



Palo Verde Nuclear  
Generating Station

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102-05206-CDM/TNW/JAP  
February 2, 2005

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U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

- References:
- 1) Letter 102-04946-CDM/TNW/JAP, dated May 28, 2003, PVNGS Units 1, 2, and 3 "Amendment to Technical Specification 3.8.1, AC Sources – Operating and 3.8.4, DC Sources – Operating," from C. D. Mauldin , APS, to USNRC
  - 2) Letter dated September 25, 2003, "Request for Additional Information 3.8.1 and 3.8.4 for Callaway, Diablo Canyon, Palo Verde and Wolf Creek Plants (TAC Nos. MB9664, MB9477, MB9150, MB9151, MB9152, and MB8763, Respectively," from USNRC to G. R. Overbeck, APS
  - 3) Letter 102-05040-CDM/TNW/JAP, dated January 22, 2004, "Response to NRC Request for Additional Information Regarding License Amendment Request to Technical Specification 3.8.1, AC Sources – Operating and 3.8.4, DC Sources – Operating (TAC Nos. MB9150, MB9151, MB9152)," from C. D. Mauldin, APS, to USNRC
  - 4) Letter 102-05120-CDM/TNW/JAP, dated June 23, 2004, "Supporting Information for the Revision to Technical Specifications 3.8.1, AC Sources – Operating, and 3.8.4, DC Sources – Operating (TAC Nos. MB9150, MB9151, and MB9152), from C. D. Mauldin, APS, to USNRC

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Units 1, 2 and 3  
Docket Nos. STN 50-528/529/530  
Amended Supporting Information for the Revision to Technical  
Specifications 3.8.1, AC Sources – Operating, and 3.8.4, DC Sources –  
Operating (TAC Nos. MB9150, MB9151, and MB9152)**

Dear Sirs:

Reference 1 transmitted an application for amendment to Facility Operating License Numbers NPF-41, NPF-51, and NPF-74 for the Palo Verde Nuclear Generating Station (PVNGS). The license amendment request proposed changes to Technical

A member of the **STARS** (Strategic Teaming and Resource Sharing) Alliance

Callaway • Comanche Peak • Diablo Canyon • Palo Verde • South Texas Project • Wolf Creek

ADD1

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Specifications (TS) 3.8.1, “AC Sources – Operating,” and TS 3.8.4, “DC Sources – Operating,” to allow surveillance testing of the emergency diesel generators (DGs) during MODES in which it is currently prohibited and to incorporate changes based on Industry/Technical Specification Task Force (TSTF) Standard Technical Specification change TSTF-283, Revision 3.

Reference 2 transmitted a request for additional information from the NRC regarding the proposed TS changes with Reference 3 providing PVNGS’ response.

Additional questions related to the testing of the DGs in MODES 1 and 2 with the DG connected to the offsite power supply were provided by electronic mail from the NRC Project Manager. In further discussions with the NRC Project Manager, APS agreed to add to the TS Bases administrative controls related to Surveillance Requirement (SR) 3.8.1.14 involving testing of the DGs in MODES 1 and 2 with the DG connected to the offsite power supply. Reference 4 provided PVNGS’ response for this addition to SR 3.8.1.14 Bases.

After submittal of Reference 4, there was further discussion concerning the controls that would be in place associated with maintenance in the switchyard during the SR 3.8.1.14 testing in MODES 1 and 2. This letter provides additional information associated with the switchyard and further amends the proposed controls for maintenance in the switchyard during SR 3.8.1.14 testing, while in MODES 1 and 2.

There are two electrical distribution switchyards at the PVNGS site. The two distribution switchyards are the PVNGS Start-up Transformer Yard and the Salt River Project (SRP) 525 kV Switchyard. Many nuclear power plant facilities do not have both of these types of switchyards at their site.

The PVNGS Start-up Transformer Yard contains the startup transformers and related switchgear to provide offsite power from the SRP 525 kV Switchyard into each of the Palo Verde units. The operational and maintenance jurisdiction for the PVNGS Start-up Transformer switchyard is under the control of PVNGS. This is the preferred power supply switchyard that many power plant facilities have.

The SRP 525 kV Switchyard functions as a major power hub for the southwest region of Arizona and California. In addition to supplying power to and receiving power from Palo Verde, this switchyard hub connects, through seven 525 kV transmission lines, to four other 525 kV switchyards. The entire maintenance jurisdiction and nearly the entire operational jurisdiction of this switchyard are under SRP control. For many other nuclear power plant facilities this type of distribution center or switchyard is located quite some

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distance from the power plant itself, and as such, is not directly associated with the power plant facility.

PVNGS is providing the revised administrative control changes to the TS Bases for SR 3.8.1.14. The revised TS Bases change is provided in the Attachment to this letter (for information only) to assist the staff in its review of the proposed change.

Specifically, the information to be added to the TS Bases for SR 3.8.1.14 will state:

“Administrative controls for performing this SR in MODES 1 or 2, with the DG connected to an offsite circuit, ensure or require that:

- a. Weather conditions are conducive for performing this SR.
- b. All activity, including access, in the PVNGS Start-up Transformer Yard shall be closely monitored and controlled. Additionally, no elective maintenance within the PVNGS Start-up Transformer Yard will be performed.
- c. No equipment or systems assumed to be available for supporting the performance of the SR are removed from service.”

As discussed in Reference 1, revision to the TS Bases will be implemented pursuant to TS 5.5.14 – Technical Specification (TS) Bases Control Program, upon implementation of the license amendment.

The supplemental information provided in this letter does not impact the conclusions of the No Significant Hazards Consideration provided in Reference 1.

No commitments are being made to the NRC by this letter.

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

Sincerely,

CDM/TNW/JAP



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and 3.8.4, DC Sources – Operating  
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Enclosures:

- Notarized Affidavit
- Attachment – Revised Technical Specification SR Bases 3.8.1.14 Change

cc: B. S. Mallett                      Regional Administrator – NRC Region IV  
J. N. Donohew                      NRC NRR Project Manager  
G. G. Wamick                      NRC Senior Resident Inspector for PVNGS  
A. V. Godwin                      Arizona Radiation Regulatory Agency (ARRA)

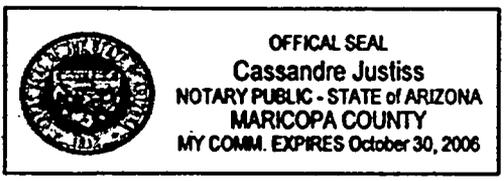
STATE OF ARIZONA        )  
  ) ss.  
COUNTY OF MARICOPA    )

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 2<sup>nd</sup> Day Of February, 2005.

*Cassandre Justiss*  
\_\_\_\_\_  
Notary Public



\_\_\_\_\_  
Notary Commission Stamp

## **Attachment**

Revised Technical Specification SR Bases 3.8.1.14 Change

BASES

**For Information Only**

SURVEILLANCE  
REQUIREMENTS

SR 3.8.1.14 (continued)

In order to ensure that the DG is tested under load conditions that are as close to design conditions as possible, testing is performed using design basis kW loading and maximum kVAR loading permitted during testing. These loads represent the inductive loading that the DG would experience to the extent practicable and is consistent with the intent of Regulatory Guide 1.9 (Ref. 3). Administrative limits have been placed upon the Class 1E 4160 V buses due to high voltage concerns. As a result, power factors deviating much from unity are currently not possible when the DG runs parallel to the grid. To the extent practicable, VARs will be provided by the DG during this SR. The load band is provided to avoid routine overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.9 (Ref. 3), paragraph 2.2.9, takes into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths.

Administrative controls for performing this SR in MODES 1 or 2, with the DG connected to an offsite circuit, ensure or require that:

- a. Weather conditions are conducive for performing this SR.
- b. All activity, including access, in the PVNGS Start-up Transformer Yard shall be closely monitored and controlled. Additionally, no elective maintenance within the PVNGS Start-up Transformer Yard will be performed.
- c. No equipment or systems assumed to be available for supporting the performance of the SR are removed from service.

This Surveillance is modified by ~~four~~ three Notes. Note 1 states that momentary variations due to changing bus loads do not invalidate the test. ~~The reason for Note 2 is that during operation with the reactor critical, performance of this Surveillance could cause perturbations to the electrical distribution systems that could challenge continued steady state operation and, as a result, unit~~

**For Information Only**

(continued)