



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

June 05, 2023

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

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 - NRC  
EXAMINATION REPORT 05000528/2023301; 05000529/2023301;  
05000530/2023301

Dear Adam Heflin:

On May 25, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an initial operator license examination at your Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The enclosed report documents the examination results and licensing decisions. The preliminary examination results were discussed on May 4, 2023, with Mr. B. Cable, Plant Manager, and other members of your staff. A telephonic exit meeting was conducted on May 25, 2023, with Ms. L. Weaver, Compliance Section Leader, Regulatory Affairs, who was provided the NRC licensing decisions.

The examination included the evaluation of seven applicants for reactor operator licenses, one applicant for instant senior reactor operator license, and four applicants for upgrade senior reactor operator licenses. The license examiners determined that all 12 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued. There were no post-examination comments submitted by your staff. The enclosure contains details of this report.

No findings were identified during this examination.

A. Heflin

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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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,



Signed by Gepford, Heather  
on 06/05/23

Heather J. Gepford, Ph.D., Chief  
Operations Branch  
Division of Operating Reactor Safety

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

Enclosure:  
Examination Report 05000528/2023301,  
05000529/2023301, and 05000530/2023301

Electronic distribution via LISTSERV

PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 - NRC EXAMINATION REPORT 05000528/2023301; 05000529/2023301; 05000530/2023301, DATED JUNE 05, 2023.

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PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 - NRC EXAMINATION REPORT 05000528/2023301; 05000529/2023301; 05000530/2023301

ADAMS ACCESSION NUMBER: **ML23152A075**

SUNSI Review: ADAMS:  Non-Publicly Available  Non-Sensitive Keyword:  
 By: TJF  Yes  No  Publicly Available  Sensitive NRR-079

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**Inspection Report**

Docket Numbers: 05000528, 05000529, 05000530

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

Report Numbers: 05000528/202330; 05000529/2023301; 05000530/2023301

Enterprise Identifier: L-2023-OLL-0039

Licensee: Arizona Public Service Company

Facility: Palo Verde Nuclear Generating Station

Location: Tonopah, Arizona

Inspection Dates: May 2, 2023 to May 25, 2023

Inspectors: T. Farina, Senior Operations Engineer (Chief Examiner)  
C. Osterholtz, Senior Operations Engineer  
J. Kirkland, Senior Operations Engineer  
M. Hayes, Senior Resident Inspector  
N. Hernandez, Operations Engineer  
D. You, Operations Engineer

Approved By: Heather J. Gepford, Ph.D., Chief  
Operations Branch  
Division of Operating Reactor Safety

## SUMMARY

Examination Report 05000528/202330, 05000529/2023301, 05000530/2023301; Palo Verde Nuclear Generating Station, Units 1, 2, and 3; Initial Operator Licensing Examination Report

The NRC examiners evaluated the competency of seven applicants for reactor operator licenses, one applicant for instant senior reactor operator license, and four applicants for upgrade senior reactor operator licenses at Palo Verde Nuclear Generating Station, Units 1, 2, and 3.

The licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 12. The written examination was administered by the licensee on May 11, 2023. The NRC examiners administered the operating tests on May 2-4, 2023.

The NRC examiners determined that all 12 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

A. NRC-Identified and Self-Revealing Findings

None.

B. Licensee-Identified Violations

None.

## REPORT DETAILS

### OTHER ACTIVITIES – INITIAL LICENSE EXAMINATION

#### .1 License Applications

##### a. Scope

The NRC examiners reviewed all license applications submitted to ensure each applicant satisfied relevant license eligibility requirements. The NRC examiners also audited three of the license applications in detail to confirm that they accurately reflected the subject applicant's qualifications. This audit focused on the applicants' experience and on-the-job training, including control manipulations that provided significant reactivity changes.

##### b. Findings

No findings were identified.

#### .2 Examination Development

##### a. Scope

The NRC examiners reviewed integrated examination outlines and draft examinations submitted by the licensee against the requirements of NUREG-1021. The NRC examiners conducted an onsite validation of the operating tests.

##### b. Findings

The NRC examiners provided outline, draft examination, and post-validation comments to the licensee. The licensee satisfactorily completed comment resolution prior to examination administration.

The NRC examiners determined the written examinations and operating tests initially submitted by the licensee were within the range of acceptability expected for a proposed examination.

#### .3 Operator Knowledge and Performance

##### a. Scope

On May 11, 2023, the licensee proctored the administration of the written examinations to all 12 applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on May 18, 2023.

The NRC examination team administered the various portions of the operating tests to all applicants on May 2-4, 2023.

##### b. Findings

No findings were identified.

All applicants passed the written examination and all parts of the operating tests. The final written examinations and post-examination analysis may be accessed in the ADAMS system under the accession numbers noted in the attachment. There were no post-examination comments as indicated in the licensee submittal.

The examination team noted two generic weaknesses associated with applicant performance on the simulator job performance measures section of the operating tests. The applicants displayed a weakness responding to an inadvertent containment spray actuation signal (CSAS) and responding to a loss of stator cooling water. Post-examination analysis revealed five generic weaknesses associated with applicant performance on the written examination; specifically, the following questions had a miss rate exceeding 50 percent: 25, 29, 84, 92, and 94. These deficiencies were captured in the licensee's corrective action program as Condition Reports 21-14266 and 23-05722. Copies of all individual examination reports were sent to the facility training manager for evaluation and determination of appropriate remedial training.

.4 Simulation Facility Performance

a. Scope

The NRC examiners observed simulator performance with regard to plant fidelity during examination validation and administration.

b. Findings

No findings were identified.

.5 Examination Security

a. Scope

The NRC examiners reviewed examination security for examination development during both the onsite preparation week and examination administration week for compliance with 10 CFR 55.49 and NUREG-1021. Plans for examination security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

### Exit Meeting Summary

The chief examiner presented the preliminary examination results on May 4, 2023, to Mr. B. Cable, Plant Manager, and other members of your staff. A telephonic exit meeting was conducted on May 25, 2023, between Mr. T. Farina, chief examiner, and Ms. L. Weaver, Compliance Section Leader, Regulatory Affairs. The licensee did not identify any information or materials used during the examination as proprietary.

## **ADAMS DOCUMENTS REFERENCED**

Accession No. ML23143A209 - FINAL WRITTEN EXAMS

Accession No. ML23143A210 - FINAL OPERATING TEST

Accession No. ML23145A277 - POST-EXAMINATION ANALYSIS