



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

December 15, 2020

EA-20-128

Mrs. Maria L. Lecal  
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 INSPECTION REPORT 05000528/2020011, 05000529/2020011, AND  
05000530/2020011

Dear Mrs. Lecal:

This letter refers to the inspection conducted from September 29 to October 3, 2020, at Palo Verde Nuclear Generating Station, Units 1, 2, and 3, with in-office inspection through November 19, 2020. The purpose of the inspection was to review the licensed operator requalification program and licensed operator performance. The enclosed report presents the results of this inspection. The inspectors discussed the preliminary inspection findings with you and other members of your staff at the conclusion of the on-site portion of the inspection and on October 2, 2020. On November 19, 2020, the inspectors conducted a final telephonic exit briefing with Mr. T. Horton, Senior Vice President, Site Operations, and other members of your staff.

Based on the results of this inspection, one apparent violation was identified and is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The apparent violation involved Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.9(a), which states, in part, that information provided to the Commission by the licensee shall be complete and accurate in all material respects. Specifically, on September 19, 2019, an NRC Form 396, "Certification of Medical Examination by Facility Licensee," was submitted to the NRC that was not complete and accurate in that it did not document a medical condition for an operator that required a restricting license condition. On November 12, 2019, the NRC granted a license to the operator without the restricting condition to use the therapeutic device as prescribed. Further details regarding this apparent violation are documented in the enclosed inspection report.

Based on our understanding of your corrective actions, both taken and planned, and because this issue was identified by your staff, the NRC is not considering a civil penalty in this case in accordance with Section 2.3.4 of the NRC Enforcement Policy. A final enforcement decision will be based on confirmation of your corrective actions and on any other relevant information you choose to provide.

Before the NRC makes its enforcement decision, we are providing you an opportunity to respond, in writing, to the apparent violation addressed in this inspection report within 30 days of the date of this letter or request a Predecisional Enforcement Conference (PEC). If a PEC is held, it will be open for public observation and the NRC will issue a press release to announce the time and date of the conference. If you decide to participate in a PEC, please contact Mr. Gregory Werner, Chief, Operations Branch, at 817-200-1159 within 10 days of the date of this letter. A PEC should be held within 30 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to an Apparent Violation in NRC Inspection Report 05000528/2020011, 05000529/2020011, and 05000530/2020011; EA-20-128," and should include for the apparent violation: (1) the reason for the apparent violation or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken; and (4) the date when full compliance will be achieved.

Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. Additionally, your response should be sent to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy mailed to Director, Division of Reactor Safety, U.S. Nuclear Regulatory Commission, Region IV, 1600 E. Lamar Blvd., Arlington, TX 76011-4511, and a copy to the NRC Resident Inspector at the Palo Verde Nuclear Generating Station, and emailed to [R4Enforcement@nrc.gov](mailto:R4Enforcement@nrc.gov) within 30 days of the date of this letter. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned.

In addition, please be advised that the number and characterization of apparent violations described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice and Procedure," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the public without redaction.

M. Lacal

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If you have any questions concerning this matter, please contact Mr. Gregory Werner of my staff at 817-200-1159.

Sincerely,

**Ryan E. Lantz**

Digitally signed by Ryan E.  
Lantz  
Date: 2020.12.15 15:42:13  
-06'00'

Ryan E. Lantz, Director  
Division of Reactor Safety

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

Enclosure:  
Inspection Report

cc w/ encl: Distribution via LISTSERV®

PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 - NRC  
 INSPECTION REPORT 05000528/2020011, 05000529/2020011, AND 05000530/2020011 –  
 DECEMBER 15, 2020

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DOCUMENT NAME: S:\RAS\ACES\ENFORCEMENT\\_EA CASES - OPEN\PVNGS EA-20-128 operator medical\PV  
 Choice Letter\_HQ Concurrences.docx

ADAMS ACCESSION NUMBER: ML20324A079

SUNSI Review      ADAMS:       Non-Publicly Available       Non-Sensitive      Keyword:  
 By: NAH       Yes  No       Publicly Available       Sensitive      NRC-002

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NAME	NHernandez	GWerner	MHayes	DYou	JDixon	GWerner
SIGNATURE	/RA/	GEW	/RA/	/RA/	/RA/	GEW
DATE	11/30/2020	11/17/2020	11/20/2020	11/20/2020	11/19/2020	11/20/2020
OFFICE	SES:ACES	TL:ACES	RC:ORA	OE	NRR	D:DRS
NAME	JKramer	JGroom	DCylkowski	DJones	RFelts	RLantz
SIGNATURE	/RA/	/RA/	/RA/	/RA/	/RA/	/RA/
DATE	11/23/2020	12/1/2020	12/7/2020	12/8/2020	12/8/2020	12/15/2020

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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: 05000528/2020011, 05000529/2020011 and 05000530/2020011

Enterprise Identifier: I-2020-011-0054

Licensee: Arizona Public Service Company

Facility: Palo Verde Nuclear Generating Station, Units 1, 2, and 3

Location: Tonopah, AZ

Inspection Dates: September 29, 2020, to November 19, 2020

Inspectors: M. Hayes, Operations Engineer  
N. Hernandez, Operations Engineer  
D. You, Operations Engineer

Approved By: Gregory E. Werner, Chief  
Operations Branch  
Division of Reactor Safety

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an NRC 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

Incomplete and Inaccurate Medical Information Resulted in Issuance of an Operator License Without a Required Medical Restriction			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Not Applicable	Apparent Violation AV 05000528, 05000529, 05000530/2020011-01 Open EA-20-128	Not Applicable	71111.11B
An apparent violation of 10 CFR 50.9, "Completeness and Accuracy of Information," for the failure to submit complete and accurate information regarding an application for an initial reactor operator license. Specifically, on September 19, 2019, the licensee submitted a licensed reactor operator application with an NRC Form 396 that inaccurately certified the medical fitness of the applicant without a required therapeutic device to control a medical condition to maintain medical qualifications.			

### Additional Tracking Items

None.

## 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 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

### 71111.11B - Licensed Operator Requalification Program and Licensed Operator Performance

#### Licensed Operator Requalification Program (IP Section 03.04) (1 Sample)

(1) Biennial Requalification Written Examinations

The inspectors evaluated the quality of the licensed operator biennial requalification written examination administered August 26, 2020, to October 3, 2020.

Annual Requalification Operating Tests

The inspectors evaluated the adequacy of the facility licensee's annual requalification operating test.

Administration of an Annual Requalification Operating Test

The inspectors evaluated the effectiveness of the facility licensee in administering requalification operating tests required by 10 CFR 55.59(a)(2) and that the facility licensee is effectively evaluating their licensed operators for mastery of training objectives.

Requalification Examination Security

The inspectors evaluated the ability of the facility licensee to safeguard examination material, such that the examination is not compromised.

Remedial Training and Re-examinations

The inspectors evaluated the effectiveness of remedial training conducted by the licensee and reviewed the adequacy of re-examinations for licensed operators who did not pass a required requalification examination.

Operator License Conditions

The inspectors evaluated the licensee's program for ensuring that licensed operators meet the conditions of their licenses. The inspectors reviewed one apparent violation

for failure to submit complete and accurate information to the NRC and have recorded the results in the following section of this report.

Control Room Simulator

The inspectors evaluated the adequacy of the facility licensee’s control room simulator in modeling the actual plant and for meeting the requirements contained in 10 CFR 55.46.

Problem Identification and Resolution

The inspectors evaluated the licensee’s ability to identify and resolve problems associated with licensed operator performance.

**INSPECTION RESULTS**

Incomplete and Inaccurate Medical Information Resulted in Issuance of an Operator License Without a Required Medical Restriction			
Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Apparent Violation AV 05000528, 05000529, 5000530/2020011-01 Open EA-20-128	Not Applicable	71111.11B
An apparent violation of 10 CFR 50.9, “Completeness and Accuracy of Information,” for the failure to submit complete and accurate information regarding an application for an initial reactor operator license. Specifically, on September 19, 2019, the licensee submitted a licensed reactor operator application with an NRC Form 396 that inaccurately certified the medical fitness of the applicant without a required therapeutic device to control a medical condition to maintain medical qualifications.			
<p><u>Description:</u> In February 2018, an employee in initial licensed operator training reported to the site medical department a condition requiring the use of a therapeutic device, a continuous positive airway pressure (CPAP) therapy for obstructive sleep apnea. On November 20, 2018, the employee provided the medical department with documentation for the condition from their personal physician. On July 16, 2019, during a pre-license physical examination the condition and accompanying documentation were discussed with the occupational health physician. The occupational health physician recognized that the use of this therapeutic device would require a license restriction but failed to document the condition on the NRC Form 396, "Certification of Medical Examination by Facility Licensee." Two additional independent reviews of the NRC Form 396 were completed, but also failed to identify the error.</p> <p>On September 19, 2019, the licensee submitted the operator’s initial license application to the NRC, which included the NRC Form 396. As stated on the NRC Form 396, the overriding purpose of licensed operator medical qualification is that the individual "would not be expected to cause operational errors endangering public health and safety." The form did not request a restricting license condition to “use the therapeutic device as prescribed” and this device is required for medical fitness for duty reasons in accordance with the American National Standards Institute (ANSI)/American National Standard (ANS)-3.4-1983, “Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants.” The licensee is committed to ANSI/ANS-3.4-1983. Specifically, the guidance</p>			



contained in ANSI/ANS-3.4, Section 5.2.2, "Freedom from Incapacity," subsection (4), forms the basis in reaching this determination. Section 6, "Waiver or Specifically Limited Approval," provides the guidance that is used to demonstrate that an operator can satisfactorily complete operational duties for an operator that does not meet all the established medical standards. Based on this standard, the therapeutic device prescribed to the licensed operator would require a condition on their license to "use the therapeutic device as prescribed." On November 12, 2019, the NRC granted a license to the operator without the restricting condition to use the therapeutic device as prescribed.

On August 4, 2020, during the licensed operator's regularly scheduled physical, the occupational health physician identified the error while comparing the medical record to the issued license. The licensee notified the NRC of the error on August 4, 2020. On August 6, 2020, the licensee submitted a letter to the NRC with a revised NRC Form 396 that reflected a new restriction to use the therapeutic device as prescribed. Based on medical documentation from the operator's treating physician, and the device's hours usage report (store up to 365 days of usage data), the operator's medical condition has been adequately controlled since the original diagnosis. The operator's condition was determined to be stable and the diagnosis had not interfered with the ability to perform licensed operator duties.

Corrective Actions: Compliance was restored on August 6, 2020, when the licensee submitted a letter to the NRC with a revised NRC Form 396 indicating the new restriction to use the therapeutic device. On August 7, 2020, the NRC issued a license amendment with the new restriction. The licensee also plans for all future NRC Form 396 reviews to be completed with the operators present to ensure accuracy, and an extent of condition was performed with no additional examples identified.

Corrective Action References: Condition Reports CR 20-09888 and CR 20-09927

Performance Assessment: Not applicable. The Reactor Oversight Process does not specifically consider the impact to the NRC's regulatory oversight when assessing licensee performance. Therefore, it is necessary to address this violation using traditional enforcement.

Enforcement:

Severity: The severity of this apparent violation will be determined in accordance with the Enforcement Policy pending a final enforcement determination.

Violation: Title 10 CFR 50.9, "Completeness and Accuracy of Information," requires, in part, that information provided to the NRC by a licensee shall be complete and accurate in all material respects.

Title 10 CFR 55.3 requires, in part, that a person must be authorized by a license issued by the Commission to perform the function of an operator or senior operator as defined in Part 55.

Title 10 CFR 55.21 requires, in part, that an applicant for a license shall have a medical examination by a physician, and that the physician shall determine that the applicant meets requirements of 10 CFR 55.33(a)(1).

Title 10 CFR 55.33(a)(1) requires, in part, the Commission will approve an initial application for license if it finds that an applicant's medical condition and general health will not adversely

affect the performance of assigned operator job duties or cause operational errors endangering public health and safety, as detailed in 10 CFR 55.23.

Title 10 CFR 55.33(b) states, in part, that if an applicant's general medical condition does not meet the minimum standards under 10 CFR 55.33(a)(1), the Commission may approve the application and include conditions in the license to accommodate the medical defect based on supporting evidence provided by the facility licensee and examining physician as provided on NRC Form 396.

Title 10 CFR 55.23 requires, in part, that to certify the medical fitness of the applicant, an authorized representative of the facility licensee shall complete and sign NRC Form 396, "Certification of Medical Examination by Facility Licensee." NRC Form 396, when signed by an authorized representative of the facility licensee, certifies that based on the results of the physical examination, including information furnished by the applicant, the physician has determined that the applicant's physical condition and general health are such that the applicant would not be expected to cause operational errors endangering public health and safety and documents whether the applicant's license should be conditioned with restrictions.

Contrary to the above, on September 19, 2019, the licensee provided information to the NRC that was not complete and accurate in all material respects. Specifically, the licensee submitted a licensed reactor operator application with an NRC Form 396 that certified the medical fitness of the applicant and that there was only one medical condition that required a restricting license condition. This information was inaccurate in that the applicant had a second issue that required a therapeutic device to control a medical condition that does not meet the minimum standards of 10 CFR 55.33(a)(1), and that requires a restricting license condition to use a therapeutic device as prescribed to maintain medical qualifications. Based, in part, on the inaccurate information, the NRC issued the applicant an operator license without the required restricting license condition on November 12, 2019.

Enforcement Action: This violation is being treated as an apparent violation pending a final enforcement determination.

## **EXIT MEETINGS AND DEBRIEFS**

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

- On October 2, 2020, the inspectors presented the preliminary inspection results to Mrs. M. Lecal, Executive Vice President/Chief Nuclear Officer, and other members of the licensee staff.
- On November 19, 2020, the inspectors presented the inspection results to Mr. T. Horton, Senior Vice President, Site Operations, and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.11B	Corrective Action Documents	Condition Report	18-13608 18-13802 18-15202	
			19-02068 18-19256 18-20239	
			19-00696 19-00968 19-01740	
			19-03361 19-02567 19-03361	
			19-06160 19-05644 19-07353	
			19-10475 19-10774 19-11531	
			19-12642 19-13033 19-16488	
			19-18353 19-18677 20-01696	
			20-02891 20-03058 20-03141	
			20-05961 20-08096 20-09221	
			18-11351 18-17236 18-19494	
			19-11846 19-17120 19-18022	
			20-02068 20-02317 20-08449	
			18-00835 18-00913 18-07282	
			18-12825 18-17209 18-18730	
			18-19049 18-20066 19-01832	
			19-04687 19-14625 19-15935	
			19-16332 19-17140 19-18211	
			20-0059 20-02596 20-03003	
			20-05451 20-06288 20-08818	
20-09563 18-05489 18-12918				
18-16332 18-18944 20-00280				
20-08172 20-09888 20-09927				
Miscellaneous			LOCT Lesson Plans Based on OE	
			LOCT Lesson Plans Based on Operator Performance	
			Licensed Operator Continuing Training Program Description	74
			2020 Remedial Written Exam 1	
			2020 Remedial Written Exam 2	
			2020 Written Exam Results	
			2020 Written Exams Weeks 0-5	
			2020 Operating Test Results	
			2019 Operating Test Results	
			2019-2020 License Reactivations	
			Written Exam Weeks 0-5	
			1st Quarter 2020 Simulator Oversight Committee Meeting Minutes	03/26/2020
			3rd Quarter 2019 Simulator Oversight Committee Meeting Minutes	09/19/2019
		2020 Operating Test Weeks 0-5		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.11B	Miscellaneous		Licensed Operator Continuing Training Program Description	74
			1st Quarter 2019 Simulator Oversight Committee Meeting Minutes	03/28/2019
		0150050401	2019 Annual Exam JPM #4 – Establish RCP Seal Injection Flow	09/13/2019
		1000020401	2019 Annual Exam JPM #11 – Operate the Plant Monitoring System	08/28/2019
		1250030501	2019 Annual Exam JPM #1 – Respond to a loss of turbine cooling water	08/15/2019
		2020-TT01-B	Manual Reactor Trip Transient Test	08/27/2020
		2020-TT03-B	Closure of all MSIVs Transient Test	08/27/2020
		2020-TT08-B	RCS rupture with Loss of Offsite Power Transient Test	08/27/2020
		CVM06A	Charging Pump Trip	10/14/19
		CVM06B	PVNGS Simulator Malfunction Test: Charging Pump Trip	08/7/19
		CVM06C	PVNGS Simulator Malfunction Test: Charging Pump Trip	08/8/19
		OT03 2019-2020	2020 Written Exam Sample Plan	
		OT03 2019-2020	2020 Operating Test Sample Plan	
		Simulator Deficiency Requests	2018-4407 2016-4195 2018-4400 2017-4427 2019-4503 2019-4464	
	Simulator Reports	SR-70, SR-4218, SR-91, SR-4213, SR-4220, SR-4217, SR-4216, SR-4215, SR-4214, SR-4211, SR-100, SR-86, SR-4208, SR-4239		
	Procedures	01DP-0EM13	Licensed Operator Medical Examinations	27
		15DP-0OT02	LOCT Annual Operating Exam Sample Plan Development	6
		15DP-0OT03	LOCT Biennial Written Exam Development and Sample Plan	6
		15DP-0OT04	LOCT Annual and Biennial Exam Administration	7
15DP-0OT05		NRC Examination Security	10	
71111.11B	Procedures	15DP-0OT06	LOCT Scenario and JPM	4

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Development	
		15DP-0TR08	Systematic Approach to Training (SAT)	17
		15DP-0TR70	Simulator Configuration	5
		40DP-0OP09	Operator Licensing and Requalification Process	1
		40DP-9OP02	Conduct of Operations	74
		ANOR01	PVNGS Simulator Malfunction Test: Loss of all control board annunciators	08/17/19