUGUST 5, 2022

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U.S. NUCLEAR REGULATORY COMMISSION Inspection Report

Docket Numbers: 05000528, 05000529 and 05000530

License Numbers: NPF-41, NPF-51 and NPF-74

Report Numbers: 05000528/2022002, 05000529/2022002 and 05000530/2022002

Enterprise Identifier: I-2022-002-0006

Licensee: Arizona Public Service

Facility: Palo Verde Nuclear Generating Station

Location: Tonopah, AZ

Inspection Dates: April 1 to June 30, 2022

Inspectors: L. Merker, Senior Resident Inspector

E. Lantz, Resident Inspector N. Cuevas, Resident Inspector

J. O'Donnell, Senior Health Physicist J. Drake, Senior Reactor Inspector E. Fernandez, Reactor Inspector D. Antonangeli, Health Physicist

B. Baca, Health PhysicistE. Simpson, Health Physicist

Approved By: John L. Dixon, Jr., Chief

Reactor Projects Branch D

Division of Operating Reactor Safety

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Palo Verde Nuclear Generating Station, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information.

List of Findings and Violations

No findings or violations of more than minor significance were identified.

Additional Tracking Items

None.

PLANT STATUS

Unit 1 entered the inspection period at approximately 95 percent power during a coastdown for refueling outage 1R23. On April 8, 2022, the unit was shut down for the refueling outage. On May 12, 2022, the unit reached criticality and returned to full power on May 18, 2022. The unit remained at full power for the remainder of the inspection period.

Units 2 and 3 operated at or near full power for the duration of the inspection period.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed activities described in IMC 2515, Appendix D, "Plant Status," observed risk-significant activities and completed onsite portions of IPs. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated the site's readiness for seasonal extreme weather conditions prior to the onset of seasonal high temperatures for Units 1, 2, and 3, class 1E 4.16 kV train B and essential spray pond train A, on May 25, 2022.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Unit 2, containment spray train A during containment spray train B maintenance, on May 27, 2022
- (2) Unit 1, essential spray pond train B during summer reliability window, on June 28, 2022
- (3) Unit 3, essential chilled water train B during summer reliability window, on June 29, 2022

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

(1) Unit 1, low-pressure safety injection train B due to being placed in service during refueling outage 1R23, on May 25, 2022.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Unit 1, containment building 80-foot elevation, fire zones 66A, 66B, 67A, and 67B, on May 4, 2022
- (2) Unit 1, emergency core cooling system train B piping penetration room, fire zone 37D, on June 22, 2022
- (3) Unit 2, high-pressure safety injection pump B room, fire zone 31B, on June 23, 2022
- (4) Unit 3, emergency diesel generator B room, fire zone 21B, on June 29, 2022

71111.06 - Flood Protection Measures

<u>Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)</u>

(1) The inspectors evaluated internal flooding mitigation protections in the Unit 2 auxiliary building 40-foot level due to water intrusion from a backed-up floor drain, on April 12, 2022.

71111.07A - Heat Exchanger/Sink Performance

Annual Review (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated the readiness and performance of the Unit 1 emergency diesel generator train A, air intercoolers A and B, on April 15, 2022.

71111.08P - Inservice Inspection Activities (PWR)

PWR Inservice Inspection Activities Sample (IP Section 03.01) (1 Sample)

(1) The inspectors verified that the reactor coolant system boundary, steam generator tubes, reactor vessel internals, risk-significant piping system boundaries, and containment boundary are appropriately monitored for degradation and that repairs and replacements were appropriately fabricated, examined and accepted by reviewing the following activities in Unit 1 from April 11–22, 2022:

03.01.a - Nondestructive Examination and Welding Activities.

- Phase array ultrasonic examination (PAUT) of auxiliary feedwater welds 58-40
 & 58-1
- Liquid Penetrant (PT) examination of high-pressure safety injection long-term recirculation welds 39-26 & 39-27
- Welding for vent valve for pipe component ID 1PEWBL057
- Welding for vent valve for pipe component ID 1PEWBL112

03.01.c – Pressurized-Water Reactor Boric Acid Corrosion Control Activities.

- Evaluation 20-12302-003 SIC-UV-653, shutdown cooling from loop 1 suction valve
- Evaluation 20-12315-003 SIB-V-057, refueling water level indication system isolation/drain valve
- Condition Report 20-11584-002 packing leak of valve CHE-LV-110Q

03.01.d – Pressurized-Water Reactor Steam Generator Tube Examination Activities.

- eddy current (ET) testing of 12427 steam generator tubes in steam generator 11
- eddy current (ET) testing of 11184 steam generator tubes in steam generator 12

Problem Identification and Resolution:

 The inspectors reviewed condition reports associated with inservice inspection activities and concluded that NDE/ISI related issues and operating experience are put into the corrective action program system at low levels to ensure conditions and problems are identified. No findings or violations of more than minor significance were identified.

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

<u>Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01)</u> (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the main control room during the following activities:
 - Units 2 and 3, alignment of electrical buses to the alternate offsite power sources following the loss of startup transformer NAN-X01, on May 5, 2022
 - Unit 1, dilution to estimated critical boron concentration and reactor startup, on May 12, 2022

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

(1) The inspectors observed licensed operator continuing training simulator evaluation activities, on May 17, 2022.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (1 Sample)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

(1) Unit 2, emergency diesel generator train B, on May 16, 2022

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Unit 3, high risk for planned 18-month reactor trip switchgear breaker C testing, on April 11, 2022
- (2) Units 2 and 3, emergent work on startup transformer NAN-X01 after the loss of NAN-X01 that resulted in a partial loss of offsite power, on May 13, 2022
- (3) Unit 2, high risk for transferring control element assembly subgroup 19 from hold bus after emergent work on control element drive mechanism control system cabinet, on May 24, 2022
- (4) Unit 1, high risk for emergent work on safety injection tank 1A nitrogen vent valve SIB-HV-633A, on May 26, 2022
- (5) Unit 3, high risk for emergent work on main turbine control oil pump B, on June 15, 2022

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (5 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Unit 1, essential cooling water pump A operability determination due to oil leakage, on May 18, 2022
- (2) Unit 1, emergency diesel generator train A fuel oil storage tank operability determination due to cracked internal support ribs, on June 3, 2022
- (3) Unit 1, condensate transfer pump B functionality assessment due to pump data outside acceptance criteria, on June 17, 2022
- (4) Unit 1, main steam isolation valve SGE-UV-170 operability determination due to accumulator B pressure decreasing trend, on June 28, 2022
- (5) Unit 2, balance of plant engineered safety features actuation system train A autosequencer operability determination due to an auto-test failure, on June 30, 2022

71111.18 - Plant Modifications

<u>Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)</u>

The inspectors evaluated the following temporary or permanent modifications:

(1) Unit 2, temporary modification to swap leads in process protective cabinet D following emergent replacement of failed low steam generator 1 reactor coolant flow trip pressure transmitter D, on April 25, 2022

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the following post-maintenance testing activities to verify system operability and/or functionality:

- (1) Unit 1, safety injection tank 2A vent valve SIB-HV-613 testing following failure to open, on May 26, 2022
- (2) Unit 1, high-pressure safety injection pump B, long-term cooling valve SID-HV-331 testing following repair of identified valve leakage, on June 1, 2022
- (3) Unit 1, low-pressure safety injection pump B suction valve SIB-HV-692 testing following repairs to correct identified valve seat leakage, on June 21, 2022
- (4) Unit 1, containment spray pump B flow control valve SIB-HV-671 testing following pressure equalization line installation, on June 21, 2022
- (5) Unit 1, startup transformer NAN-X01 phase differential relays testing following a partial loss of offsite power, shield wire removal, and protective relay calibrations, on June 22, 2022
- (6) Unit 2, atmospheric dump valve SGB-HV-185 testing following valve positioner replacement, on June 22, 2022

71111.20 - Refueling and Other Outage Activities

Refueling/Other Outage Sample (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated the Unit 1 refueling outage 1R23 activities utilizing guidance from Operating Experience Smart Sample (OpESS) 2007/03, "Crane and Heavy Lift Inspection, Supplemental Guidance to [Inspection Procedure] 71111.20 and [Inspection Procedure] 71111.13," revision 3, from April 8 through May 18, 2022.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance testing activities to verify system operability and/or functionality:

Surveillance Tests (other) (IP Section 03.01) (3 Samples)

- (1) Unit 1, emergency diesel generator and integrated safeguards train B testing, on April 19, 2022
- (2) Unit 1, auxiliary feedwater train A surveillance testing, on May 19, 2022
- (3) Unit 3, low-pressure safety injection train B in-service testing, on June 3, 2022

Inservice Testing (IP Section 03.01) (1 Sample)

(1) Unit 3, containment spray pump B inservice testing, on May 16, 2022

Containment Isolation Valve Testing (IP Section 03.01) (1 Sample)

(1) Unit 1, containment spray train A containment isolation valve SIA-V-164 testing, on May 9, 2022

RADIATION SAFETY

71124.01 - Radiological Hazard Assessment and Exposure Controls

Radiological Hazard Assessment (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated how the licensee identifies the magnitude and extent of radiation levels and the concentrations and quantities of radioactive materials and how the licensee assesses radiological hazards.

Instructions to Workers (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated how the licensee instructs workers on plant-related radiological hazards and the radiation protection requirements intended to protect workers from those hazards.

Contamination and Radioactive Material Control (IP Section 03.03) (3 Samples)

The inspectors observed/evaluated the following licensee processes for monitoring and controlling contamination and radioactive material:

- (1) surveys of potentially contaminated packages/equipment from the radiologically controlled area and workers exiting potentially contaminated areas
- (2) labeling for several nonexempt radioactive sources listed in the licensee's source inventory, including the following sources: RP407, RP036, RP696, and RP191
- (3) physical and programmatic controls for highly activated and contaminated non-fuel materials stored within the spent fuel pool

Radiological Hazards Control and Work Coverage (IP Section 03.04) (3 Samples)

The inspectors evaluated the licensee's control of radiological hazards for the following radiological work:

- (1) high risk radiological work and job coverage for reactor inboard loop discharge check valve disassembly, inspection, and repair of safety injection train B valve SIE-V-237 (RWP 1-3521-R232022-1508, tasks 30 and 50)
- (2) medium and high-risk radiological work and job coverage for primary side steam generator maintenance activities for the Unit 1, reactor (RWP 1-3306-R23, all tasks)
- (3) medium risk radiological work and job coverage for low-pressure safety injection valve work, lapping in-body seats for low-pressure safety injection train B valve SIB-HV-692 (RWP 1-3502-R23)

High Radiation Area and Very High Radiation Area Controls (IP Section 03.05) (4 Samples)

The inspectors evaluated licensee controls of the following high radiation areas and very high radiation areas (VHRA):

- (1) Unit 1, VHRA tunnel and incore instrumentation chase, 100-foot elevation, room C-B05, door C-107
- (2) Unit 1, regenerative heat exchanger access, 120- and 126-foot elevations, door C-203
- (3) Unit 1, reactor head laydown structure access, 140-foot elevation, doors C-306, C-307, and C-308
- (4) Unit 1, reactor drain tank access, 80-foot elevation, room C-A02, door C-A07

Radiation Worker Performance and Radiation Protection Technician Proficiency (IP Section 03.06) (1 Sample)

(1) The inspectors evaluated radiation worker and radiation protection technician performance as it pertains to radiation protection requirements.

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

Permanent Ventilation Systems (IP Section 03.01) (2 Samples)

The inspectors evaluated the configuration of the following permanently installed ventilation systems:

- (1) emergency ventilation systems for the main control rooms in Units 1, 2, and 3
- (2) emergency ventilation system for the technical support center, which is independent of the three units

Temporary Ventilation Systems (IP Section 03.02) (2 Samples)

The inspectors evaluated the configuration of the following temporary ventilation systems:

- (1) steam generator ventilation system in Unit 1
- (2) reactor vessel head ventilation system in Unit 1

Use of Respiratory Protection Devices (IP Section 03.03) (1 Sample)

(1) The inspectors evaluated the licensee's use of respiratory protection devices.

Self-Contained Breathing Apparatus for Emergency Use (IP Section 03.04) (1 Sample)

(1) The inspectors evaluated the licensee's use and maintenance of self-contained breathing apparatuses.

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Walkdowns and Observations (IP Section 03.01) (5 Samples)

The inspectors evaluated the following radioactive effluent systems during walkdowns:

- (1) Unit 2, containment building and containment purge ventilation exhaust
- (2) Unit 2, plant stack exhaust
- (3) Unit 2, radwaste ventilation exhaust

- (4) Unit 3, fuel building exhaust sampling
- (5) Unit 3, retention tanks 1 and 2

Sampling and Analysis (IP Section 03.02) (5 Samples)

Inspectors evaluated the following effluent samples, sampling processes and compensatory samples:

- (1) Unit 1, iron skid liquid grab sample number 1-19-0771
- (2) Unit 1, seismic gap water tritium sample dated October 15, 2020
- (3) Unit 3, chemical waste neutralizing tank B sample number 3-22-0118
- (4) Unit 3, fuel building exhaust RU-145 particulate, iodine, gaseous, and tritium sampling for permit number 2022-3-061
- (5) Unit 3, retention tank 2 sample number 3-22-0435

Dose Calculations (IP Section 03.03) (2 Samples)

The inspectors evaluated the following dose calculations:

- (1) Unit 1, fuel building ventilation exhaust effluent release permit number 2022-1-070, revision 1
- (2) Unit 1, fuel building ventilation exhaust effluent release permit number 2022-1-075, revision 1

Abnormal Discharges (IP Section 03.04) (1 Sample)

(1) The inspectors evaluated the licensee performance for abnormal releases. There were no abnormal discharges identified during the inspection period.

71124.07 - Radiological Environmental Monitoring Program

Environmental Monitoring Equipment and Sampling (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated environmental monitoring equipment and observed collection of environmental samples.

Radiological Environmental Monitoring Program (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated the implementation of the licensee's radiological environmental monitoring program.

GPI Implementation (IP Section 03.03) (1 Sample)

(1) The inspectors evaluated the licensee's implementation of the Groundwater Protection Initiative program to identify incomplete or discontinued program elements.

71124.08 - Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation

Shipment Preparation (IP Section 03.04) (1 Sample)

(1) The inspectors observed the preparation of radioactive waste shipment 22-RW-023 on June 14, 2022. This shipment included two intermodal containers of low specific activity dry active waste.

OTHER ACTIVITIES - BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS05: Safety System Functional Failures (SSFFs) Sample (IP Section 02.04) (3 Samples)

- (1) Unit 1 (January 1, 2021, through March 31, 2022)
- (2) Unit 2 (January 1, 2021, through March 31, 2022)
- (3) Unit 3 (January 1, 2021, through March 31, 2022)

OR01: Occupational Exposure Control Effectiveness Sample (IP Section 02.15) (1 Sample)

(1) Units 1, 2, and 3 (October 1, 2021, through March 31, 2022)

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences Sample (IP Section 02.16) (1 Sample)

(1) Units 1, 2, and 3 (October 1, 2021, through March 31, 2022)

71152A - Annual Follow-up Problem Identification and Resolution

Annual Follow-up of Selected Issues (Section 03.03) (1 Sample)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

(1) Unit 1, effectiveness of corrective actions following discovery of a broken wire from the rotor slip ring to one of the field pole windings on emergency diesel generator train A, on June 29, 2022

71152S - Semiannual Trend Problem Identification and Resolution

Semiannual Trend Review (Section 03.02) (1 Sample)

(1) The inspectors reviewed the licensee's system health reports and program health reports for potential adverse trends that might be indicative of a more significant safety issue. For system health, the inspectors noted the control element drive mechanism control system (CEDMCS) was moved from green (excellent) to yellow (marginal) health status over a six-month period during 2021 for Unit 3. For systems in yellow status, action plans are developed and implemented by the licensee's strategic engineering personnel to address declining system and equipment performance per procedure. Prior to the CEDMCS system moving to yellow health status, the licensee was already aware of the declining performance and had ranked the CEDMCS system number one in the site top ten technical issues for pathway to

excellence in plant reliability. The inspectors recognize that action plans have been developed and will be implemented in the next outages to improve CEDMCS performance. Overall, the inspectors determined that the licensee has adequately followed site procedures to monitor system and equipment performance over time.

71153 - Follow Up of Events and Notices of Enforcement Discretion

Personnel Performance (IP Section 03.03) (1 Sample)

(1) The inspectors evaluated the Unit 2 and Unit 3 partial loss of offsite power due to a loss of the startup transformer NAN-X01 and the licensee's response, on May 5, 2022.

Reporting (IP Section 03.05) (1 Sample)

(1) The inspectors evaluated event notification 55926 for the Unit 1 invalid actuations of auxiliary feedwater train B and essential spray pond train B, on June 27, 2022.

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On April 22, 2022, the inspectors presented the Palo Verde Unit 1 refueling outage 1R23 inservice inspection results to Mr. A. Meeden, Vice President, Nuclear Engineering, and other members of the licensee staff.
- On April 22, 2022, the inspectors presented the occupational radiation safety inspection results to Mr. T. Horton, Senior Vice President, Site Operations, and other members of the licensee staff.
- On May 20, 2022, the inspectors presented the public radiation safety inspection results to Mr. B. Cable, General Plant Manager, and other members of the licensee staff.
- On June 29, 2022, the inspectors presented the public radiation safety inspection results to Mr. A. Meeden, Vice President, Nuclear Engineering, and other members of the licensee staff.
- On July 8, 2022, the inspectors presented the integrated inspection results to Mr. T. Horton, Senior Vice President, Site Operations, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
71111.01	Corrective Action Documents		20-03234, 22-05663, 22-05649, 22-04795, 22-05815	
	Procedures	40OP-9PB01	4.16 kV Class 1E Power (PB)	34
		400P-9SP01	Essential Spray Pond (SP) Train A	60
		40OP-9ZZ19	Hot Weather Protection	7
		40ST-9ZZM1	Operations Mode 1 Surveillance Logs	74
71111.04	Corrective Action Documents		15-12565, 18-01355, 20-09071, 22-04502, 20-07811, 21-04745, 22-05258	
	Drawings	01-M-ECP-001	P&I Diagram Essential Chilled System	36
		01-M-RCP-001	P & I Diagram Reactor Coolant System	43
		01-M-RCP-002	P & I Diagram Reactor Coolant System	16
		01-M-SIP-001	P & I Diagram Safety Injection and Shutdown Cooling System	62
		01-M-SIP-001	P & I Diagram Safety Injection and Shutdown Cooling System	52
		01-M-SIP-002	P & I Diagram Safety Injection and Shutdown Cooling System	44
		01-M-SPP-001	P & I Diagram Essential Spray Pond System	74
		01-M-SPP-002	P & I Diagram Essential Spray Pond System	23
		02-M-SIP-001	P & I Diagram Safety Injection & Shutdown Cooling System	56
	Miscellaneous		System Training Manual volume 40 Safety Injection System (SI	0
			Safety Injection System Design Basis Manual	41
		PVNGS DBM	Essential Spray Pond System	23
		PVNGS DBM	Essential Chilled Water System	18
	Procedures	40OP-9EC02	Essential Chilled Water Train B	34
		400P-9SI02	Recovery from Shutdown Cooling to Normal Operating Lineup	121
		40OP-9SP02	Essential Spray Pond (SP) B	58
		40ST-9SI13	Train A LPSI and CS System Alignment Verification	36
		40ST-9SI14	Train B LPSI and CS System Alignment Verification	2

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
71111.05	Calculations	13-MC-FP-0805	Combustible Loads-Containment Building	12
		13-MC-FP-0809	Combustible Loads – Auxiliary Building	13
		13-MC-FP-808	Combustible Loads – Diesel Generator Building	6
	Corrective Action		22-04422, 22-04934, 22-04303, 22-04156, FSCCR 5436858,	
	Documents		22-06824, FSCCR 5454046	
	Miscellaneous		Pre-fire Strategies Manual	28
			Pre-fire Strategies Manual	30
			Unit 2 Tamper/Vital/Security Tour Post 20 dates 6/1-6/15/2022	06/23/2022
			Pre-fire Strategies Manual	29
		01-M-FPP-006	P&I Diagram Fire Protection System	16
		N-04-29-004	Security Incident Form	04/27/2022
		VTD-H260-0018	Honeywell Model W940A/C Multizone fire and security	0
			systems installation Instructions	
	Procedures	14DP-0FP01	Firewatch Requirements	14
		14DP-0FP02	Fire System Impairments and Notifications	28
		14DP-0FP32	Emergency Notification and Response	38
		14DP-0FP35	Pre-Fire Strategies Manual Control	12
		14DP-0FP43	Fire Protection Program Responsibilities, Authorities, and	2
			Management Expectation	
		14DP-9FP06	B.5B Containment Flooding	8
		38FT-9QK05	Fire Detection/Protection System Supervised Circuits and Functional Test – Diesel Generator Building	18
		38FT-9QK27	Fire Detection/Protection System Functional Test –	8
			Honeywell One Detector Type Panels	
	Work Orders		5289424, 5336398	
71111.06	Corrective Action Documents		22-01002, 22-00999, PVAR 4011751, PVAR 4021314	
	Miscellaneous		Updated Final Safety Analysis Report	21
		13-MC-ZA-0809	As Built Auxiliary Building Flooding Calculation	8
71111.07A	Calculations	13-MC-DG-0411	DG Heat Exchanger Minimum Flow Rate vs. Inlet SP Water	5
			Temperature	
	Corrective Action		22-02133, 22-02153, 22-02257	

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
	Documents			
	Procedures	73DP-9ZZ11	Heat Exchanger Program	16
		73DP-9ZZ21	Heat Exchanger Visual Inspection	8
		73TI-9ZZ28	Eddy Current Examination of Tubing	11
	Work Orders		5297615, 5297616	
71111.08P	Corrective Action Documents	CR 1 22-03786	White Residue Found on SG 1 Pressure Nozzle After Insulation Removed	04/12/2022
	Boodinonio	CR 1 22-03940	Boron Accumulation on "B" HJTC Hub and Clamp Halves	04/14/2022
	Procedures	73TI-9ZZ07	Liquid Penetrant Examination	19
		73TI-RC01	Steam Generator Eddy Current Exams	36a
		73WP-0ZZ05	WPS for GTAW Process Welding Groove and Fillet Welds in P1 Materials	18
		MN756-A00001	PDI Generic Procedure for Ultrasonic Examination of Ferritic Pipe Welds, PDI-UT-1	2
		MN756-A00005	PDI Generic Procedure for Ultrasonic Examination of Dissimilar Metal Welds, PDI-UT-10	2
	Self-Assessments	INPO Letter	Results of the 202 MRV INPO Review Visit	09/29/2020
	Work Orders	W.O Number 5030564	Weld Data Sheet for Fillet and Socket Welds	10/06/2021
71111.11Q	Corrective Action Documents		22-04997, 22-05012	
	Miscellaneous		Startup Rod Worth Estimator- Table 2.8.1, 2.8.2, and 2.8.3, Unit 1 Cycle 24 Core Data Book	0
			Determination of Anticipated Condition – Anticipated Critical Position and 1/M plot	05/12/2022
		SES-0-05-K-07	Licensed Operator Continuing Training Simulator Evaluation Scenario	05/23/2018
	Procedures	40DP-9OP02	Conduct of Operations	76
		400P-9DG01	Emergency Diesel Generator A	80
		400P-9NA03	13.8 kV Electrical System (NA)	40
		400P-9NB01	4.16 kV Non-Class 1E Power (NB)	33
		40OP-9PB01	4.16 kV Class 1E Power (PB)	34
		40OP-9ZZ02	Initial Reactor Startup Following Refuelings	61

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		72OP-9RX01	Calculation of Estimated Critical Condition	36
71111.12	Corrective Action Documents		22-02856, 22-02912, 22-02920, 22-20921, 22-02924, 22-02925, 22-02930, 22-03046, 22-02997, 22-03124	
	Miscellaneous		Performance Criteria Formulation Bases for DG System (Emergency Diesel Generator)	5
			Performance Criteria Formulation Bases for HD System (Diesel Building HVAC)	1
			Unit 2 Maintenance Rule SSC Unavailability (UA) Report	03/22/2022
			Unit 2 Emergency Diesel Generator Train B Performance Monitoring Group Report	03/29/2022
		01-M-SGP-002	P&I Diagram Main Steam System	53
	Procedures	30DP-9MP03	Mechanical System Cleanliness	25
		31MT-9DG06	Installation and Removal of DG B Temporary Piping Supports	7
		70DP-0MR01	Maintenance Rule	46
	Work Orders		5303387, 5303436, 5303324, 5303389	
71111.13	Corrective Action Documents		22-04997, 22-04999, 22-05000, 22-05012, 22-04997, 22- 05590, 22-06427	
	Miscellaneous		Phoenix Risk Monitor - PVGS Unit 2, Work Week 2218 Schedule Risk Evaluation 5/2/2022-5/8/2022	05/04/2022
			Phoenix Risk Monitor - PVGS Unit 2, Work Week 2218 Schedule Risk Evaluation 5/2/2022-5/8/2022	05/05/2022
			Phoenix Risk Monitor - PVGS Unit 2, Work Week 2218 Schedule Risk Evaluation 5/2/2022-5/8/2022	05/06/2022
			Phoenix Risk Monitor - PVGS Unit 3, Work Week 2218 Schedule Risk Evaluation 5/2/2022-5/8/2022	05/04/2022
			Phoenix Risk Monitor - PVGS Unit 3, Work Week 2218 Schedule Risk Evaluation 5/2/2022-5/8/2022	05/05/2022
			Phoenix Risk Monitor - PVGS Unit 3, Work Week 2218 Schedule Risk Evaluation 5/2/2022-5/8/2022	05/06/2022
			Phoenix Risk Monitor - PVGS Unit 2, Current Risk Summary Report as of 5/4/2022 21:40	05/04/2022
			Phoenix Risk Monitor - PVGS Unit 3, Current Risk Summary Report as of 5/4/2022 21:40	05/04/2022

			•	Revision or Date
			Unit 2 Protected Equipment Scheme for Offsite Power Source INOP	05/05/2022
			Unit 3 Protected Equipment Scheme for Offsite Power Source INOP	05/05/2022
			Work Week 2214 Schedule Risk Evaluation	04/06/2022
			Site Integrated Risk Assessment Work Task 5249300-0	07/28/2021
			Phoenix Risk Monitor - PVGS Unit 2, Work Week 2221	
			Schedule Risk Evaluation 5/23/2022-5/29/2022, as of 05/25/2022	
			Site integrated risk assessment work task 5445781-1	05/22/2022
			Work Week 2221 Schedule Risk Evaluation	05/25/2022
			Phoenix Risk Monitor - PVGS Unit 3, Work Week 2224	06/15/2022
			Schedule Evaluation	
F	Procedures	01DP-0AP57	Management of Critical Evolutions and Infrequently	2
			Performed Tests or Evolutions	
		01DP-0AP57	Management of Critical Evolutions and Infrequently Performed Tests or Evolutions	2
		02DP-0RS01	Online Integrated Risk	9
		32ST-9SB02	18 Month Surveillance Test for Westinghouse Type DS-416 Reactor Trip Breakers	8
		36ST-9SB52	RTSG Shunt and Undervoltage Trip Functional Rest	12
		40AO-9ZZ12	Degraded Electrical Power	78
		40DP-9AP21	Protected Equipment	7
		40DP-9RS01	Operations Department Online Nuclear Risk Determination Modes 1 and 2	7
		40DP-9ZZ01	Containment entry in mode 1 thru mode 4	44
		400P-9DG01	Emergency Diesel Generator A	80
		40OP-9MT02	Main Turbine	92
		400P-9NA03	13.8 kV Electrical System (NA)	40
		400P-9PB01	4.16kV Class 1E Power (PB)	34
		400P-9SF01	Control Element Drive Mechanism Control System (CEDMECS) Operation	31
		40ST-9ZZ37	Inoperable Power Sources Action Statement	6

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		70DP-0RA05	Assessment and Management of Risk When Performing Maintenance in Modes 1 and 2	24
	Work Orders		5249300, 5270938, 5301642, 5445781, 5446205, 5448858	
71111.15	Calculations	13-MC-DF-0503	Seismic Evaluation of Diesel Fuel Oil Storage Tanks	0
	Corrective Action		22-02110, 18-08590, 22-05673, 22-02173, 22-14388, 22-	
	Documents		01209, 22-05998, 17-00288, 22-04759, 22-04840, 22-04849	
	Drawings	J104-00025	Schematic FBEVAS, CPIAS & CREFAS Module	4
		J104-00026	Schematic FBEVAS, CPIAS & CREFAS Module	3
	Miscellaneous		Design Basis Manual - Main Steam	33
			DBM, Diesel Generator, Class 1E Standby Generation, Fuel	28
			Oil Storage and Transfer System	
			UFSAR, Section 9.2.6 - Condensate Storage Facility	21A
			Design Basis Manual, Essential Cooling Water System	24
			Prompt Operability Determination, 1MEWBP01 Pump	0
			Outboard Bearing Fitting Oil Leaks	
		13-NS-C088	Mission Times for the EW, SP, SI, AF, and DG Systems	1
		2022-00099	Engineering Design Change	0
		21-14504-003	Engineering Evaluation	
		22-01209-002	Engineering Evaluation	
		22-01209-003	Immediate Operability Determination/Functional Assessment Evaluation	
		4378348	Engineering Evaluation	
		VTD-A391-00010	Anchor/Darling Instruction Manual for Main Steam Isolation Valves (MSIV) and Feedwater Isolation Valves (FWIV)	14
		VTD-G063-00002	General Atomic (Sorrento Division) Instruction Manual for Balance of Plant Engineered Safety Features Actuation System (BOP ESFAS) [Pub. # E-115-760]	5
	Procedures	36MT-9SA01	Balance of Plant Engineered Safety Features Actuation System Functional Test	11
		36MT-9SA01	Balance of Plant Engineered Safety Features Actuation System Functional Test	13
		40DP-9OP26	Operations Condition Reporting Process and Operability Determination/Functional Assessment	47
		400P-9SA01	BOP ESFAS Modules Operation	33

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		40OP-9SA02	De-Energization of BOP ESFAS	25
		400P-9SG01	Main Steam	81
		73ST-9CT02	Condensate Transfer System – Comprehensive Pump Test	22
		73ST-9EW02	Essential Cooling Water Pumps – Comprehensive Pump Test	13
	Work Orders		5222133, 5416947, 5423586, 5262223, 5074439, 5424192, 5268665, 5448694, 5440240	
71111.18	Corrective Action Documents		21-12743, 22-02134, 22-02526, 22-02777, 22-02778, 22- 03008, 21-10165	
	Drawings	02-J-RCE-0072	Instrument Loop Wiring Diagram Reactor Coolant System	7
	Engineering Changes	22-02134-004	Temporary Modification to Support Reverse Polarity on Unit 2 Pressure Transmitter 115D	0
	Miscellaneous	VTD-I204-00025	ITT Barton Models 764 Differential Pressure Electronic Transmitter Installation and Operational Manual	6
	Procedures	36MT-9SA01	Balance of Plant Engineered Safety Features Actuation System Functional Test	12
		81DP-0DC17	Temporary Configuration Changes	46
		81DP-0EE10	Design Change Process	50
		IP-ENG-001	Standard Design Process (SDP)	2
	Work Orders		5324635, 5423562, 5427875	
71111.19	Corrective Action Documents		17-00732, 22-04140, 22-04143, 22-04724, 22-05698, 22-04531, 22-04997, 22-05060, 22-06690	
	Drawings	01-E-MAF-0026	Control Wiring Diagram Main Generation System Startup SFMR A-E-NAN-X01 Billing & Metering	4
		01-E-NAB-0004	Elementary Diagram 13.8kV Non-Class 1E Power System Intermediate Bus 1E-NAN-S06 13.8kV Stand-by Supply Breaker	11
	Miscellaneous	VTD-M430-00010	Model Series 74 Valve Positioner and Motion Transmitter	7
	Procedures	39MT-9SG04	Calibrate Atmospheric Dump Valve SGB-HV-0185	8
		400P-9SI03	Safety Injection Tank Operations	38
		73ST-9XI04	SI Train B Valves – Inservice Test	41
		73ST-9XI12	HPSI B Long Term Cooling Valve – Inservice Testing	9
		73ST-9XI20	ADVs-Inservice Test	57

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		73ST-9XI33	HPSI pump and check valve full flow test	67
		73ST-9XI37	Safety Injection Tank Nitrogen Vent Valves-Inservice Test	9
	Work Orders		4856277, 5307449, 5310508, 5073803, 5311066, 5034972, 5442074, 5446387, 5453258	
71111.20	Corrective Action Documents		22-03168, 22-03209, 22-03775, 22-03802, 22-03909, 22-03958, 22-03951, 22-04260, 22-04284, 22-04342, 22-04434, 22-04690, 22-04667, 22-04712, 22-05316, 22-05348, 22-03672	
	Miscellaneous		Unit ONE 23rd Refueling Outage Shutdown Risk Assessment Final Report	0
			Unit 1 Fuel Building Material Accountability Log (MAL),	04/29/2022
			Palo Verde Nuclear Generating Station Design Basis Manual-PC System, Table 2-1:System Specific Design Requirements	18
			Palo Verde Shutdown Safety Function Assessment e-form PV-E2263, RCS At/Below RV Flange, as of 07:10AM on 04/15/2022	04/15/2022
			UFSAR, Section 9.1-Fuel Storage and Handling, Table 9.1-2 Cooling System Design Parameters	21A
			22-003 1R23 Refueling Outage Restart Plant Review Board	05/06/2022
		TD 282072	1ENANS02**CKTBRK – 13.8KV – Non-class 1ESWITCHGEAR *CRIT* (278563)	04/19/2022
		TSCCR 5443671	40ST-9ZZ09 Containment Cleanliness Inspection TSCCR for Unit 1	05/12/2022
		TSCCR 5443671	40ST-9ZZ09 Containment Cleanliness Inspection TSCCR for Unit 1	05/10/2022
	Procedures	01DP-0AP17	Managing Personnel Fatigue	12
		30DO-9MP23	Foreign Material Exclusion Controls	10
		31MT-9RC01	Reactor Vessel Missile Shield, Cable Support Structure, Riser Duct & RV Flange Insulation Removal and Installation	44
		31MT-9RC30	Reactor Vessel Head Removal and Installation	60B
		31MT-9ZC05	Open/Close the Containment Equipment Access Hatch and Missile Shield Doors	42
		31MT-9ZC05	Open/Close the Containment Equipment Access Hatch and	42

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			Missile Shield Doors	
		321MT-9ZC07	Miscellaneous Containment Building Heavy Loads	43
		40AO-9ZZ23	Loss of SFP Level or Cooling	33
		40DP-9OP29	Power Block Clearance and Tagging	68
		40EP-9EO11	Lower Mode Functional Recovery	38
		40OP-9ZZ16	RCS Drain Operations	85
		40OP-9ZZ23	Outage GOP	87
		40ST-9RC01	RCS and Pressurizer Heatup and Cooldown Rates,	21
		40ST-9ZZ09	Containment Cleanliness Inspection	25
		70DP-0RA01	Shutdown Risk Assessments	63
		78OP-9FX01	Refueling Machine Operations	64
	Work Orders		5305253, 5149326, 5307104, 5307995	
71111.22	Calculations	02-EC-MA-0221	AC Distribution, Section 3.1.7 – Load Equipment Minimum	14
			Operating Voltage Levels	
		13-NC-ZC-0232	Loss of Coolant Accident Pressure and Temperature	12
			Containment Analysis for Limiting Case	
	Corrective Action		22-03778, 22-03722, 22-04872, 22-04875, 22-05125,	
	Documents		3395638, 22-04994	
			18-11987	
			22-05320	
	Miscellaneous		QSPDS Flow transmitter FT-41A and FT-40A flow data, time	05/11/2022
			14:00 to 14:10 on 05/11/2022	
			PVNGS Design Basis Manual - Reactor Coolant System	32
			UFSAR, section 18.II.E.3.1, Emergency Power Supply for	21A
			Pressurizer Heaters	
		01-M-AFP-001	P&I Diagram Auxiliary-Feedwater System	45
		73DP-9CL02	Containment Leakage Rate Testing Program Basis	37A
			Document	
		73ST-9CL01	Containment Leakage Type B and C Testing Basis	50A
			Document	
		S-03-0045	LDCR 03-R002 for TRM T7.0300 and LDCR 03-F005 for	0
			UFSAR Sections 6.2.4 and 6.2.6	
	Procedures	32ST-9RC01	AC Distribution, Section 3.1.7 – Load Equipment Minimum	14

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			Operating Voltage Levels	
		73DP-(XI01	Pump and Valve Inservice Testing Program	41
		73DP-9CL02	Containment Leakage Rate Testing Program	37
		73ST-9AF04	Auxiliary Feedwater Pump A – Comprehensive Pump Test	30
		73ST-9CL01	Containment Leakage Type B and C Testing	50
		73ST-9DG02	Class 1E Diesel Generator and Integrated Safeguards Test Train B	32
		73ST-9SI06	Containment Spray Pumps and Check Valves – Inservice Test	46
		73ST-9SI11	Low Pressure Safety Injection Pumps Miniflow – Inservice Test	41
	Work Orders		5312257	
			5307398, 5307436, 3830281, 5310494	
71124.01	ALARA Plans	RWP 3306	Steam Generator Maintenance and Support	3
		RWP 3502	Valve, Flange, and Pump Maintenance and Inspection	2
		RWP 3521	High Risk - Inboard Loop Discharge Check Valve Work	3
	Corrective Action	CR-	21-11774, 21-12257, 21-12591, 21-12701, 21-12977, 21-	
	Documents		13124, 21-14301, 21-14818, 21-14886, 21-15023, 22-00129,	
			22-00164, 22-00264, 22-00419, 22-00512, 22-00688, 22-	
			00786, 22-00796, 22-01002, 22-01376, 22-01543, 22-01562,	
			22-01595, 22-01681, 22-01695, 22-01759, 22-01978, 22-	
			01978, 22-02438, 22-02685, 22-02926, 22-03016	
	Procedures	75DP-9RP01	Radiation Exposure and Access Control	23
		75RP-0RP01	Radiological Posting and Labeling	36
		75RP-9OP02	Control of High Radiation Areas, Locked High Radiation Areas, and Very High Radiation Areas	32
		75RP-9RP04	Personnel Contamination Monitoring	9
		75RP-9RP05	Contamination Dose Evaluation	8
		75RP-9RP07	Radiation and Contamination Surveys	32
		75RP-9RP08	Radiological Air Sampling	1
		75RP-9RP10	Conduct of R.P. Operations	39
	Radiation	2-M-20211009-11	Unit 2 Steam Generator and Regenerative Heat Exchanger	10/09/2021
	Surveys		Survey	. 5, 55, 2521

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		2-M-20220129-1	40-foot Auxiliary Building Follow-up Survey for Floor Drain Backup	01/28/2022
		2-M-20220216-3	New High Radiation Area Posting of the Auxiliary Building 88-foot Pipe Chase	02/16/2022
71124.03	Corrective Action Documents	CR-	21-12149, 21-13888, 22-00917, 22-01564, 22-02478, 22-02630, 22-02926, 22-03976	
	Miscellaneous		February 2022 Respiratory Equipment Inventory	02/22/2022
		435039-0	Laboratory Report Compressed Air/Gas Quality Testing Bauer K18 36012 - Grade D	11/23/2021
		435039-1	Laboratory Report Compressed Air/Gas Quality Testing Bauer K18 36012 - Grade E	11/23/2021
		Airhawk 4500 S/N: LAC-240- 926	Posi3 USB Test Results Complete SCBA Test	11/01/2021
		Airhawk 4500 S/N: LAC-240- 941	Posi3 USB Test Results Complete SCBA Test	10/12/2021
		Airhawk 4500 S/N: LAC-240- 951	Posi3 USB Test Results Complete SCBA Test	11/15/2021
		Airhawk 4500 S/N: LAC-265- 122	Posi3 USB Test Results Complete SCBA Test	11/01/2021
	Procedures	01DP-0EM20	Respirator Fit Test	2
		01DP-0EM21	Respirator Medical Evaluation	2
		01DP-0IS10	PVGS Respiratory Protection Program	14
		14DP-0FP42	Respiratory Equipment Inspection and Repair Documentation	1
		33DP-0AP03	Ventilation Filter Testing Program (VFTP)	8
		73DP-0AP08	Control Room Envelope Habitability Program	3
		75DP-0RP01	RP Program Overview	12
		75RP-9RP08	Radiological Air Sampling	1

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		75RP-9RP20	Use and Control of HEPA Filtration and Vacuum Equipment	5
	Self-Assessments		Radiological Safety Trends	02/28/2022
			Organizational Health Quarterly Report for 4th Quarter - 2021	02/18/2022
			Integrated Performance Assessment Report Radiation Protection 1st Half of 2021	08/03/2021
	Work Orders	5168823	33ST9HJ031 Train B Carbon Analysis for the Unit 1 Control Room Essential Nuclear Air Treatment Sys.	11/12/2020
		5218995	33ST9HJ02 - Perform Surveillance Testing of the Unit 3 Control Room Nuclear Air Treatment System. Train "A"	06/08/2021
		5229400	33ST9HJ033 Train A Carbon Analysis for the Unit 3 Control Room Essential Nuclear Air Treatment Sys.	04/07/2021
		5238085	33ST9HJ031 Train A Carbon Analysis for the Unit 1 Control Room Essential Nuclear Air Treatment Sys.	08/03/2021
		5254415	33ST9HJ02 - Perform Surveillance Testing of the Unit 2 Control Room Nuclear Air Treatment System. Train "A".	12/06/2021
71124.06	Corrective Action Documents		19-05660, 19-05826, 19-06030, 19-06982, 19-07312, 19-08154, 19-08356, 19-08357, 19-08576, 19-08743, 19-09372, 19-09979, 19-10583, 19-10923, 19-13299, 19-13930, 19-15767, 20-02366, 20-03430, 20-03432, 20-03548, 20-05385, 20-06303, 20-06322, 20-07392, 20-07664, 20-07807, 20-07995, 20-08425, 20-09289, 20-11384, 20-11784, 20-12169, 20-14316, 20-14604, 20-14833, 20-15077, 20-16696, 20-16869, 21-01719, 21-04180, 21-04358, 21-04426, 21-06744, 21-08122, 21-08443, 21-09419, 21-10990, 21-12026	
	Corrective Action Documents Resulting from Inspection		22-05691	
	Miscellaneous		Unit 2 Ventilation Testing and Maintenance Report: 2MHANJ01A, 2MHANJ01B, 2MHRNJ01A, 2MHRNJ01B, 2MCPNJ02, 2MHCNF01A, 2MHCNF01B	05/19/2022
			Technical Specification (Engineered Safety Feature) Air	04/28/2022

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			Cleaning Ventilation Surveillance Testing Report	
			Offsite Dose Calculation Manual, Palo Verde Nuclear Generating Station Units 1, 2, and 3	29
			Palo Verde Nuclear Generating Station 2019 Annual Radioactive Effluent Release Report	04/17/2020
			Palo Verde Nuclear Generating Station 2020 Annual Radioactive Effluent Release Report	04/21/2021
			Palo Verde Nuclear Generating Station 2021 Annual Radioactive Effluent Release Report	04/26/2022
		237-03072-LMB	3rd Quarter 2020 Chemistry Hot Cross Checks	01/18/2021
		237-03074-BDM	4th Quarter 2020 Chemistry Hot Cross Checks	01/21/2021
		237-03082- AJR/AJR	1st Quarter 2021 Chemistry Hot Cross Checks	04/19/2022
		Special Report 1- SR-2019-001-00	Fuel Building Ventilation System High Range Radioactive Gaseous Effluent Monitor Nonfunctional, Docket No. STN 50-528, Unit 1	04/26/2019
	Procedures	74RM-9EF20	Gaseous Radioactive Release Permits and Offsite Dose Assessment	20
		74RM-9EF63	RU-143/RU-144 Sample Operations	3
		74RM-9EF65	RU-145/146 Sample Operations	1
		74ST-9SQ04	Effluent Monitoring System Monthly Source Check	8
		74ST-9SQ04	Effluent Monitoring System Monthly Source Check	8
	Radiation Surveys	3-22-0118	Chemical Waste Neutralizing Tank (CWNT) to Retention Tank Sample Data Sheet and associated CWNT Effluent Sample Data Sheet	02/07/2022
		3-22-0204	Retention Tank (AMOWN11) to Evaporation Pond Data Sheet and associated Effluent Sample Data Sheet	03/08/2022
		3-22-0431	Steam Generator/Condensate Demineralizer Regeneration Data Sheet and associated RC#6 Caustic Injection Rinse Effluent Sample Data Sheet	05/19/2022
		3-22-0435	Retention Tank (AMOWN12) to Evaporation Pond Data Sheet and associated Retention Tank #2 Effluent Sample Data Sheet	05/19/2022
		G3-22-0422	Gas Grab Sample for Fuel Building Exhaust (FBE) RU-145	05/17/2022

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		13-22-0421	RU145 4X Monthly P&I (particulate/iodine) Changeout for Fuel Building Exhaust Permit - Iodine	05/17/2022
		P3-22-0420	RU145 4X Monthly P&I (particulate/iodine) Changeout for Fuel Building Exhaust Permit - Particulate	05/17/2022
		Permit 2022-3- 061	RU145 4X Monthly P&I (particulate/iodine) Changeout for Fuel Building Exhaust Permit Effluent Sample Data Sheet	05/17/2022
		T3-22-0423	Monthly Fuel Building Exhaust RU-145 Tritium (H3) Sample	05/17/2022
	Self-Assessments	218-04731	2020 Annual Radiation Protection Program Summary Report	08/25/2021
		Audit 2020-004	Nuclear Assurance Department (NAD) Audit Report: Radiation Safety	08/06/2021
		TSD 22-008	Assessment of Palo Verde Radiological Monitoring System and Radiological Effluents Programs	0
	Work Orders	WO	5146989, 5204740	
71124.07	Corrective Action Documents		19-17113, 19-17120, 21-08037, 21-08261, 21-08443, 21-14818, 21-15209, 22-04327	
	Corrective Action Documents Resulting from Inspection		22-05633, 22-05696, 22-05697	
	Miscellaneous		Palo Verde Nuclear Generating Station Annual Radiological Environmental Operating Report 2020	04/14/2021
			Palo Verde Nuclear Generating Station Annual Radiological Environmental Operating Report 2021	04/08/2022
			Palo Verde Nuclear Generating Station Units 1, 2, and 3 - Offsite Dose Calculation Manual	29
			Land Use Census, Appendix A	12/17/2021
			Monthly Well Tritium Data for March 2022	
			Palo Verde Nuclear Generating Station Units 1, 2, and 3 - Technical Requirements Manual	69
		218-04612-MLC	Decommissioning Records Review and 10 CFR 50.75(g)(1) Applicability Review for 2019	05/12/2020
		218-04728-MLC	Decommissioning Records Review and 10 CFR 50.75(g)(1) Applicability Review for 2020	08/15/2021
		ACT 4657834	Radiological Environmental Monitoring Program Air	11/14/2017

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			Sampling Siting Evaluation	
		MOD RG-1609	Engineering Disposition for ENG-DMW #4225738	02/06/2018
	Procedures	74RM-0EN02	Radiological Environmental Air Sampling	21
		74RM-0EN03	Radiological Environmental Sampling	34
		74RM-0EN07	Land Use Census	15
		74RM-9EN01	Sentinel Well Sampling Instructions	2
		75DP-9AP01	Groundwater Protection Program	3
		77ST-9RG04	Meteorological System Instrumentation Replacement and Verification (Primary Side)	3
		77ST-9RG05	Meteorological System Instrumentation Replacement and Verification (Redundant System)	3
		91DP-0EN30-01	Environmental Sampling Administrative Guideline	2
	Work Orders	WO 5260630	Surveillance Test under 77ST-9RG04	10/18/2021
		WO 5310146	Surveillance Test under 77ST-9RG05	04/19/2022
		WO 5310234	Meteorological System Calibration (Primary System)	01/19/2021
71124.08	Radiation Surveys	0-M-20220614-1	22-RW-023 (2) Sealands 22-1-018 and 22-2-017	06/14/2022
	Shipping Records	22-RW-023	LSA shipment of DAW in two 20' Sealand (intermodal) containers [ID #'s 22-2-017 and 22-1-018].	06/14/2022
71151	Corrective Action Documents		21-06337	
	Miscellaneous		Radiation Protection Index Indicator Analysis Detail	04/10/2022
		RCTSAI 1566	2021 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT	04/21/2022
	Procedures	93DP-0LC10	SSFF Mitigating Systems Performance Indicator	6
71152A	Corrective Action Documents		16-11253, 22-02105, 22-02181, 22-02224	
	Drawings	M018-00825	#160 Slip Ring Assy 29" Dia	1
	Engineering Changes		DEC-01011	
	Miscellaneous	13-JN-0109	Installation Specification for Soldering and Circuit Board Repair	4

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		VTD-P292-00003	Portec Inc. Instructions for the Installation, Operations, and Maintenance of Horizontal A.C. Synchronous Generators and A.C. Synchronous and Induction Motors (Pub. #SM-117);	3
	Procedures	32MT-9PE01	Cleaning, Inspection, and Testing of the Class 1E Diesel Generator	47
	Work Orders		4601202, 4840682, 4903834, 5074228, 5297453, 5297620, 5423702	
71152S	Miscellaneous		System IQ: System Health reports as of current period - Fourth Quarter 2021	
	Procedures	01DP-0AP44	Top Ten Technical Issues	2
		73DP-0AP05	Engineering Programs Management and Health Reporting	21
		73TD-0ZZ03	Strategic Engineering Handbook	28
71153	Corrective Action Documents		22-05012, 22-03722, 22-03778	
	Drawings	01-E-SAF-004	Control Wiring Diagram Engineered Safety Features Actuation System BOP-ESFAS Intertying Circuits Train B	
	Miscellaneous		Units 1, 2, and 3 RK Alarm Typer	05/04/2022
			Phoenix Risk Monitor – PVGS Unit 2 Current Risk Summary Report as of 5/4/2022 21:40	05/04/2022
			Phoenix Risk Monitor – PVGS Unit 3 Current Risk Summary Report as of 5/4/2022 21:40	05/04/2022
		EN 55878	Event Notification for the Valid Specified System Actuations of Unit 2 and Unit 3 Emergency Diesel Generators and Unit 3 Auxiliary Feedwater Pump	05/04/2022
		EN 55926	Event Notification for the Invalid Specified System Actuations of the Unit 1 Auxiliary Feedwater System Train B and Essential Spray Pond System Train B	06/03/2022
		VTD-G063-00002	General Atomic (Sorrento Division) Instruction Manual for Balance of Plant Engineered Safety Features Actuation System (BOP ESFAS)	5
	Procedures	40AL-9RK1A	Panel B01A Alarm Responses	9
		40AL-9RK1C	Panel B01C Alarm Responses	8
		40AL-9RK2A	Panel B02A Alarm Responses	14

Inspection	Туре	Designation	Description or Title	Revision or
Procedure		-		Date
		40AL-9RK7A	Panel B07A Alarm Responses	10
		40AO-9ZZ12	Degraded Electrical Power	78
		40ST-9ZZ37	Inoperable Power Sources Action Statement	6
	Work Orders		5307398	