10 CFR 50.59, 10 CFR 72.48

Palo Verde Nuclear Generating Station

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102-06196-TNW/KAR
May 21, 2010

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, & 3 and Independent Spent Fuel Storage Installation (ISFSI)
Docket Nos. STN 50-528/529/530 and 72-44
Twenty-Four Month 10 CFR 50.59, 10 CFR 72.48 and Commitment Change Reports (January 2009 – December 2009)

Enclosed please find Arizona Public Service Company's (APS') 10 CFR 50.59, 10 CFR 72.48 and Commitment Change Reports for the period of January 1, 2009 through December 31, 2009.

In accordance with 10 CFR 50.59(d)(2), APS is providing a brief description of each change and a summary of the evaluation required by 50.59(d)(1) for each change. This report contains all evaluations written during 2009, regardless of the implementation status of the evaluated action and is included as Enclosure 1 to this letter.

In accordance with 10 CFR 72.48(d)(2), APS is reporting that there were no changes completed during the period that were required to be reported pursuant to 72.48, as stated in Enclosure 2 to this letter.

In accordance with commitment management program requirements, APS is reporting three NRC commitment changes made during the period that were not otherwise reported. The report of commitment changes is included as Enclosure 3 to this letter.

No new commitments are being made to the NRC by this letter. Should you need further information regarding this submittal, please contact Russell A. Stroud, Licensing Section Leader, at (623) 393-5111.

Sincerely,

Thomas N. Weber

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Enclosure 1. Acronym/Abbreviation List, 10 CFR 50.59 Report
2. 10 CFR 72.48 Report
3. Commitment Change Report

cc: E. E. Collins Jr. NRC Region IV Regional Administrator
J. R. Hall NRC NRR Project Manager
L. K. Gibson NRC NRR Project Manager
R. I. Treadway NRC Senior Resident Inspector for PVNGS
E. W. Brach Director, Spent Fuel Project Office

ENCLOSURE 1

PALO VERDE NUCLEAR GENERATING STATION

ACRONYM/ABBREVIATION LIST, and

10 CFR 50.59 Report

January 2009 - December 2009

ACRONYMN / ABBREVIATION LIST

(Acronyms included in calculation or document numbers are not included in this list)

ACE	Apparent Cause Evaluation
ACT	Action
AOR	Analysis of Record
Calc	Calculation
CENTS	Combustion Engineering Nuclear Transient Simulation
CRAI	Condition Report Action Item
CRDR	Condition Report/Disposition Request
CS	Containment Spray
DFWO	Deficiency Work Order
DMWO	Design Modification Work Order
ECCS	Emergency Core Cooling System
EDC	Engineering Document Change
EDG	Emergency Diesel Generator
EPAC	Equivalence Table for PAC
FWLBLOPSF	Feedwater Line Break with Loss of Offsite Power and Single Failure
HDP	Heater Drain Pump
HPSI	High Pressure Safety Injection
LDCR	Licensing Document Change Request
LOCA	Loss of Coolant Accident
LOF	Loss of Flow
LPSI	Low Pressure Safety Injection
LTA	Lead Test Assembly
MSLB	Main Steam Line Break
MTC	Moderator Temperature Coefficient
NFM	Nuclear Fuel Management
NRC	Nuclear Regulatory Commission
OBE	Operating Basis Earthquake
PAC	Physics Assessment Checklist
PC	Protective Clothing
PLC/HMI	Programmable Logic Controller with Human Machine Interface
PLCSM	Pressurizer Level Control System Malfunction
PLS	Portable Laundry Skid
PO-EDC	Paper Only Engineering Document Change
PROC	Procedure
PSV	Primary Safety Valve
PVAR	Palo Verde Action Request
PVNGS	Palo Verde Nuclear Generating Station
RP	Radiation Protection
RSG	Replacement Steam Generator
RTD	Resistance Temperature Detector
RWT	Refueling Water Tank
SABD	Safety Analysis Basis Document
SBCSM	Steam Bypass Control System Malfunction

ACRONYMN / ABBREVIATION LIST (continued)

(Acronyms included in calculation or document numbers are not included in this list)

SBLOCA	Small Break Loss of Coolant Accident
SBOG	Station Blackout Generator
SBOGTG	Station Blackout Gas Turbine Generator
SCFM	Standard Cubic Feet per Minute
SDC	Shutdown Cooling
SDOC	Supplier Document
SG	Steam Generator
SIRCP	Startup of an Inactive Reactor Coolant Pump
SOE	Sequence of Events
TMOD	Temporary Modification
TRM	Technical Requirements Manual
TTA	Sodium Tolytriazole (Copper corrosion inhibitor)
UFSAR	Updated Final Safety Analysis Report
VDP	Vendor Document Package
VTD	Vendor Technical Document

10 CFR 50.59 Report (January 2009 through December 2009)

Log	Doc Type	Doc Number	Description	Summary
E-08-0005	DMWO	2578794 Rev 1 and 3	The proposed change is to replace the following solenoid operated valves with motor operated valves in Units 1, 2, 3: JSGAUV0134A , S/G #1 Steam Supply to AFA-P01 Bypass Valve and JSGAUV0138A , S/G #2 Steam Supply to AFA-P01 Bypass Valve.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-08-0014	Analysis of Record	TA-13-C00-2002-002, Rev 05	The new analysis of record (AOR) is changing various input parameters in accordance with current plant design, is using the latest revision of applicable computer codes, and is removing discretionary conservatisms in the previous AOR. CRDR# 2830075.	This change DOES require prior NRC approval to implement changes.
E-08-0022	TRM LDCR	TRM 3.8.103 LDCR 07-R004	A new section is being added to the Technical Requirements Manual (TRM Section 3.8.103) to specify the TRM requirements for the Station Blackout Generator (SBOG) system. The SBOG system is defined to include the two gas turbine generators (SBOGs) and the following support systems: fuel oil, lube oil, diesel hydraulic start and electrical distribution. Rev. 1 of this evaluation is being issued to correct the the stated TLCO requirements for when both Station Blackout Generators (SBOGs) must be operable.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0001	Temp Mod and Temporary Instruction	DW-08-001 Rev 0, DW-14 to WROP-8DW01 Rev 17	A temporary drain valve is to be installed on the DW system vacuum degasifier air water separator. Temporary instruction will be issued for it's use.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0002	LDCR	08-F052, Rev 0	Clarify UFSAR Sections 8.3.1.1.4.3 (EDG Tripping Devices) and 9.5.7.3 (EDG Lube Oil System Safety Evaluation) to include statements that EDG control air must be available for the "EDG overspeed", "low lube oil pressure", "generator differential", and "manual trip at the control panel" engine protective trips to be in effect.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0004	DFWO	3315351	This DFWO documents the impact on the Reactor Coolant System and connected NSSS systems of a Use-As-Is Disposition for leaving degraded Reactor Coolant Pump (RCP) diffuser wedge	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).

10 CFR 50.59 Report (January 2009 through December 2009)

Log	Doc Type	Doc Number	Description	Summary
			assemblies in-place for Unit-3 RCP 1A.	
E-09-0005	DFWO	3322244	Replace the damaged NEMA 4 cast iron junction box with a NEMA 12 sheet metal junction box for EDG 3A.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0006	DMWO	3190342	The replacement of the PVNGS Units 1, 2 and 3 reactor vessel closure heads (RRVCH) requires modifications to site facilities. These changes are covered by DMWO 3190342 and include temporary modifications to the RRVCH haul route and protection for plant commodities that are located alongside and/or under the haul route, as required. DMWO 3190342 also covers installation and subsequent removal of the Elevated Cantilevered Handling Device (ECHD) and Erection Crane, both installed outside of Containment adjacent to the equipment hatch/missile shields.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0007	DMWO	3095435	Palo Verde will install a Simplified Head Assembly (SHA) that is designed to reduce the time, associated dose, and number of polar crane picks for the disassembly and reassembly of the reactor vessel closure head (RVCH) as well as to increase personnel safety.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0008	DMWO	2992340	Palo Verde Units 1, 2, and 3 will install a Replacement Reactor Vessel Closure Head (RRVCH) to include a new reactor head (including inconel 690 nozzles and reactor head vent nozzle extension), new CEDM housings, new CEDMs, new reactor head insulation, and new Reactor Vessel Level Monitoring System (RVLMS) housings.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0010	DMWO	2650413, Rev 0	This change adds automatic static transfer switches to Unit 1 inverters 1EPNAN11, 1EPNBN12, 1EPNCN13, and 1EPNDN14.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).

10 CFR 50.59 Report (January 2009 through December 2009)

Log	Doc Type	Doc Number	Description	Summary
E-09-0012	Calc LDCR	N001-1900-01331, REV2 (CN-LAM-09-33, Rev. 00), MN725-A01518, REV 2 (CN-OA-05-53, Rev. 02 and CN-OA-03-53, Rev. 03) LDCR 2009-F063	This Screening/Evaluation applies to the three Westinghouse LOCA related calculations – LOCA Checklist calculations MN725-A01518 Rev. 02 [CN-OA-05-53, Rev. 02 and CN-OA-05-53, Rev. 03] and LBLOCA calculation N001-1900-01331 Rev. 02 [CN-LAM-09-33, Rev.00] and the LDCR 2009-F063, which is based on the LBLOCA analysis.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0013	Calc	RDROP-15.4.3-TA, Rev. 0, NA-13-C00-2002-005, Rev 02, TA-13-C00-2005-005, Rev 05, and 40AO-9ZZ11, Rev 14	The WEC calculation, MN725-A00206, Rev 3, Full Length CEA Drop (A-PV2-FE-0169), (Ref. 2) was reformatted to the AAOR project standards and brought in house as an APS calculation, RDROP-15.4.3-TA, Rev. 0 (Ref. 1). In the process, a number of errors were identified and corrected. The impact of these corrections are changes to the COLR figures 3.1.5-1 and 3.2.4-1 and PAC limits on the sub-group drop distortion factor. The changes to COLR figure 3.1.5-1 affect procedure, 40AO-9ZZ11, CEA MALFUNCTIONS Rev 13, (Ref. 3). This 50.59 covers changes discussed in Appendix A of RDROP-15.4.3-TA, Rev. 0, and NA-13-C00-2002-005, Rev 02, and applicable changes to TA-13-C00-2005-005, Rev 05, and 40AO-9ZZ11, Rev 13. Appendix E of Ref. 1are the proposed changes to the UFSAR 15.4.3.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0014	LDCR	LDCR 08-F049	LDCR 08-F049 is being submitted to update UFSAR Section 11.2 to reflect the current operation of the Liquid Radwaste System (LRS) as described in the associated LRS operating procedures and design drawings.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).
E-09-0015	Calc LDCR	TA-13-C00-2004-003, Rev. 03, LDCR 2009-F016	Revision 03 of TA-13-C00-2004-003 (PVNGS Chapter 15 EAB & LPZ Dose Consequences) corrects several inputs for the offsite radiological dose calculations in Revision 01 and changes the calculation of an internal Dose Conversion Factor. This screening also addresses UFSAR updates in LDCR 2009-F016.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).

10 CFR 50.59 Report (January 2009 through December 2009)

Log	Doc Type	Doc Number	Description	Summary
E-09-0016	Analysis	Analysis EXCESSLOAD-TA Rev. 0.	Analysis EXCESSLOAD-TA Rev. 0, "Augmented Analysis of Record for the Excess Load Events in UFSAR Chapters 15.1.1, 15.1.2, 15.1.3 and 15.1.4." was generated as part of the Augmented Analysis of Record Project. This 10 CFR 50.59 includes the applicable changes made in analysis EXCESSLOAD-TA Rev. 0., in addition to the proposed changes to the UFSAR described in Appendix E of the analysis.	This change does not require prior NRC approval in accordance with 10CFR50.59(c)(1).

ENCLOSURE 2

10 CFR 72.48 Report

January 2009- December 2009

10 CFR 72.48 Annual Report (January 2009 - December 2009)

No changes were made per 10 CFR 72.48 from January 1, 2009 through December 31, 2009 that are required to be reported.

ENCLOSURE 3

Commitment Change Report

January 2009- December 2009

Regulatory Commitment/Action Change Evaluation Summary

COMMITMENT CHANGE A

The commitment clarification below was made on March 25, 2009.

Commitment Number: RCTSAI 8994

Source Document(s): Letter ANPP-30760 TQ/KLM

Existing Commitment Description:
Molded case circuit breakers associated with safe-shutdown power sources will be inspected and tested on a periodic basis.

Revised Commitment Description:
Molded case circuit breakers associated with safe-shutdown power sources will be inspected on a periodic basis. All non-single pole molded case breakers will be tested on a periodic basis.

Justification of Change:
GE Letter GE-APS-090484-BG1 dated Sept 4, 1984, and 84-002-419.3 dated May 10, 1984, describes the overall negative impact on breaker life and function through instantaneous trip testing.

COMMITMENT CHANGE B

The commitment clarification below was made on August 13, 2009.

Commitment Number: RCTSAI 12022

Source Document(s): CRAI 3346129

Existing Commitment Description:
Provide Preventive Maintenance (PM) tasks for calibration of the class 1E switchgear UV & D/G protective relays required during each refueling outage.

Revised Commitment Description:
Provide PM tasks for calibration of the class 1E switchgear UV & D/G protective relays required every two (2) years.

Justification of Change:
The NRC-endorsed EPRI PMBD 2.0 template states that the recommendation for critical relays in severe environments is two years as-found testing and calibration. The recommendation for mild environments, like these relays are in, is four years. In addition, PVNGS operating experience does not indicate a history of failures attributed to the optimized PM frequency.

COMMITMENT CHANGE C

The commitment below was closed on August 28, 2009.

Commitment Number: RCTS 13226

Source Document(s): CRDR 3324447, 161-00108-JGH, 455-00150-MSB, 450-00138-JHH

Existing Commitment Description:
Design change packages will be developed to provide 1E power to containment temperature and humidity detectors, RMS mini-computer, containment radwaste sump level indication and key radiation monitors that are used in the Diagnostic flow chart. Note that an RCTSAI was apparently never generated for this action. However, this action is being handled as a commitment.

Revised Commitment Description:
Commitment tracking closed. Modification installed in Unit 3, the modification was canceled for Unit 1 and Unit 2.

Justification of Change:
After the installation of the modification in Unit 3, APS determined that the modification was not required due to alternate containment temperature indication from a reliable power source that can be supplied from class 1E diesel generators. Based upon availability of these alternate temperature indicators, the modification was cancelled. Containment temperature and humidity indication can be supplied by a bus with an emergency diesel generator. At least two breakers separate class power supply from the non-class inverter in all units.