



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

September 8, 2011

Randall K. Edington, Executive
Vice President, Nuclear/CNO
Arizona Public Service Company
P.O. Box 52034, Mail Stop 7602
Phoenix, AZ 85072-2034

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION - NOTIFICATION OF
INSPECTION (NRC INSPECTION REPORT 05000528/2011005,
05000529/2011005, AND 05000530/2011005) AND REQUEST FOR
INFORMATION

Dear Mr. Edington:

The purpose of this letter is to notify you that on December 5, 2011, the U.S. Nuclear Regulatory Commission (NRC), Region IV staff will begin the onsite portion of the Gas Accumulation Management in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems Temporary Instruction at your Palo Verde Nuclear Generating Station. This inspection will be performed in accordance with NRC Temporary Instruction (TI) 2515/177.

Experience has shown that this inspection is resource intensive 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. The documents have been divided into two groups.

- The first group lists information necessary for our initial inspection scoping and in-office preparation activities. This information should be separated by information request number, especially if provided electronically (e.g., folder with the information request number). This information should be available to the inspector no later than November 21, 2011. Upon review of these documents, the inspectors will select additional documentation for review upon arrival. By December 1, 2011, the inspector will communicate the initial selected samples.
- The second group of documents requested is needed to support our onsite inspection activities. This set of documents should be available to the inspector on December 5, 2011. It is also requested that corrective action documents and responses to questions developed during the inspection be provided to the inspector as the documents are generated.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Del Elkinton of your licensing organization. If there are any questions about this inspection or the material requested, please contact either Abin Fairbanks, at (817) 860-8158 or by email at Abin.Fairbanks@nrc.gov, or Dustin Reinert, at (817) 860-8244 or by email at Dustin.Reinert@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 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

In accordance with Code of Federal Regulations, Title 10, Part 2.390 of the NRC's Rules of Practice, 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/

Thomas R. Farnholtz, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos.: 50-528, 50-529, 50-530

Licenses: NPF-41, NPF-51, NPF-74

Enclosure: INFORMATION REQUEST FOR PALO VERDE NUCLEAR
GENERATING STATION TEMPORARY INSPECTION DOCUMENT
REQUEST

CC: Distribution via ListServ for Palo Verde

R\Reactors\PV\2011\Palo Verde TI-177 RFI.docx

ML11251A212

ADAMS: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> SUNSI Review Complete	Reviewer Initials:	
	<input checked="" type="checkbox"/> Publicly Available	<input checked="" type="checkbox"/> Non-Sensitive	
	<input type="checkbox"/> Non-publicly Available	<input type="checkbox"/> Sensitive	
DRS/RI	DRS/RI	DRS/Branch Chief	
AFairbanks	DReinert	TFarnholtz	
/RA/	/RA/	/RA/	
09/07/2011	09/08/2011	09/08/2011	

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**INFORMATION REQUEST FOR PALO VERDE NUCLEAR GENERATING STATION
TEMPORARY INSPECTION DOCUMENT REQUEST**

Inspection Report: 05000528/2011005, 05000529/2011005, AND 05000530/2011005

Inspection Dates: December 5 - 9, 2011

Inspection Procedure: TI 2515/177, "Management of Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems"

Inspectors: Abin Fairbanks
Reactor Inspector
(817) 860-8158
Abin.Fairbanks@nrc.gov

Dustin Reinert
Reactor Inspector
(817) 860-8244
Dustin.Reinert@nrc.gov

I. Information Requested by November 21, 2011

The following information should be sent to the Region IV office in hard copy or electronic format (ims.certrec.com or compact disc, preferred), in care of Abin Fairbanks, or Dustin Reinert, to facilitate the selection of specific items that will be reviewed during the onsite inspection week. The inspectors will select specific items from the information requested below and then request from your staff additional documents needed during the onsite inspection weeks. Also, we request that you categorize the documents in your response with the numbered list below. Please provide requested documentation electronically if possible. If requested documents are large and only hard copy formats are available, please inform the inspectors, and provide subject documentation during the first day of the onsite inspection. If you have any questions regarding this information request, please call the inspectors as soon as possible.

1. List of corrective action program documents (with a short description) associated with GL 2008-01, voids in piping, and pressure transients for the previous three years.
2. List of changes (with a short description and tracking number) to the final safety analysis report (FSAR), technical specifications, technical specification bases, and technical requirements manual associated with the resolution of GL 2008-01.
3. List of calculations associated with GL 2008-01, including calculations that have been changed or created in response to GL 2008-01 (with a short description of the calculation and the change).
4. List (with a short description) of gas intrusion mechanisms that apply to the plant and the affected system locations (e.g., identify the source, conditions, and expected void locations). Also, include a short description of how each gas intrusion mechanism has been addressed (e.g., plant hardware modification, procedure change).

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5. List of the suction piping sections identified as susceptible to gas accumulation (the list should identify the corresponding system).
6. List of the discharge piping sections identified as susceptible to gas accumulation (the list should identify the corresponding system).
7. Copies of isometric drawings of the Emergency Core Cooling System, Decay Heat Removal System, and Containment Spray System (hard-copies are preferred).
8. Copies of piping and instrumentation diagrams (P&IDs) of the Emergency Core Cooling System, Decay Heat Removal System, and Containment Spray System (hard-copies are preferred). Please highlight any components that were part of hardware modifications installed as part of the resolution of GL 2008-01 and all high point vents that are monitored during void surveillances.
9. Copies of program documents and procedures developed to implement the resolution of GL 2008-01.
10. List of actions that were completed in response to GL 2008-01.
11. Copies of the modification packages for hardware modifications as part of the resolution of GL 2008-01.
12. Design basis documents of the Emergency Core Cooling System, Decay Heat Removal System, and Containment Spray System.
13. Design basis documents of keep-full systems of the Emergency Core Cooling System, Decay Heat Removal System, and Containment Spray System.
14. System walkdown reports associated with the resolution of GL 2008-01.
15. If applicable, provide a list of inaccessible locations where plant walkdowns of the Emergency Core Cooling System, Decay Heat Removal System, and Containment Spray System have not been completed. Include an explanation of why each area is considered inaccessible.
16. Copies of surveillance procedures associated with the resolution of GL 2008-01 (i.e., procedures used for detecting and determining void volumes) and the results of the last two surveillances for the Emergency Core Cooling System, Decay Heat Removal System, and Containment Spray System.
17. Copies of procedures used for filling and venting.
18. Copies of trends of periodic venting results.
19. Copies of the engineering evaluations performed for all identified voids.

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20. Basis for the void acceptance criteria (e.g., calculation). If applicable, provide the justification for any deviation from the void acceptance criteria established by the Office of Nuclear Reactor Regulation (NRR).
21. Copies of the methodologies used for predicting void behavior and impact on system operability.
22. Copies of any void transport analyses.
23. Copies of vortexing calculations associated with systems under the scope of GL 2008-01.
24. Copies of self-assessments associated with the implementation of the GL 2008-01 program.
25. Copies of any training materials for gas-related concerns.
26. Copies of training modules and attendance records that ensure personnel are aware of gas-related concerns.

II. Information Requested by December 5, 2011

27. Copies of the selected corrective action program documents.
28. Copies of the selected licensing and design basis document changes.
29. Copies of the selected calculations.
30. Copies of corrective action program implementing procedures.
31. Electronic copies of the current technical specifications, technical specification bases, updated final safety analysis report, and technical requirements manual.

Inspector Contact Information:

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