



Palo Verde Nuclear
Generating Station

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10 CFR 50.90
10 CFR 50.91

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102-04580-CDM/CKS/SAB/TNW
June 15, 2001

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-37
Washington, DC 20555

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Docket Nos. STN 50-528/529/530
Proposed Amendment to Eliminate the Requirements for the Post
Accident Sampling System (PASS) Using the Consolidated Line Item
Improvement Process (CLIP)**

In accordance with the provisions of 10 CFR 50.90, Arizona Public Service Company (APS) is requesting an amendment to the Technical Specifications (TS) for the Palo Verde Nuclear Generating Station (PVNGS) Units 1, 2 and 3.

The proposed amendment would delete TS 5.5.3, "Post Accident Sampling" and thereby eliminate the requirements to have and maintain the PASS at PVNGS. This request also revises TS 5.5.2, "Primary Coolant Sources Outside Containment" to reflect the elimination of the PASS. The proposed changes are consistent with the NRC approved Technical Specification Task Force (TSTF) Traveler number TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of the model safety evaluation for this TS improvement was announced in the Federal Register on October 31, 2000 (65 FR 65018) as part of the Consolidated Line Item Improvement Process.

Enclosure 1 provides the following sections supporting the proposed changes:

- A. Description of the Proposed TS Amendment
- B. Purpose of the TS
- C. Need for the Proposed TS Amendment
- D. Safety Analysis for the Proposed TS Amendment
- E. Optional Changes and Variations
- F. No Significant Hazards Consideration Determination
- G. Verifications and Commitments

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Requirements for PASS using the CLIIP
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- H. Environmental Evaluation
- I. Marked-up TS Pages
- J. Re-typed TS Pages

In accordance with the PVNGS quality assurance program, the Plant Review Board and the Offsite Safety Review Committee have reviewed and concurred with this request. By copy of this letter, this submittal is being forwarded to the Arizona Radiation Regulatory Agency (ARRA) pursuant to 10 CFR 50.91(b)(1).

Approval of this proposed amendment is requested within 90 days from the date of this letter. An implementation time of 7 months is requested for this amendment. The approval date was administratively selected to allow for NRC review but the plant does not require this amendment to allow continued safe full power operation.

There are commitments being made to the NRC in this letter. The commitments are identified in Enclosure 1 to this letter.

Should you have any questions, please contact Thomas N. Weber of my staff at (623) 393-5764.

Sincerely,



CDM/CKS/SAB/TNW/kg

Enclosures:

1. Proposed Amendment to PVNGS Units 1, 2 and 3 To Eliminate the Requirements for the Post Accident Sampling System (PASS)
2. UFSAR change to add the commitment to maintain certain capabilities required as part of the TS change to eliminate the requirements for PASS. Reference 01-F013.

cc: E. W. Merschoff (NRC Region IV)
L. R. Wharton (NRR Project Manager)
J. H. Moorman (NRC Resident Inspector)
A. V. Godwin (ARRA)

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

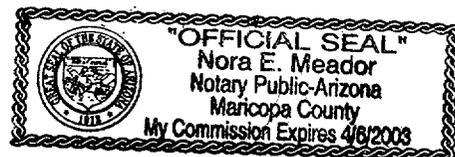
I, David Mauldin, represent that I am Vice President Nuclear Engineering and Support, Arizona Public Service Company (APS), that the foregoing document has been signed by me on behalf of APS with full authority to do so, and that to the best of my knowledge and belief, the statements made therein are true and correct.

David Mauldin
David Mauldin

Sworn To Before Me This 15 Day Of June, 2001.

Nora E. Meador
Notary Public

My Commission Expires
April 6, 2003



ENCLOSURE 1

**Proposed Amendment to PVNGS Units 1, 2 and 3
To Eliminate the Requirements for the
Post Accident Sampling System (PASS)**

ENCLOSURE 1

Proposed Amendment to PVNGS Units 1, 2 and 3 To Eliminate the Requirements for the Post Accident Sampling System (PASS)

A. DESCRIPTION OF THE PROPOSED TS AMENDMENT

The proposed TS amendment would delete TS 5.5.3, "Post Accident Sampling" and thereby eliminate the requirements to have and maintain the PASS at PVNGS. This proposed TS amendment would also revise TS 5.5.2, "Primary Coolant Sources Outside Containment" to reflect the elimination of PASS. These proposed changes are shown on a marked-up copy and a re-typed copy of the TS pages in Sections I and J of this Enclosure.

The proposed TS changes are consistent with the NRC approved Technical Specification Task Force (TSTF) Traveler number TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The proposed changes are also consistent with the NRC guidance and the model safety evaluation for this TS change as announced in the Federal Register on October 31, 2000 (65 FR 65018) as part of the Consolidated Line Item Improvement Process (CLIIP).

B. PURPOSE OF THE TS

The purpose of TS 5.5.3 is to establish, implement and maintain a program which ensures PVNGS has the capability to obtain and analyze reactor coolant, radioactive gases and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions.

The purpose of TS 5.5.2 is to establish, implement and maintain a program which provide controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable.

C. NEED FOR THE PROPOSED TS AMENDMENT

The Combustion Engineering Owners Group (CEOG) Topical Report CE NPSD-1157, Revision 1, evaluated the PASS requirements to determine their contribution to plant safety and accident recovery. The topical report concluded that the current PASS samples specified in NUREG-0737, "Clarification of TMI Action Plan Requirements", may be eliminated from the Technical Specifications.

In the review of the Topical Report, the NRC agreed that PASS may be eliminated since the information provided by PASS was either unnecessary or is effectively provided by other indications of process parameters or measurements of radiation levels. Since the PASS system is referenced in TS 5.5.2, a change is needed to make it clear TS 5.5.2 remains applicable to the PASS as long as it is a possible leakage path.

D. SAFETY ANALYSIS FOR THE PROPOSED TS AMENDMENT

APS has reviewed the NRC guidance and the model safety evaluation published in the October 31, 2000 Federal Register (65 FR 65018) as part of the CLIP for the elimination of PASS from the TS. This included a review of the NRC staff's evaluation as well as the supporting information provided for TSTF 366. APS has concluded that the justifications presented in the TSTF proposal and the model safety evaluation prepared by the NRC are applicable to PVNGS Units 1, 2 and 3 and justify this amendment for the incorporation of the changes to the PVNGS TS.

E. OPTIONAL CHANGES AND VARIATIONS

APS is not proposing any technical variations or deviations from the technical specification changes described in TSTF-366 or the NRC staff's model safety evaluation published in the Federal Register on October 31, 2000 (65 FR 65018).

The PVNGS TS's include an administrative requirement for a program to minimize leakage from those portions of systems outside containment that contain highly radioactive fluids during a serious transient or accident. PASS is specifically listed in TS 5.5.2 as falling under the scope of this requirement. As described in the staff's model safety evaluation published on October 31, 2000, APS is proposing to add the following phrase to the two separate references to PASS in TS 5.5.2: "(until such time as a modification eliminates the PASS penetration as a potential leakage path)." This phrase makes it clear that TS 5.5.2 remains applicable to the PASS as long as there is a possible leakage path, and reflects that actual modification of the piping may be scheduled beyond the implementation period for this amendment.

F. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

APS has reviewed the proposed No Significant Hazards Consideration Determination published as part of the CLIP for the elimination of PASS from the TS. APS has concluded that the proposed determination presented in the notice is applicable to PVNGS and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

G. VERIFICATIONS AND COMMITMENTS

As discussed in the notice of availability published in the Federal Register on October 31, 2000 (65 FR 65018) for this technical specification improvement, the following are the PVNGS plant specific verifications and commitments:

1. APS will develop contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. A description of the contingency plans will be contained in PVNGS emergency plan implementing procedures. This change will be made with the implementation of the License amendment that eliminates the requirement for PASS from TS 5.5.3. The development of the contingency plans is considered a regulatory commitment. (See also commitment No. 4 for the requirement to maintain the contingency plans.)
2. The capability for classifying fuel damage events at the Alert level threshold will be developed. This level of core damage is associated to radioactivity levels of 300 $\mu\text{Ci}/\text{cc}$ dose equivalent iodine. This capability will be described in PVNGS emergency plan implementing procedures. This change will be made with the implementation of the License amendment that eliminates the requirement for PASS from TS 5.5.3. The development of the capability for classifying fuel damage events is considered a regulatory commitment. (See also commitment No. 4 for the requirement to maintain the capability for classifying fuel damage events.)
3. APS will develop the capability to monitor radioactive iodines that have been released to offsite environs. This capability will be described in PVNGS emergency plan implementing procedures. This change will be made with the implementation of the License amendment that eliminates the requirement for PASS from TS 5.5.3. The development of the capability to monitor radioactive iodines is considered a regulatory commitment. (See also commitment No. 4 for the requirement to maintain the capability to monitor radioactive iodines that have been released to offsite environs.)
4. APS will add to the UFSAR the commitment to maintain the following items that were developed as part of a regulatory commitment made in the proposed TS Amendment to eliminate the requirements for PASS from TS 5.5.3:
 - a) APS will add to the UFSAR a commitment to maintain the contingency plans for obtaining and analyzing highly

radioactive samples of reactor coolant, containment sump and containment atmosphere.

- b) APS will add to the UFSAR a commitment to maintain the capability for classifying fuel damage events at the Alert level threshold.
- c) APS will add to the UFSAR a commitment to monitor radioactive iodines that have been released to the offsite environs.

This change will be made with the implementation of the License amendment that eliminates the requirement for PASS from TS 5.5.3. The addition to the UFSAR of the above three commitments is considered a regulatory commitment. A copy of the proposed UFSAR change is included as Enclosure 2 to this letter.

H. ENVIRONMENTAL EVALUATION

APS has reviewed the environmental evaluation included in the model safety evaluation published on October 31, 2000 as part of the CLIIP. APS has determined that the staff's findings presented in that evaluation are applicable to PVNGS and the evaluation is hereby incorporated by reference for this application.

I. Marked-up Technical Specification Pages

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include recirculation portion of the high pressure injection system, the shutdown cooling portion of the low pressure safety injection system, the post-accident sampling subsystem of the reactor coolant sampling system, the containment spray system, and the post-accident containment atmosphere sampling piping of the hydrogen monitoring subsystem. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.3

Post Accident Sampling

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel;
- b. Procedures for sampling and analysis; and
- c. Provisions for maintenance of sampling and analysis equipment.

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(until such time as a modification eliminates the PASS penetration as a potential leakage path)

(continued)

J. Retyped Technical Specification Pages

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include recirculation portion of the high pressure injection system, the shutdown cooling portion of the low pressure safety injection system, the post-accident sampling subsystem of the reactor coolant sampling system (until such time as a modification eliminates the PASS penetration as a potential leakage path), the containment spray system, and the post-accident containment atmosphere sampling piping of the hydrogen monitoring subsystem (until such time as a modification eliminates the PASS penetration as a potential leakage path). The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.3 Deleted

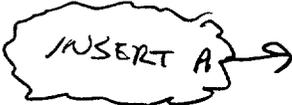
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ENCLOSURE 2

**UFSAR change to Add the Commitment to Maintain Certain
Capabilities Required as Part of the TS Change to Eliminate the
Requirements for PASS**

Section 18.II.B.3

Additionally, the procedure to be utilized at PVNGS to estimate the degree of core damage was developed from the "Development of Comprehensive Procedure Guidelines for Core Damage Assessment," Combustion Engineering Owner's Group Task 467, dated July, 1983. The PVNGS procedure uses isotopic analysis data obtained from the PASS sources, core exit thermocouple readings, containment radiation readings, and hydrogen production estimates. Early core damage estimates can be provided using the core exit thermocouple and containment radiation methods, and upgraded later using the hydrogen production and isotopic analysis methods.



INSERT A →

Insert A

The means for sampling reactor coolant, containment sump and containment atmosphere will be by grab sample. Provisions will be maintained for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump and containment atmosphere.

The capability for classifying fuel damage events at the Alert level threshold will be maintained in the PVNGS Emergency Plan implementing procedures. This level of core damage is associated to radioactivity levels of 300 $\mu\text{Ci/cc}$ dose equivalent iodine.

The capability to monitor radioactive iodines that have been released to the offsite environs will be maintained in the PVNGS Emergency Plan implementing procedures.