



A subsidiary of Pinnacle West Capital Corporation

Palo Verde Nuclear
Generating Station

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102-06106-DCM/GAM
December 17, 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, 50-529 and 50-530
Response to November 2, 2009, Request for Additional Information
Regarding Plant Structures for the Review of the PVNGS License
Renewal Application, and License Renewal Application Amendment
No. 4**

By letter dated November 2, 2009, the NRC issued a request for additional Information (RAI) related to the PVNGS license renewal application (LRA). Enclosure 1 contains APS's response to the November 2, 2009, RAI. Enclosure 2 contains PVNGS LRA updates to reflect changes made as a result of the RAI responses.

APS makes no commitments in this letter. Should you need further information regarding this submittal, 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 12/17/09
(date)

Sincerely,

DCM/RAS/GAM/

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

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U.S. Nuclear Regulatory Commission
Response to November 2, 2009, Request for Additional Information for the Review of
the Palo Verde Nuclear Generating Station License Renewal Application
Page 2

Enclosures:

1. Response to November 2, 2009, Request for Additional Information Regarding
Plant Structures for the Review of the PVNGS License Renewal Application
2. Palo Verde Nuclear Generating Station License Renewal Application
Amendment No. 4

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
	L. M. Regner	NRC License Renewal Project Manager

ENCLOSURE 1

**Response to November 2, 2009, Request for Additional
Information Regarding Plant Structures for the Review of the
PVNGS License Renewal Application**

Enclosure

**Response to November 2, 2009, Request for Additional Information
for the Review of the PVNGS License Renewal Application**

NRC RAI 2.4.1-1

Based on the staff's review of Section 2.4.1, "Containment Building," and Table 2.4-1 of the LRA, it is not clear if the hatches/plugs, caulking and sealant have been included within the scope of license renewal and subject to an aging management review (AMR). If the components are not included due to oversight, please discuss whether these components are within the scope of license renewal and subject to an AMR. If they are excluded from the scope of license renewal, please provide the basis for their exclusion.

APS Response to RAI 2.4.1-1

The containment access hatches and associated components are identified as component types "hatch - emergency airlock," "hatch - equipment," and "hatch - personnel airlock" in LRA Table 2.4-1. Component type "hatch - equipment" includes the concrete missile barrier for the equipment hatch. These components are identified as components within the scope of license renewal and subject to an AMR. There are no in-scope components in the containment building to which the component type "hatches/plugs" is applicable.

All in-scope structural seals in the containment building are identified as component types "compressible joints/seals" or "fire barrier seals" in LRA Table 2.4-1. These components are identified in LRA Table 2.4-1 as components within the scope of license renewal and subject to an AMR. There are no in-scope components in the containment building to which the component type "caulking and sealant" is applicable.

NRC RAI 2.4.4-1

Based on the staff's review of Section 2.4.4, "Turbine Building," and Table 2.4-4 of the LRA, it is not clear if the compressible joints and seals have been included within the scope of license renewal and subject to an AMR. If the components are not included due to oversight, please discuss whether these components are within the scope of license renewal and subject to an AMR. If they are excluded from the scope of license renewal, please provide the basis for their exclusion.

APS Response to RAI 2.4.4-1

All in-scope structural seals in the turbine building are identified as component types "fire barrier seals" or "roofing membrane" in LRA Table 2.4-4. These components are identified as components within the scope of license renewal and subject to an AMR. There is no component type "compressible joints and seals" in the Turbine Building that meets the criteria to be within the scope of license renewal.

Enclosure

**Response to November 2, 2009, Request for Additional Information
for the Review of the PVNGS License Renewal Application**

NRC RAI 2.4.5-1

Based on the staff's review of Section 2.4.5, "Auxiliary Building," and Table 2.4-5 of the LRA, it is not clear if the boot seal penetration has been included within the scope of license renewal and subject to an AMR. If the component is not included due to oversight, please discuss whether these components are within the scope of license renewal and subject to an AMR. If it is excluded from the scope of license renewal, please provide the basis for its exclusion.

APS Response to RAI 2.4.5-1

All in-scope structural seals in the Auxiliary Building are identified as component types "roofing membrane," "fire barrier seals," "compressible joints/seals," or "caulking/sealant." The component type "caulking/sealant" includes boot seal penetrations. These components are identified in LRA Table 2.4-5 as components within the scope of license renewal and subject to an AMR.

NRC RAI 2.4.9-1

Based on the staff's review of Section 2.4.9, "Fuel Building," and Table 2.4-9 of the LRA, it is not clear if the fire barrier coatings and wraps have been included within the scope of license renewal and subject to an AMR. If the components are not included due to oversight, please discuss whether these components are within the scope of license renewal and subject to an AMR. If they are excluded from the scope of license renewal, please provide the basis for their exclusion.

APS Response to RAI 2.4.9-1

There are no fire barrier coatings or wraps within the scope of license renewal and subject to an AMR in the fuel building. The PVNGS UFSAR, Appendix 9B.2, Fire Hazards Analysis, describes the fire protection evaluation for the fuel building in UFSAR Section 9B.2.6. This evaluation documents that no fire barrier coatings or wraps are credited for protection of structural members or raceways in the fuel building.

NRC RAI 2.4.12-1

Based on the staff's review of Section 2.4.12, "Transformer Foundations and Electrical Structures," and Table 2.4-12 of the LRA, it is not clear if the electrical penetration has been included within the scope of license renewal and subject to an AMR. If the component is not included due to oversight, please discuss whether these components are within the scope of license renewal and subject to an AMR. If it is excluded from the scope of license renewal, please provide the basis for its exclusion.

Enclosure

**Response to November 2, 2009, Request for Additional Information
for the Review of the PVNGS License Renewal Application**

APS Response to RAI 2.4.12-1

There are no electrical penetrations within the scope of license renewal and subject to an AMR in LRA Section 2.4.12, "Transformer Foundations and Electrical Structures." Electrical components that connect these structures with other buildings are routed through electrical penetrations that are evaluated with those buildings in their respective subsections in LRA Section 2.4.

NRC RAI 2.4.13-1

Based on the staff's review of Section 2.4.13, "Yard Structures," and Table 2.4-13 of the LRA, it is not clear if the following components have been included within the scope of license renewal and subject to an AMR:

- a) Duct banks and manholes
- b) Transmission towers

If the components are not included due to oversight, please discuss whether these components are within the scope of license renewal and subject to an AMR. If they are excluded from the scope of license renewal, please provide the basis for their exclusion.

APS Response to RAI 2.4.13-1

"Duct banks and manholes" and "transmission towers" are evaluated in LRA Section 2.4.12, "Transformer Foundations and Electrical Structures," and LRA Table 2.4-12.

In order to clarify the LRA, the following sentence is being added to LRA page 2.4-25 at the end of the Structure Description and just before Structure Intended Function in Section 2.4.13, "Yard structures (in-scope)" (see LRA Amendment No. 4 changes in Enclosure 2 to this letter).

Duct banks and manholes and transmission towers are evaluated in Section 2.4.12, Transformer Foundations and Electrical Structures, and Table 2.4-12.

ENCLOSURE 2

**Palo Verde Nuclear Generating Station
License Renewal Application Amendment No. 4**

**Palo Verde Nuclear Generating Station
License Renewal Application
Amendment No. 4**

Source: RAI 2.4.13-1

The following sentence is added to LRA page 2.4-25 at the end of the Structure Description and just before the Structure Intended Function in Section 2.4.13, "Yard structures (in-scope)":

Duct banks and manholes and transmission towers are evaluated in Section 2.4.12, Transformer Foundations and Electrical Structures, and Table 2.4-12.