



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

July 24, 2018

Mr. Robert S. Bement
Executive Vice President Nuclear/
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 –
NOTIFICATION OF INSPECTION (NRC INSPECTION REPORT
05000528/2018004, 05000529/2018004, 05000530/2018004 AND REQUEST
FOR INFORMATION

Dear Mr. Bement:

From September 24, 2018 to September 28, 2018, inspectors from the Nuclear Regulatory Commission's (NRC) Region IV office will perform the baseline biennial requalification inspection at Palo Verde Station, using NRC Inspection Procedure 71111.11B, "Licensed Operator Requalification Program." Experience has shown that this inspection is a resource intensive inspection both for the NRC inspectors and your staff. In order to minimize the impact to your onsite resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. These documents have been divided into three groups. The first group (Section A of the enclosure) identifies information to be provided prior to the inspection to ensure that the inspectors are adequately prepared. The second group (Section B of the enclosure) identifies the information the inspectors will need upon arrival at the site. The third group (Section C of this enclosure) identifies the items which are necessary to close out the inspection and are usually sent a few weeks after the team has left the site. It is important that all of these documents are up to date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Mr. John Rodgers of your training organization. Our inspection dates are subject to change based on your updated schedule of examination activities. If there are any questions about this inspection or the material requested, please contact the lead inspector Nicholas Hernandez (832) 689-9928 (nicholas.hernandez@nrc.gov) or Clyde Osterholtz at (817) 200-1269 (clyde.osterholtz@nrc.gov).

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-

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In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedures," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Vincent G. Gaddy, Chief
Operations Branch
Division of Reactor Safety

Docket: 50-05000528/529/530
License: NPF-41, NPF-51, NPF-74

Enclosure:
Inservice Inspection Document Request

PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 – NOTIFICATION OF INSPECTION (NRC INSPECTION REPORT 05000528/2018004, 05000529/2018004, 05000530/2018004 AND REQUEST FOR INFORMATION – DATED JULY 24, 2018

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- Project Manager (Michael.Orenak@nrc.gov)
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- RIV RSLO (Bill.Maier@nrc.gov)
- Acting Team Lead, DRS/IPAT (Gerond.George@nrc.gov)
- Project Engineer, DRS/IPAT (Peter.Jayroe@nrc.gov)
- RITS Coordinator (Marisa.Herrera@nrc.gov)
- ACES (R4Enforcement.Resource@nrc.gov)
- Branch Chief, DRP/D (Neil.Keefe@nrc.gov)
- Senior Project Engineer, (John.Dixon@nrc.gov)
- Project Engineer, (Russell.Bywater@nrc.gov)
- Project Engineer, (John.Vera@nrc.gov)
- Senior Resident Inspector (Charles.Peabody@nrc.gov)
- Resident Inspector (David.You@nrc.gov)
- Resident Inspector (Dustin.Reinert@nrc.gov)
- PV Administrative Assistant (Yvonne.Dubay@nrc.gov)

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ADAMS ACCESSION NUMBER: ML18200A291

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

OFFICE	OE:OB	OE:OB	C:OB			
NAME	NHernandez	COsterholtz	VGaddy			
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DATE	07/19/18	07/23/18	07/24/18			

OFFICIAL RECORD COPY

BIENNIAL REQUALIFICATION INSPECTION DOCUMENT REQUEST

From: Nicholas Hernandez
Operations Engineer, NRC RIV
832-689-9928

To: John Rodgers
Supervisor, Palo Verde
623-393-6335

Subj: Information Request to Support September 24-28, 2018, Licensed Operator
Requalification Program Inspection (IP 71111.11B)

A. The following information is requested in order to support inspection preparation activities. These items are listed by section as they appear in the inspection module (ie 2.02, 2.04, etc). Requested materials should be sent either electronically or by CD/DVD in order to arrive at the Region IV office no later than August 16, 2018. Do not send USB flash drives.

- Electronically: To: Nicholas.Hernandez@nrc.gov (lead inspector);
 Cc: Clyde.Osterholtz@nrc.gov (inspector)

- Physically: To: US Nuclear Regulatory Commission, Region IV
 1600 E. Lamar Blvd
 Arlington, TX 76011
 ATTN: *Clyde Osterholtz*

General Requests:

- List of licensed operators (SRO & RO) by crew (operating & staff)
- Training and Operations Department organization charts (with qualified LOR evaluators identified)
- Procedures that identify process for revising and maintaining LOR continuing training program
- List of outstanding LOR program changes
- List of plant events and industry operating experience incorporated into LOR program since last BRQ
- Audits and/or self-assessment reports addressing the LOR training program
- Last two years of simulator review committee (or equivalent) meeting minutes
- Last two years of Curriculum Review Committee (or equivalent) meeting minutes

02.03: Biennial Requalification Written Examination Quality

- The current and approved biennial written examination schedule
- The current requalification cycle written examination results to date
- **All** written examinations that have been approved for administration up to the date of submittal. Include password protection if e-mailed or double envelope protection if mailed per NUREG-1021.
- The current requalification cycle examination methodology (sample plan)

02.04: Annual Requalification Operating Test Quality

- The schedule for the operating tests to be given the week of September 24, 2018

Enclosure

- All operating tests (password protected) that have been approved for administration up to and including the week of the onsite inspection
- All 2017 NRC-required annual operating tests
- Current requalification cycle operating test results
- Current requalification cycle operating test methodology (sample plan)
- List of time critical operator actions, including USAR references

02.05: Licensee Admin of Requal Exams

- All procedures used to administer the annual operating test
- All procedures used to assess operator performance
- All procedures that describe conduct of simulator training
- All procedures used to test, operate, and maintain the simulator

02.06: Requalification Examination Security

- Tracking tools used to prevent excessive overlap on the written examinations and ensure sampling of required topics on a periodic basis
- Tracking tools used to prevent excessive overlap on the operating tests and ensure sampling of all required malfunctions (major events, instrument/component malfunctions, TS calls, etc.) on a periodic basis.
- All Procedures that describe examination security, including procedures used to develop the examinations that include guidelines on overlap between examinations in current exam cycle tests and prior year examinations
- List of all Condition Reports since the last biennial requalification inspection related to examination security and overlap

02.07: Licensee Remedial Training Program

- List of remedial training conducted or planned since last biennial requalification inspection (includes remedial training for exam failures and training to correct generic or individual weaknesses observed during previous requal exam cycle)
- Remediation plans (lesson plans, reference materials, and final documentation)

02.08: Conformance with Operator License Conditions

- All Procedures and Program documentation for maintaining active operator licenses, tracking training attendance, and ensuring medical fitness of licensed operators
- All Procedures and associated documentation that supports reactivation of any SRO/RO license (operating or staff crew) since the last biennial inspection

02.09: Simulator Performance

- An index of the most recent operability test packages required by ANSI 3.5 2009 Appendix B, including performance and approval dates, and results.
- An index of simulator baseline data sources (ANSI 3.5 2009 5.1.1) for the transient performance tests required by ANSI 3.5 2009 Appendix B.3.2.1.
- An index of most recent malfunction tests for the malfunctions listed in ANSI 3.5 2009 3.1.4, as required by section 4.1.4. If these are satisfied exclusively by SBT packages, then include an index of relevant SBT packages.
- An index of core physics testing performed in the simulator since September 24, 2016, the plant physics data book reference used for comparison, and results
- An index of Post-Event Simulator Tests conducted since September 24, 2016
- An index of simulator modification packages that are not yet complete

- An index of simulator modification packages completed since September 5, 2016
- Current Simulator Differences List / Lesson plan used in training
- All Simulator Management and Configuration Procedures if not already provided for section 02.05 above.
- Simulator Discrepancy Report **summary** list for all open DR's, and **summary** list for those Discrepancy Reports closed since September 24, 2016.

02.10: Problem Identification and Resolution

- A summary report of all condition reports related to licensed operator actions/errors in the control room since September 24, 2016
- Any revised requalification training that was based on licensed operator performance issues since September 24, 2016

B. The following information is requested in order to support the onsite inspection activities. Requested materials should be available to the inspection team, either electronically or hardcopy, upon site arrival on August 27, 2018.

02.02: Exam Results / 02.03 and 02.04: Written Exam and Op Test Quality

- All approved operating tests to be administered subsequent to the onsite inspection
- All results up to the day the team leaves the site.

02.08: Conformance with Operator License Conditions

- Access to licensed operators' records
- Access to licensed operators' training attendance records
- Access to licensed operators' medical records

02.09: Simulator Performance

- Simulator discrepancies reports (DRs) since September 24, 2016. This should include all open and closed DRs, with documentation / justification for closure
- Acceptance test documentation, including hardware and software model revisions at the time of acceptance (as available)
- Documentation that validates current models, including the thermal-hydraulic and neutronics models, to the actual plant.
- All current model deficiencies, including USAR vs Design differences in the simulator
- Summary list of modifications since September 24, 2016.
- Plant modifications (both hardware and software) incorporated onto the simulator since September 24, 2016.
- The complete book of all simulator annual performance test packages (either hardcopy or electronic), complete with all transient tests, steady state tests, and malfunction tests. This should also include the test procedures for each test, the acceptance criteria, and results. For each transient test, the reference chart should be included or an equivalent subject matter expert review versus the simulator results with an analysis for any differences beyond the ANSI standard requirements
- Simulator reactor core performance test packages used to verify core physics parameters (ANSI/ANS 3.5 sections 3.4.3.3 / 4.4.3.3), including applicable reference graphs from the plant physics data book, test procedures, acceptance criteria, and results
- All simulator test, configuration management, and related documents available in the room for inspectors to review. This includes training needs analysis packages, simulator review committee meeting minutes, etc.

- Current copy of ANSI 3.5 standard you are committed to for simulator testing

02.10: Problem Identification and Resolution

- All condition reports related to licensed operator actions/errors in the control room.

C. Palo Verde Nuclear Generating Station is required to send the final results and any remaining written exams and operating tests to the lead inspector for final review and comparison against the Significance Determination Tools in order to communicate the exit results for the inspection. Report results in the format below:

1. Total number of licensed operators.	
2. Number of licensed operators administered a requalification examination required by 10 CFR 55.59(a).	
3. Number of individual licensed operators who failed <u>any</u> portion of a requalification examination (written, JPM, or individual simulator scenario failures).	
3.a. Number of individual licensed operators who failed written exam	
3.b. Number of individual licensed operators who failed JPM exam	
3.c. Number of individual licensed operators who failed simulator scenario exam individually	
4. Divide line 3 by line 2 to obtain the individual requalification examination failure rate.	%
5. Number of crews administered simulator scenarios as part of a requalification examination required by 10 CFR 55.59(a)	
6. Number of crews who performed unsatisfactorily on the simulator scenarios.	
7. Divide line 6 by line 5 to obtain the crew simulator scenario failure rate.	%
8. Describe the reason for each licensed operator who was not administered an NRC-required requalification exam, or who did not pass an administered requalification exam, and the station's plan to satisfy the requalification exam requirement for each.	