

ENCLOSURE 1

NOTICE OF VIOLATION

Arizona Public Service Company

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

Palo Verde Nuclear Generating Station

License Nos.: NPF-41
NPF-51
NPF-74

During an NRC inspection conducted on March 11 through April 4, 1997, three violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. Technical Specification 6.8, "Procedures and Programs," states, in part, "Written procedures shall be established, implemented, and maintained covering the activities referenced below: . . . Refueling Operations."

Procedure 31MT-9IA01, "Installation and Removal of Temporary Air/Nitrogen Supply for Fuel Transfer Canal Gate," Revision 2, Step 4.1, states, in part, "Obtain a full nitrogen bottle . . . as described in Appendix 'A' . . ." Appendix A describes the nitrogen bottle as 2500 psi, Stock Code No. 27, and that no substitutions are allowed without prior engineering approval. Appendix A refers to Engineering Evaluation Request EER 93-IA-001 dated August 10, 1993, which shows that Stock Code 27 has a 330 cubic foot volume.

Section 3.7 in Procedure 30DP-9MP01, "Conduct of Maintenance," Revision 21, requires work instructions to be documented and stated, including signing off verification steps to show that work has been performed, accepted, and verified.

Step 4.1.14, a verification step in Procedure 31MT-9IA01, is required to be signed-off upon completion of Section 4.1, "Installation of Backup Nitrogen System."

Administrative Control Procedure 40AC-OZZ06, "Locked Valve, Breaker, and Component Control," Revision 11, provides requirements to assure that components, identified as having locking provisions, are properly controlled and locked. Appendix A to implementing Departmental Procedure 40DP-9OP19, "Locked Valve, Breaker, and Component Tracking," Revision 39, states that the basis or justification for valve PCE-V125 to be locked closed, is to prevent an inadvertent drainage of the fuel transfer canal during refueling.



Preventive Maintenance Program Master Instruction PMM09535, "Spent Fuel Pool Gates," and Preventive Maintenance Task 082288, "Spent Fuel Pool Gates," Revision 0, (in effect through December 1994) require the replacement of spent fuel pool/cask loading pit gate seals every 4 years.

Contrary to the above, the following are examples in which these procedural requirements were not met:

1. On February 23, 1997, a refueling and mechanical services team leader failed to comply with Procedure 31MT-9IA01 requirements by installing, without obtaining prior engineering approval, a substitute nitrogen cylinder that differed from that specified. This resulted in an unreviewed, undocumented, and unapproved condition different from what was evaluated and specified in Procedure 31MT-9IA01 and Engineering Evaluation Request EER 93-IA-001.
2. On March 4, 1997, operations personnel isolated the instrument air system from the fuel transfer canal gate seal and placed the backup nitrogen cylinder in service, without documenting or statusing the work, or without signing off verification Step 4.1.14 in Procedure 31MT-9IA01 to show that the work had been performed and accepted. This oversight resulted in a loss of configuration control of the pressurization supply for the Unit 3 spent fuel pool transfer canal gate seal and was a contributing cause to the subsequent inadvertent partial drain down of the spent fuel pool.
3. While refueling operations were in progress on March 13, 1997, the inspectors observed fuel canal drain isolation to Cleanup Header Valve PCE-V125 in a closed but unlocked position. In addition, the valve was incorrectly statused as "open" in the record book. Operator logs showed that valve PCE-V125 remained unlocked for a total time of 19 days between February 22 and March 13, 1997.
4. The gate seals were not replaced every 4 years. None of the Unit 3 gate seals have ever been replaced, and the Unit 1 decontamination pit gate seal has never been replaced. With the exception of the Unit 1 fuel transfer canal gate seal, all other gate seals were replaced at a frequency that exceeded 4 years.

These examples constitute a Severity Level IV violation (Supplement I) (50-528;-529;-530/9709-01).



- B. Criterion III of Appendix B to 10 CFR Part 50 requires, in part, that measures shall be established to assure that the design basis for safety-related structures, systems, and components is correctly translated into procedures and instructions. Measures shall also be established for the selection and review for suitability of application of parts or equipment that are essential to the safety-related function of the structures, systems, or components.

Contrary to the above, measures were inadequate to assure that the design bases of the gate seals (classified as safety-related components) were translated into applicable procedures and instructions, and no provisions were established to assure that their safety-related function would not be lost. Measures did not assure selection and review for suitability of application of parts or equipment that were essential to the safety-related function of the gate seals, in that, the gate seal air supply sources, (instrument air system, plant service gas (nitrogen) system, temporary nitrogen cylinders) and connecting hardware were nonsafety-related.

This is a Severity Level IV violation (Supplement I) (50-528;-529;-530/9709-02).

- C. Criterion V of Appendix B to 10 CFR Part 50 states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures . . . and shall be accomplished in accordance with these instructions, procedures . . . Instructions, procedures . . . shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Procedure 78MT-97F01, "Removal and Installation of Spent Fuel Pool Gates," Revision 4, addresses removal, inspection, replacement, and installation of the spent fuel pool gates seals.

Contrary to the above, Procedure 78MT-97F01 did not include appropriate qualitative acceptance criteria for determining under what conditions the spent fuel pool gates should be replaced. The procedure failed to prescribe a specific inspection technique or method, inspection conditions (i.e., lighting, visual aids, and scope or area of seal to be inspected), or the training/qualifications of the personnel who perform the inspection.

This is a Severity Level IV violation (Supplement 1) (50-528;-529;-530/9709-03).

Pursuant to the provisions of 10 CFR 2.201, Arizona Public Service Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the



basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Arlington, Texas
this 1st day of May 1997

