APS A subsidiary of Pinnacle West Capital Corporation

Palo Verde Nuclear Generating Station

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102-06104-DCM/GAM
December 11, 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 13, 2009, Request for Additional Information Regarding Ventilation for the Review of the PVNGS License Renewal Application

By letter dated November 13, 2009, the NRC issued a request for additional Information (RAI) related to the PVNGS license renewal application (LRA). Enclosed is APS's response to the November 13, 2009, RAI.

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 12/11/09
(date)

Sincerely,

D. C. Mims

DCM/RAS/GAM

A138
NRR

Enclosure: Response to November 13, 2009, Request for Additional Information Regarding Ventilation for the Review of the PVNGS License Renewal Application

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

Response to November 13, 2009, Request for Additional Information Regarding Ventilation for the Review of the PVNGS License Renewal Application

NRC RAI 2.3.3.11-1

Drawing LR-PVNGS-HJ-02-M-HJP-001 at zone/location H-16 and LR-PVNGS-HJ-02-M-HJP-002 at zones/locations H-2/16 show fixed louvers in air supply and exhaust flow paths that are not highlighted as being in scope. If these components are excluded from the scope of license renewal, please provide a basis for their exclusion. Please include a discussion on whether deterioration related failure of these components could result in compromised performance of the Control Building Heating, Ventilating, and Air Conditioning (HVAC) System or allow intrusion of missile/debris that could adversely affect in-scope components.

APS Response to RAI 2.3.3.11-1

Fixed louvers shown on drawing LR-PVNGS-HJ-02-M-HJP-001 at coordinates H-16 and LR-PVNGS-HJ-02-M-HJP-002 at coordinates H-2/16 are structural components within the scope of license renewal that are installed in an exterior wall of the Control Building. The fixed louvers are evaluated as a carbon steel structural steel component and an aluminum barrier component in the Control Building structure. See LRA Section 2.4.2. The fixed louvers have a missile barrier function and provide protection of safety-related components against internal and external missiles.

These structures, systems, and components were not highlighted on drawings LR-PVNGS-HJ-02-M-HJP-001 and LR-PVNGS-HJ-02-M-HJP-002 because those drawings are mechanical boundary drawings and only mechanical components within scope of license renewal are highlighted on mechanical boundary drawings. The scoping and screening methodology for mechanical systems is further detailed in the LRA Section 2.1.3.1 and the scoping and screening methodology for structural systems is further detailed in LRA Section 2.1.3.2. A single license renewal drawing was created for structures based on the site plan.

NRC RAI-2.3.3.12-1

Drawing LR-PVNGS-HA-02-M-HAP-001 at locations H-8 and F-6 show fire dampers HAN-M05 and HAN-M29A that are not highlighted. Please provide the basis for excluding these fire dampers from the license renewal scope. Please include in your discussion, a description of the airflow entering in to the corridor that then passes through fire damper HAN-M29A into the west piping penetration room.

APS Response to RAI-2.3.3.12-1

Fire damper HAN-M05 shown on drawing LR-PVNGS-HA-02-M-HAP-001 at coordinates H-8 has been evaluated as within the scope of license renewal. The fire damper has a fire barrier and a non-safety-related structural support intended function and is installed in an interior wall of the Auxiliary Building structure.

Fire damper HAN-M05 on drawing LR-PVNGS-HA-02-M-HAP-001 was not highlighted due to a drawing preparation error. Drawing LR-PVNGS-HA-02-M-HAP-001 has been revised to highlight fire damper HAN-M05 to indicate that the damper is within the scope of license renewal.

Damper HAN-M29A shown on drawing LR-PVNGS-HA-02-M-HAP-001 at coordinates F-6 has been evaluated as not within the scope of license renewal. Damper HAN-H29A is not mounted in a fire barrier wall and has been evaluated as not having a fire barrier intended function.

The corridor outboard of damper HAN-M29A is open to the broad area of the Auxiliary Building 88-foot elevation and communicates with elevations above by stairwells. Air passes into the pipe penetration room from the corridor via damper HAN-M29A.

NRC RAI-2.3.3.15-1

Drawing LR-PVNGS-HD-01-M-HDP-001 shows fixed louver assemblies at drawing zones/locations D-1 and B-3 are not color coded as being in scope. If these components are excluded from the scope of license renewal, please provide a basis for their exclusion. Please include a discussion on whether deterioration related failure of these components could result in compromised performance of the Diesel Generator Building HVAC System or allow intrusion of missile/debris that could adversely affect in-scope components.

APS Response to RAI-2.3.3.15-1

Fixed louvers shown on drawing LR-PVNGS-HD-01-M-HDP-001 at coordinates D-1 and B-3 are structural components within scope of license renewal that are installed in an exterior wall and an interior wall of the Diesel Generator Building. The fixed louvers are evaluated as carbon steel structural steel components with a structural support intended function and a shelter and protection intended function in the Diesel Generator Building structure. See LRA Section 2.4.3. The fixed louvers are not credited for the missile barrier intended function because a combination of concrete, offset concrete baffles, and a concrete plenum prevent missile entry (PVNGS Updated Final Safety Analysis Report Appendix 3A, Table 3A-1).

These SSCs were not highlighted on drawing LR-PVNGS-HD-01-M-HDP-001 because that drawing is a mechanical boundary drawing and only mechanical components within scope of license renewal are highlighted on mechanical boundary drawings. The scoping and screening methodology for mechanical systems is further detailed in LRA Section 2.1.3.1 and the scoping and screening methodology for structural systems is further detailed in LRA Section 2.1.3.2. A single license renewal drawing was created for structures based on the site plan.

NRC RAI-2.3.3.17-1

Drawing LR-PVNGS-HT-01-M-HTP-001 at zone/location B-2 shows fire dampers HTN-M39-S3M and HTN-M40-S3M highlighted as being in scope. Please discuss whether these fire dampers are mounted in the fire barrier boundary (wall) and if the downstream backdraft dampers/ducting should also be shown in scope as needed to maintain the fire barrier boundary integrity. If the downstream backdraft dampers/ducting are excluded from the scope of license renewal, please provide a basis for their exclusion.

APS Response to RAI-2.3.3.17-1

Fire dampers HTN-M39-S3M and HTN-M40-S3M (as highlighted on LR-PVNGS-HT-01-M-HTP-001 at coordinates B-2) are identified as within the scope of license renewal and support a Station Blackout license renewal intended function. Fire dampers HTN-M39-S3M and HTN-M40-S3M are fire rated dampers installed in a 2-hr fire barrier wall but are not credited for 10 CFR 50.48 Fire Protection. The downstream ducting and backdraft dampers HTN-M19 and HTN-M18 in the flow path from HTN-M39-S3M and HTN-M40-S3M do not have a 10 CFR 50.48 Fire Protection or Station Blackout license renewal intended function and are evaluated as not within the scope of license renewal.