



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

August 23, 2022

Mr. Mike McLaughlin
Site Vice President
Arizona Public Service Company
P.O. Box 52034, MS 7602
Phoenix, AZ 85072-2034

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- NOTIFICATION OF NRC
DESIGN BASES ASSURANCE INSPECTION (TEAM) (05000528/2022010,
05000529/2022010, AND 05000530/2022010) AND REQUEST FOR
INFORMATION**

Dear Mr. McLaughlin and Mr. Heflin:

The purpose of this letter is to notify you that U.S. Nuclear Regulatory Commission (NRC) staff will conduct a triennial baseline design bases assurance inspection at your Palo Verde Nuclear Generating Station beginning on October 24, 2022. The inspection will be conducted in accordance with NRC Inspection Procedure (IP) 71111.21M, "Design Bases Assurance Inspection (Team)," dated December 8, 2016, by a team lead, four engineering-focused inspectors, one inspector-in-training, and one operations-focused inspector.

The inspection will consist of an information gathering visit by the team lead, in-office preparation, and two weeks of onsite inspection. The current inspection schedule is as follows:

- Onsite Information Gathering Visit: October 24, 2022
- In-office Preparation Weeks: November 14-18, 2022
- Onsite Inspection Weeks: November 28 - December 1, 2022, and December 12-15, 2022

The purpose of the information gathering visit is to identify potential risk significant samples and operator actions. Additionally, the team lead will request a tour of the plant and interviews with operations and probabilistic safety assessment staff. During the onsite weeks, several days and administration will be needed on the plant-referenced simulator to facilitate performance of operator action-based scenarios and job performance measures. Additional information needed to support the inspection will be identified during the in-office preparation and onsite inspection weeks, including interviews with engineering managers, engineers, operations, and probabilistic safety assessment staff.

The objectives of this inspection are to gain reasonable assurance that: 1) risk significant structures, systems, and components can adequately perform their design basis function, 2) modifications affecting the design and licensing bases have been adequately implemented, and 3) risk significant issues resulting from generic communications (i.e., operating experience) have been adequately addressed. Completion of this inspection procedure consists of a minimum sample size of eight component and modification samples and one operating experience sample.

To minimize the impact the inspection has on the site and to ensure an efficient inspection, we have enclosed a request for information needed for the inspection. It is important that these requests are fulfilled as completely and accurately as possible to minimize any additional requests during the preparation or onsite inspection weeks. The requests have been divided into three groups.

- The first group lists information necessary for our initial inspection scoping activities and sample selections. This information should be available to the team lead no later than October 24, 2022. The team lead will review the information prior to and during the information gathering visit and communicate the initial list of component, modification, and operating experience samples as soon as practicable.
- The second group of information requested includes those items needed to support our in-office preparation activities. This set of documents should be available no later than November 14, 2022. This information should be separated for each sample, especially if provided electronically. Note that the team may identify additional information needed to support the inspection during this week and will communicate those requests as soon as practicable.
- The third group of information requested includes the additional documentation identified during in-office preparation activities as well as other resource requests necessary to support our onsite inspection activities. The additional information or resources should be available throughout the week of onsite inspection activities beginning on November 28, 2022.

All information requested are to be for the time from the onsite inspection period back to the last triennial design bases assurance inspection (team) unless stated otherwise. If nothing addressing a request was done in that time, then the request applies to the last applicable document. If a request does not apply for any sample, no response is necessary. Include all attachments to the requests, especially corrective action program documents.

We have discussed the schedule for this inspection with your staff. If there are any questions about this inspection or the documents requested, please contact the lead inspector, Gerond George, by telephone at 817-200-1562 or by e-mail at Gerond.George@nrc.gov.

PAPERWORK REDUCTION ACT STATEMENT

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Sincerely,



Signed by Gaddy, Vincent
on 08/23/22

Vincent G. Gaddy, Chief
Engineering Branch 1
Division of Reactor Safety

Dockets: 50-528; 50-529; 50-530
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Enclosure:
As stated

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PALO VERDE NUCLEAR GENERATING STATION- NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (TEAM) (05000528/2022010, 05000529/2022010 AND 05000530/2022010) AND REQUEST FOR INFORMATION – AUGUST 23, 2022.

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DOCUMENT NAME: PALO VERDE NUCLEAR GENERATING STATION- NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (TEAM) (05000528/2022010, 05000529/2022010 AND 05000530/2022010) AND REQUEST FOR INFORMATION
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 ADAMS ACCESSION NUMBER: **ML22235A666**

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

OFFICE	DRS/EB1/SRI	DRS/EB1/C			
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DATE	8/23/2022	8/23/2022			

**Request for Information
Design Bases Assurance Inspection (Team)
Palo Verde Generating Station**

Inspection Report: 05000528/2022010, 05000529/2022010, AND
05000530/2022010

Information Gathering Dates: October 24, 2022

Onsite Inspection Dates: November 28 - December 1, 2022, and December 12-15,
2022

Inspection Procedure: IP 71111.21M, "Design Bases Assurance Inspection
(Team)"

Lead Inspector: Gerond A. George, Senior Reactor Inspector

I. Information Requested by October 24, 2022:

1. A sortable list of equipment basic events (with definitions), including importance measures sorted by risk achievement worth (RAW) and Fussell-Vesely (FV) from your internal events probabilistic risk assessment (PRA). Include basic events with RAW value of 1.3 or greater.
2. A sortable list of the top 50 cut-sets from the station's PRA.
3. A copy of any PRA "system notebooks" and the latest PRA summary document.
4. A sortable list of PRA human action basic events or risk ranking of operator actions from your site-specific PRA sorted by RAW and FV. Provide copies of your human reliability worksheets for these items.
5. If you have an external events or fire PRA model, provide the information requested in items 1-4 for external events and fire.
6. A copy of the Individual Plant Examination of External Events (IPEEE).
7. A sortable list of high large early release frequency (LERF) impact events and associated components.
8. A sortable list of structures, systems, and components in the Maintenance Rule (a)(1) category.
9. A sortable list of high-risk maintenance rule systems/components and functions based on engineering or expert panel judgment.
10. A list of the station's "top 10 issues" if available.
11. A list of structures, systems, and components associated with calculations having low design margins if available.

12. A list of any common-cause failures of components.
13. A list of root cause evaluations associated with component failures or design issues initiated/completed in the last 5 years.
14. A copy of any time-critical and time-sensitive program procedures and a list of all time-critical and/or time-sensitive operator actions in procedures if not included.
15. A copy of any procedures used to accomplish operator actions associated with the basic events credited in your PRA.
16. A sortable list of current “operator work arounds/burdens” and any program procedures related to operator work arounds/burdens.
17. A list with brief descriptions of permanent and temporary modifications implemented in the past 5 years to structures, systems, and components. Implemented means accepted or placed into service and declared functional or operable, as applicable. Modifications include, for example, permanent or temporary plant changes, design changes, set point changes, procedure changes, equivalency evaluations, suitability analyses, calculations, and commercial grade dedications.
18. A sortable list with brief descriptions of operating experience evaluations opened and/or closed. Include whether it was applicable and if the evaluation and any associated actions, such as modifications, procedure updates, etc., are complete.
19. A copy of any internal/external self-assessments or audits and associated corrective action documents generated in preparation for this inspection or related to engineering or operations.
20. A copy of the technical specifications, surveillance frequency control program, inservice testing program, preventive maintenance program, technical requirements manual, and the final safety analysis report (as updated). Include bases documents as applicable.
21. A copy of corrective action program, design change, design calculation, and operating experience evaluations procedures.
22. A copy of condition reports associated with inspection findings from the previous NRC design bases inspection.
23. A list of licensee contacts for the inspection team with phone numbers.
24. A copy of the current management and engineering organizational charts.

II. Information Requested by November 14, 2022:

1. Components
 - a. A copy of the design bases document, system description, etc.
 - b. A copy of any vendor manuals (e.g., installation, operation, maintenance, etc.)

- c. A copy of any relevant, active calculations and drawings. If the number of calculations and/or drawings is extensive, provide a list instead.
 - d. A list of the preventive maintenance schedule, including any inservice, surveillance, etc. testing, and a copy of the most recent performance of each.
 - e. A copy of the system health notebook
 - f. A copy of any corrective action documents covering the past 3 years
 - g. A copy of any relevant normal, abnormal, or emergency procedures
2. Modifications
- a. A copy of the complete change package
 - b. A copy of the implementing work order, job, etc.
 - c. A copy of post-modification testing work orders, jobs, etc.
 - d. A copy of any associated corrective action documents
 - e. A copy of any vendor manuals (e.g., operation and maintenance)
 - f. A copy of any updated procedures, licensing basis documents, calculations, drawings, etc.
3. Operating Experiences
- a. A copy of the complete operating experience evaluation
 - b. A copy of any associated corrective action documents
 - c. A copy of any associated change packages
 - d. A copy of any updated procedures, licensing basis documents, calculations, drawings, etc.

III. Additional Requests During Onsite Inspection Activities:

- 1. A copy of any corrective action documents generated because of the team's requests or questions during this inspection.
- 2. A copy of a list of questions submitted by the team and the status/resolution of the information requested (provide daily during the inspection to each team member).

Inspector Contact Information:

Gerond A. George, Lead
Senior Reactor Inspector
817-200-1562
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