



A subsidiary of Pinnacle West Capital Corporation

10 CFR 50.90

Palo Verde Nuclear  
Generating Station

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102-06011-DCM/DLK  
May 28, 2009

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Units 1, 2, and 3  
Docket Nos. STN 50-528/529/530  
License Amendment Request for Adoption of TSTF-511, Revision 0,  
"Eliminate Working Hour Restrictions from Technical Specification  
5.2.2 to Support Compliance with 10 CFR Part 26"**

In accordance with the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), Arizona Public Service Company (APS) is submitting a request for an amendment to the Technical Specifications (TS) for PVNGS Units 1, 2, and 3.

The proposed amendment would delete those portions of the TS that are superseded by 10 CFR Part 26, Subpart I. This change is consistent with NRC approved Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." The availability of this TS improvement was announced in the Federal Register on December 30, 2008 (73 FR 79923) as part of the Consolidated Line Item Improvement Process (CLIIP). A deviation from the model Safety Evaluation published in the Federal Register notice is being made to enhance the wording of the proposed commitment and account for the possibility that the requested amendment may not receive NRC approval before October 1, 2009. APS is committing to implement the license amendment following NRC approval whether concurrent with or after implementation of the new 10 CFR 26, Subpart I, requirements.

Attachment 1 provides an evaluation of the proposed change. Attachment 2 provides the existing TS pages marked up to show the proposed change. Attachment 3 provides the proposed TS changes in final typed format. Attachment 4 provides the regulatory commitment.

ADD  
NRR

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
License Amendment Request For Adoption of TSTF-511, Revision 0, "Eliminate  
Working Hour Restrictions From TS 5.2.2 to Support Compliance with 10 CFR Part 26"  
Page 2

APS requests approval of the proposed license amendment by September 1, 2009, to support implementation of TS changes concurrent with implementation of the new 10 CFR 26, Subpart I, requirements by October 1, 2009. In the event NRC approval for the requested amendment is not obtained before October 1, 2009, the amendment shall be implemented within 30 days of NRC approval and APS shall comply with the new 10 CFR 26, Subpart I, requirements and current Technical Specifications until the approved TS changes are implemented.

This letter contains one regulatory commitment as identified in Attachment 4.

In accordance with 10 CFR 50.91, a copy of this License Amendment Request, with attachments, is being provided to the Arizona Radiation Regulatory Agency (ARRA).

Should you need further information regarding this amendment request, please contact Russell A. Stroud, Licensing Section Leader, at (623) 393-5111.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 5/28/09  
(Date)

Sincerely,

*D.C. Morris*

DMC/RAS/DLK/gat

Attachments: 1. Evaluation of the Proposed TS Change  
2. Proposed Technical Specification Change (Mark-Up)  
3. Proposed Technical Specification Change (Re-Typed)  
4. List of Regulatory Commitments

cc: E. E. Collins Jr. NRC Region IV Regional Administrator  
J. R. Hall NRC NRR Project Manager  
R. I. Treadway NRC Senior Resident Inspector for PVNGS  
A. V. Godwin Arizona Radiation Regulatory Agency (ARRA)  
T. Morales Arizona Radiation Regulatory Agency (ARRA)

## ATTACHMENT 1

### Evaluation of the Proposed TS Change

**Subject:** License Amendment Request for Adoption of TSTF-511, Revision 0,  
"Eliminate Working Hour Restrictions from TS 5.2.2 to Support  
Compliance with 10 CFR Part 26"

- 1.0 DESCRIPTION
- 2.0 PROPOSED CHANGE
- 3.0 BACKGROUND
- 4.0 TECHNICAL ANALYSIS
- 5.0 REGULATORY SAFETY ANALYSIS
  - 5.1 No Significant Hazards Consideration Determination
  - 5.2 Applicable Regulatory Requirements/Criteria
- 6.0 ENVIRONMENTAL CONSIDERATION
- 7.0 REFERENCES

## **1.0 DESCRIPTION**

The proposed amendment would delete those portions of the Technical Specifications (TS) superseded by 10 CFR Part 26, Subpart I. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." A single enhancement to the proposed NRC staff's model safety evaluation is described in Section 2.0. The availability of this TS improvement was announced in the Federal Register on December 30, 2008, (73 FR 79923) as part of the Consolidated Line Item Improvement Process (CLIIP).

## **2.0 PROPOSED CHANGE**

Consistent with the NRC approved Revision 0 of TSTF-511, the proposed TS changes delete those portions of TS superseded by 10 CFR Part 26, Subpart I.

This application is being made in accordance with the CLIIP. Arizona Public Service Company (APS) is proposing a single enhancement to the proposed NRC staff's model Safety Evaluation (SE) published on December 30, 2008, (73 FR 79923) as part of the CLIIP Notice of Availability. The deviation from the model SE published in the FR notice is that the proposed commitment to implement the approved TS changes has been enhanced to state that implementation would be concurrent with or after implementation of the new 10 CFR 26, Subpart I, requirements, since this amendment may not be approved until after the October 1, 2009, final rule required implementation date. In the event NRC approval for the requested amendment is not obtained before October 1, 2009, the amendment shall be implemented within 30 days of NRC approval and APS shall comply with the new 10 CFR 26, Subpart I, requirements and current Technical Specifications until the approved TS changes are implemented.

## **3.0 BACKGROUND**

The NRC issued a Federal Register notice (73 FR 16966, March 31, 2008) of the issuance of a final rule that amended 10 CFR Part 26. The revised regulations in 10 CFR Part 26, Subpart I, supersede working hour restrictions contained in paragraph d of TS 5.2.2. The background for this application is adequately addressed by the NRC Notice of Availability published on December 30, 2008 (73 FR 79923).

## **4.0 TECHNICAL ANALYSIS**

APS has reviewed the model SE published on December 30, 2008, (73 FR 79923) as part of the CLIIP Notice of Availability. APS has concluded that the technical justifications presented in the model SE prepared by the NRC staff are applicable to PVNGS Units 1, 2, and 3.

10 CFR Part 26, Subpart I, supersedes existing worker fatigue guidance. 10 CFR Part 26, Subpart I, distinguishes between work hour controls and fatigue management and strengthens the requirements for both. Under the new rule, work hour restrictions include not only work hour limitations for rolling 24-hour, 48-hour, and 7-day periods, but also include a required minimum break between work periods and varying required minimum days off. Additionally, Subpart I confines the use of waivers (deviations from restrictions) to situations where overtime is necessary to mitigate or prevent a condition adverse to safety or is necessary to maintain the security of the facility. Subpart I also strengthens reporting requirements. Finally, the new rule's work hour control scope includes certain operating and maintenance personnel, as well as individuals directing those operating and maintenance personnel, health physics and chemistry personnel who are a part of the on-site emergency response organization minimum shift complement, the fire brigade member who is responsible for understanding the effects of fire and fire suppressants on safe shutdown capability, and certain security personnel.

The proposed change removes working hour limits imposed in the Technical Specifications in order to support compliance with 10 CFR Part 26, Subpart I. Work hour controls and fatigue management requirements have been incorporated into the NRC's regulations; therefore, it is unnecessary to have work hour control requirements in the Technical Specifications.

Removal of the Technical Specification requirements will be performed concurrent with or after the implementation of the 10 CFR Part 26, Subpart I, requirements, even if the Technical Specification change is approved by the NRC prior to the October 1, 2009, deadline. Along with this License Amendment Request, APS is submitting a commitment to implement the amendment concurrent with the new 10 CFR Part 26, Subpart I, requirements. In the event NRC approval for the requested amendment is not obtained before October 1, 2009, the amendment shall be implemented within 30 days of NRC approval and APS shall comply with the new 10 CFR 26, Subpart I, requirements and current Technical Specifications until the approved TS changes are implemented.

## **5.0 REGULATORY SAFETY ANALYSIS**

### **5.1 No Significant Hazards Determination**

APS has reviewed the no significant hazards determination published on December 30, 2008, (73 FR 79923) as part of the CLIP Notice of Availability. APS has concluded that the determination presented in the notice is applicable to PVNGS Units 1, 2, and 3. APS has evaluated the proposed changes to the TS using the criteria in 10 CFR 50.92 and has determined that the proposed changes do not involve a significant hazards consideration. An analysis of the issue of no significant hazards consideration is presented below:

**Attachment 1**  
**License Amendment Request for**  
**Adoption of TSTF-511, Revision 0**

**Criterion 1: The Proposed Change Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated**

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. Removal of the Technical Specification requirements will be performed concurrent with or after the implementation of the 10 CFR Part 26, Subpart I, requirements. In the event NRC approval for the requested amendment is not obtained before October 1, 2009, the amendment shall be implemented within 30 days of NRC approval and APS shall comply with the new 10 CFR 26, Subpart I, requirements and current Technical Specifications until the approved TS changes are implemented. The proposed change does not impact the physical configuration or function of plant structures, systems, or components (SSCs) or the manner in which SSCs are operated, maintained, modified, tested, or inspected. Worker fatigue is not an initiator of any accident previously evaluated. Worker fatigue is not an assumption in the consequence mitigation of any accident previously evaluated.

Therefore, it is concluded that this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

**Criterion 2: The Proposed Change Does Not Create the Possibility of a New or Different Kind of Accident from Any Accident Previously Evaluated**

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. Working hours will continue to be controlled in accordance with NRC requirements. The new rule allows for deviations from controls to mitigate or prevent a condition adverse to safety or as necessary to maintain the security of the facility. This ensures that the new rule will not unnecessarily restrict working hours and, thereby, create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change does not alter the plant configuration, require new plant equipment to be installed, alter accident analysis assumptions, add any initiators, or affect the function of plant systems or the manner in which systems are operated, maintained, modified, tested, or inspected.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

**Attachment 1**  
**License Amendment Request for**  
**Adoption of TSTF-511, Revision 0**

**Criterion 3: The Proposed Change Does Not Involve a Significant Reduction in a Margin of Safety**

The proposed change removes Technical Specification restrictions on working hours for personnel who perform safety related functions. The Technical Specification restrictions are superseded by the worker fatigue requirements in 10 CFR Part 26. The proposed change does not involve any physical changes to the plant or alter the manner in which plant systems are operated, maintained, modified, tested, or inspected. The proposed change does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis acceptance criteria are not affected by this change. The proposed change will not result in plant operation in a configuration outside the design basis. The proposed change does not adversely affect systems that respond to safely shutdown the plant and to maintain the plant in a safe shutdown condition.

Removal of plant-specific Technical Specification administrative requirements will not reduce a margin of safety because the requirements in 10 CFR Part 26 are adequate to ensure that worker fatigue is managed.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, APS concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

**5.2 Applicable Regulatory Requirements/Criteria**

A description of the proposed TS change and its relationship to applicable regulatory requirements was provided in the NRC Notice of Availability published on December 30, 2008 (73 FR 79923). APS has reviewed the NRC staff's model SE published on December 30, 2008 (73 FR 79923) as part of the CLIP Notice of Availability and concluded that the regulatory evaluation section is applicable to PVNGS Units 1, 2, and 3.

The proposed change eliminates the plant-specific Technical Specification administrative controls on working hours. The Technical Specification guidance has been superseded by 10 CFR Part 26.

10 CFR Part 26, Subpart I, "Managing Fatigue," contains requirements for managing worker fatigue at operating nuclear power plants.

10 CFR 50.36 provides, among other things, the regulatory requirements for the content in the Administrative Controls section of the Technical Specifications. The inclusion of requirements to control working hours and manage fatigue is not required to be in the

**Attachment 1**  
**License Amendment Request for**  
**Adoption of TSTF-511, Revision 0**

Administrative Controls by 10 CFR Part 50.36. Because the requirement to control working hours and manage fatigue is provided in 10 CFR Part 26, Subpart I, it is unnecessary for the Technical Specifications to contain similar controls.

## **6.0 ENVIRONMENTAL CONSIDERATION**

APS has reviewed the environmental evaluation included in the model SE published on December 30, 2008, (73 FR 79923) as part of the CLIP Notice of Availability. APS has concluded that the staff's findings presented in that evaluation are applicable to PVNGS Units 1, 2, and 3. The proposed amendment changes recordkeeping, reporting, or administrative procedures. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## **7.0 REFERENCES**

1. Federal Register Notice, Final Rule 10 CFR Part 26 published on March 31, 2008 (73 FR 16966).
2. TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26."
3. Federal Register Notice, Notice of Availability published on December 30, 2008 (73 FR 79923).

**ATTACHMENT 2**

**Proposed Technical Specification Change (Mark-Up)**

**Pages:**

**5.2-2**

**5.2-3**

## 5.2 Organization

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### 5.2.2 Unit Staff (continued)

shall be assigned for each control room from which a reactor is operating in MODES 1, 2, 3, or 4.

- b. Shift crew composition shall meet the requirements stipulated herein and in 10 CFR 50.54(m). Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.f for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- c. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- d. ~~Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety related functions (e.g., licensed SROs, licensed ROs, radiation protection technicians, auxiliary operators, and key maintenance personnel).~~

~~The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.~~

~~Any deviation from the working hour guidelines shall be authorized in advance by personnel at the Director level or designees, in accordance with approved administrative procedures and with documentation of the basis for granting the deviation.~~

~~Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by these authorized individuals or designees to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.~~

(continued)

## 5.2 Organization

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### 5.2.2 Unit Staff (continued)

- de. The Operations Department Leader or Operations Supervisor shall hold an SRO license.
  - ef. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Manager in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.
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**Attachment 3**

**Proposed Technical Specification Change (Re-Typed)**

**Page:**

**5.2-2**

## 5.2 Organization

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### 5.2.2 Unit Staff (continued)

- shall be assigned for each control room from which a reactor is operating in MODES 1, 2, 3, or 4.
- b. Shift crew composition shall meet the requirements stipulated herein and in 10 CFR 50.54(m). Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.f for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
  - c. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
  - d. The Operations Department Leader or Operations Supervisor shall hold an SRO license.
  - e. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Manager in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.
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## **Attachment 4**

### **List of Regulatory Commitments**

#### **Commitment**

Removal of the plant-specific Technical Specification requirements will be performed concurrently with the implementation of the 10 CFR Part 26, Subpart I, requirements. In the event NRC approval for the requested amendment is not obtained before October 1, 2009, the amendment shall be implemented within 30 days of NRC approval and APS shall comply with the new 10 CFR 26, Subpart I, requirements and current Technical Specifications until the approved TS changes are implemented.