



102-07701-MDD/TMJ
June 1, 2018

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

**Palo Verde
Nuclear Generating Station**
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Dear Sirs:

Subject: **Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, & 3 - Independent Spent Fuel Storage Installation (ISFSI)
Docket Nos. STN 50-528, 50-529, 50-530, and 72-44
10 CFR 50.59, 10 CFR 72.48, and Commitment Change
Annual Reports**

Enclosed please find the Arizona Public Service Company (APS), title 10 of the Code of Federal Regulations (10 CFR) 50.59, 10 CFR 72.48 and Commitment Change reports for January 1, 2017, through December 31, 2017.

In accordance with 10 CFR 50.59(d)(2), APS is providing a brief description and summary of the evaluations required by 10 CFR 50.59(d)(1) for each change completed during the period. Enclosure 1 contains a report of the evaluations written during 2017, regardless of the implementation status of the evaluated action.

In accordance with 10 CFR 72.48(d)(2), APS is reporting that there was one change completed during the period that was required to be reported pursuant to 10 CFR 72.48, and a brief description and summary of the evaluations is also included in Enclosure 1 to this letter.

In accordance with the APS commitment management program, APS is reporting three NRC commitment changes made during the referenced time period as described in Enclosure 2 to this letter. Other commitment changes made during 2017 that were reported in separate correspondence are not included in Enclosure 2.

No new commitments are being made to the NRC by this letter. Should you need further information regarding this submittal, please contact Matthew S. Cox, Nuclear Regulatory Affairs Section Leader, at (623) 393-5753.

Sincerely,

Michael, D. DiLorenzo
Department Leader, Nuclear Regulatory Affairs

MDD/TMJ

Enclosure: 1. 10 CFR 50.59 and 10 CFR 72.48 Reports, January 2017 – December 2017
2. Commitment Change Reports, January 2017 – December 2017

ENCLOSURE 1

10 CFR 50.59 and 10 CFR 72.48 Reports

January 2017 - December 2017

PVNGS 10 CFR 50.59 and 10 CFR 72.48 Reports (January 2017 through December 2017)

Log	Doc Type	Doc Number	Description	Summary
50.59 E-14-0002 Rev. 003	DMWO	3232547	An update to reflect the move of the originally proposed location for the new proposed door which was to be installed on the common wall between the train A equipment room and train B equipment room. The new risk-informed tech specs and their supporting probabilistic risk assessment Break Exclusion Region (BER) no longer support the installation of the door at this location. Therefore the new door will be installed on the common wall between the train A equipment and train A battery rooms.	This change does not require prior NRC approval in accordance with 10 CFR 50.59(c)(1).
50.59 E-16-0005 Rev. 002	SEP	SEP-28079-001-001	Implemented a revision to a procedure to perform a sizing test, which involved information gathering to provide a basis for determining the appropriate size needed for future installation of permanent neutron absorber inserts in the Spent Fuel Pool at PVNGS for Units 1, 2, and 3.	This change does not require prior NRC approval in accordance with 10 CFR 50.59(c)(1).
50.59 E-17-0001 Rev. 000	PROC	73DP-9XI03, 3INT-ISI-1, 2, 3	The PVNGS Inservice Inspection Program (ISI) to implement the EPRI Risk Informed Inspection Methods to the BER as found in EPRI TR-1006937. The methodology has been developed to replace the existing BER augmented ISI program, which specifies 100% volumetric examination of BER welds, with a risk-informed program, which uses PRA to determine the inspection locations and number of welds to be examined for BER piping.	This change does not require prior NRC approval in accordance with 10 CFR 50.59(c)(1).
50.59 E-17-0003 Rev. 000	STDY	13-NS-A106	Engineering Study 13-NS-A106 – The proposed activity revises the Essential Spray Pond System (ESPS) tornado missile probabilistic risk assessment study.	This change does not require prior NRC approval in accordance with 10 CFR 50.59(c)(1).
50.59 E-17-0004 Rev. 001	TMOD	17-07348-002	Temporary Modification 17-07342-002 was developed in accordance with procedure 81DP-0DC17 and utilized portable demineralizers to remove unwanted sodium from the Unit 3 condensate storage tank	This change does not require prior NRC approval in accordance with 10 CFR 50.59(c)(1).

PVNGS 10 CFR 50.59 and 10 CFR 72.48 Reports (January 2017 through December 2017)

Log	Doc Type	Doc Number	Description	Summary
50.59 E-17-0006 Rev. 000	PROC	40OP-9SI02, 90OP-9SI03, 40AL-9RK2B, 73ST-9SI03, 40DP-9OP05	Procedures 40OP-9SI02 Rev. 115A, 40OP-9SI03 Rev. 037A, 40AL-9RK2B Rev. 059A, 73ST-9SI03 Rev. 053A, 40DP-9OP05 Rev. 075A, were changed based upon this 10 CFR 50.59 review that addressed compensatory actions to be taken in response to Condition Report (CR) 17-07845. Specifically, normally open manual valve SI-V947 in the Unit 2 Safety Injection Tank (SIT) fill and drain header will be closed to stop inventory loss from the 1A SIT.	This change does not require prior NRC approval in accordance with 10 CFR 50.59(c)(1).
72.48 E-16-001 Rev. 001	EDC	2016-00369	EDC 2016-00369, NAC Licensing Drawing 790-585 Transportable Storage Canister, (TSC) NAC-UMS. The design for the TSC Shield Lid Weld (Shield Lid to Canister Shell) is being revised to permit a minimum weld size of 5/16".	This change does not require prior NRC approval in accordance with 10 CFR 72.48(d)(2).

Acronyms/Abbreviation List

- CALC - Calculation
- DMWO - Design Modification Work Order
- EDC - Engineering Document Change
- LDCR - Licensing Document Change Request
- PROC - Procedure
- SEP - Special Engineering (Vendor) Procedure
- STDY - Study
- TMOD - Temporary Modification

ENCLOSURE 2

Commitment Change Reports

January 2017 – December 2017

COMMITMENT CHANGE 16-C002**Commitment Number:** RCTSAI 3094369**Source Document(s):**

Letter 102-05766, Confirmatory Order: Access Authorization Issues, dated November 16, 2007
Confirmatory Order EA-07-162, dated October 19, 2007, CRDR 3042957, NEI Efficiency
Bulletin: 16-26, dated September 30, 2016, CR 16-15748

Existing Commitment Description:

Palo Verde will incorporate revised behavioral observation program training material into site access training. The revised behavioral observation program training material will emphasize the required actions regarding communication with Access Authorization (AA) for personnel issued that may affect an individual's trustworthiness or reliability.

Revised Commitment Description:

N/A – The commitment is being cancelled

Justification of Change:Reason for the change:

NEI efficiency bulletin: 16-26, "Standardization of In-Processing," describes the industry transition to the standard nuclear plant access training modules for all utility and supplemental workers, and refresher training will be performed at reduced frequencies. The proposed industry standard nuclear plant access training provides guidance to communicate with Access Authorization when an individual's trustworthiness or reliability is questioned. The site specific content included in PVNGS courses, FFD21, and FFD01 including the portions that implement the commitment are not included in this training. Site specific content is being eliminated entirely.

Background:

The commitment was related to action number 6 of confirmatory order, EA-07-162, dated October 19, 2007. It stated:

6. Within 30 days of the date of the Confirmatory Order, APS will provide the NRC with written communication regarding the weaknesses found in its process for identifying potential access authorization issues to other licensees through the Personnel Access Data System (PADS). APS will describe its corrective actions in this letter, and will send the letter to the Document Control Desk with a copy to the Regional Administrator, NRC RIV and to the Resident Inspector at the Palo Verde Nuclear Generating Station.

APS Letter 102-05766, confirmatory Order: Access Authorization Issues, dated November 16 2007, responded to the action and provided the commitment described in the respective RCTSAI along with the results of the apparent cause evaluation (ACE) described in CRDR 3042957, including the corrective actions. The ACE identified gaps existed in the

Justification of Change: (continued)

processes for ensuring potentially disqualifying employment information is communicated to the Access Authorization (AA) department for adjudication (Apparent Cause #4). Corrective actions were identified and steps were added to applicable APS and PVNGS checklists, procedures, and instructions to aid in identifying events that warrant a review by AA. The gaps included:

- Gaps in communication among line management, human resource, and AA personnel regarding facts indicating a potential trustworthiness and reliability issue
- Gaps in personnel recognition of the AA implications of potential trustworthiness and reliability issues
- Gaps in training and procedures regarding reporting of potential access authorization issues to the AA organization

Neither the referenced letter nor the ACE identified gaps in general knowledge of the station workforce related to the AA and Human Resources (HR) process issues that required site access training as a remedy because the general (frontline) workforce would not be expected to implement processes for which AA, leaders, and HR are solely responsible.

The implementation of corrective actions is described in the referenced letter, among them:

- The identified gaps were discussed with groups whose responsibilities include routine involvement in significant employment actions [HR, Security, AA, Fitness for Duty (FFD), Employee Assistance Program (EAP), Employee Concerns (EC), Contract Management, and Medical] to ensure that their access authorization roles and responsibilities were understood.
- The HR department has revised the Leaders' Checklist for Exiting Employees form to include AA as part of the exit process. The corporate procedure 24-02, Employee Separation/Termination, directs PVNGS leaders to an HR Consultant to obtain an exit packet. This packet contains the exit checklist.
- The Contracts Department has revised the Contract Personnel/Visitor Exit Checklist for to include AA as part of the exit process. Procedure 12DP-0MC45, Management form Contracts and Supplier Personnel, requires completion of the checklist.
- Procedure 20DP-0SK39, PVNGS Badging Procedure, has been revised to include a new ACAD hold request form to facilitate AA review of ACAD hold. From this review, AA will determine if a PADS entry is required for an ACAD placed on hold.

Justification:

The site access training commitment in the referenced letter did not correct a deficiency related to flagging trustworthiness of terminating staff in PADS identified either in the order, the referenced letter required by the order, or the associated ACE. The existing corrective actions discussed in CRDR 3042957 related to the process controls, which remain implemented, are sufficient to ensure trustworthiness issues continue to be communicated to AA and flagged in PADS.

Justification of Change: (continued)

Guidance for communication requirements to AA for reporting personnel issues that may affect an individual's trustworthiness or reliability is located in the following:

- APS Online Empower (HR) Leader Job Aids
- PV-E0059 Ver. 11, Leader Checklist For Exiting Employees
- PV-E0694 Ver. 6, Contract Personnel for Cause and Mutual Understanding Release Request in conjunction with PV-E0046 Ver. 24, Contract Personnel/Visitor Exit Checklist per PVNGS Procedures, 12DP-0MC45, Contract Management
- PVNGS procedure 20DP-0SK39, PVNGS Badging procedure (CRDR 3042957, CRAI 3054812)
- PVNGS procedure 20DP-0SK40, Access Authorization

Conclusion

The commitment can be cancelled because appropriate guidance exists in station documents and procedures and elimination of the content from site access training will not affect performance.

COMMITMENT CHANGE 17-C002

Commitment Number: RCTSAI 7663, RCTSAI 7665, RCTSAI 7673

Source Document(s):

RCTSAI 7663, RCTSAI 7665 and RCTSAI 7673: Letter Number ANPP 19591, dated December 3, 1981. Also, for RCTSAI 7673, APS letter 102-06877, dated June 27, 2014.

Existing Commitment Description:

7663 – APS will provide complete BOP ESFAS System testing in at least one Sequencer Mode on a Monthly Basis.

7665 – APS will run the BOP ESFAS in auto-test at least once a week

7673 – BOP ESFAS System will be fully tested at periodicities defined by the surveillance frequency control program. Tests will include testing of all sequence modes and ESFAS logic circuits. Sequencer timing will also be checked.

Revised Commitment Description:

The wording of RCTSAIs 7663, 7665, and 7673 commitments are not being changed. The RCTSAIs will be transitioned from Trend Code Active Y to Trend Code Active N, as they are captured in the UFSAR or the TS. The items no longer need to be tracked as lower tier commitments, but rather are regulatory obligations. Change management will be in accordance with 10 CFR 50.59, the surveillance frequency control program or 10 CFR 50.90 as appropriate, in lieu of the commitment management process.

Justification of Change:

The purpose of this commitment change is to transition RCTSAIs 7663, 7665 and 7673 to Trend Code Active N, such that BOP ESFAS testing will no longer be controlled in the commitment change process. Each of these RCTSAIs is captured in higher tier regulatory obligations in the form of the UFSAR or the TS. The elements of RCTSAIs 7663 and 7665 are captured in the UFSAR, as described in LDCR 17-F006, mentioned below, and RCTSAI 7673 is captured in TS SRs 3.8.1.11 and 12. The original RCTSAI 7663 incorrectly implied that a monthly test was required, even if a weekly auto-test was performed. Since RCTSAI 7663 will be transitioned to Active N, there is no need to alter the test of the item.

NEI-99-04, *Guidelines for Managing NRC Commitment Changes* page 8, indicates that commitments moved in the UFSAR can be removed from the commitment tracking systems, as follows:

“Licensees who employ a formal commitment tracking system may choose to remove items from their tracking systems upon placement of the information into another licensing basis document (e.g., updated FSAR and QA Program), to the extent that controls and reporting requirements for subsequent changes are consistent with expectations mutually agreed upon by the licensee and NRC staff. [Decisions to maintain or delete items covered by other controls are left to the discretion of licensees considering the site-specific procedures, information management systems and other factors.]”

Justification of Change: (continued)

NEI 99-04 has been endorsed by the NRC staff in Regulatory Information Summary (RIS) 2000-17, *Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff*, dated September 21, 2000.

Engineering Evaluation (EE) 17-00288-003 documents the performance history and reliability targets for BOP ESFAS and describes recommendations for the auto-test feature test frequency. The operating history and reliability analysis documented in EE 17-00288-003 [and related engineering documents GA Reliability Analysis (E-115-751) 13-10407-J104-52, dated January 1979] demonstrates that weekly auto-test is not essential to confirm adequate system performance and reliability, but that some operation flexibility can be applied particularly for high-risk plant operating conditions, such as during the Unit 3 "B" train EDG extended completion time for TS 3.8.1, Condition B, Required Action B.4 (License Amendment 200). Auto-testing on a 24-day basis or performing BOP-ESFAS testing in at least one sequencer mode on a 24-day basis confirms the performance reliability targets for BOP-ESFAS.

As well as described later, the PVNGS UFSAR, Section 8.3.1.1.3.10.1, will be changed by LDCR 17-F006 to change the test frequency of the auto-test design feature from weekly to 24-days and to indicate that a 24-day test of at least one sequencer Mode can be substituted for the auto-test feature.

Excerpt from Letter ANPP 19591, dated December 3, 1981, which is the source document for the RCTSAIs – Resolution of open items addressed at NRC Design Review of ESF Load Sequencer:

Action D

Commit to the use of auto-testing. The auto-testing need not be running all of the time, but at a frequency commensurate with the desired reliability.

Response

It is our intent to run the BOP ESFAS in the auto-test mode continuously. As was discussed at the meeting, placing a channel in bypass prohibits auto-testing. We have reviewed our design reliability goal of .9999 and have determined that this goal can be exceeded if testing is performed on a weekly basis. We, therefore, will auto-test at least once a week. In the event that auto-testing cannot be performed, we will provide complete BOP ESFAS system testing in at least one sequencer mode on a monthly basis. Because complete system testing is a more rigorous test monthly testing is sufficient to maintain our reliability goal.

Excerpt from Section 8.3.1.1.3.10.1:

"The ESF load sequencer for each logic train contains the necessary hardware and associated software programs stored in read-only memory to determine that each functional channel within that train will respond to field initiated input contact action and that the ESF load sequencer in the opposite train is operative."

The auto-test function does not check:

- A. The Cross Logic Train Actuation Signal Operation – Response times dictated by specified signal filtering bandpass limit of 30 Hz do not allow test pulses to propagate to the opposite train.
- B. Actual Actuation Relay Contact Transfer – Only the relay drive current response is monitored.
- C. Manually Initiated Actuation Inputs.

"The auto-test feature is normally off. It is manually activated for testing once a week."

Justification of Change: (continued)

LDCR 17-F006 changes test frequency of the auto-test design feature from weekly to 24-days in PVNGS UFSAR, Section 8.3.1.1.3.10.1, and permits an alternative 24-day test of one sequencer mode if the auto-test feature is not available or used.

Commitment Change 13-C004 documented a change to RCTSAI 7673 regarding the 18-month surveillance testing for BOP ESFAS. This change (to 18-month testing on a staggered train basis) was reported to the NRC by APS letter 102-06877, dated June 27, 2014. As this testing is captured in the PVNGS TS as regulatory obligations, it no longer is required to be tracked as an Active Y commitment. Any changes would be processed under the Surveillance Frequency Control Program or the license amendment process, pursuant to 10 CFR 50.90, and not the commitment changes process.

Per paragraph 4.2.2.3.c of procedure 93DP-0LC08, the appropriate trend code for these commitments is ACTIVE N because "Once incorporated into a license basis document, the commitment no longer requires tracking in the RCTS as and ACTIVE "Y" commitment."

COMMITMENT CHANGE 17-C003**Commitment Number:** RCTSAI 2270**Source Document(s):**

NRC Generic Letter (GL) 99-02 06/03/99 APS Letter 102-04373 (PVNGS response to GL 99-02), CR 16-09130-007, TS Amendment #130, TS 5.5.11 [Ventilation Filter Testing Program (VFTP)] (#120 before and #130 after)

Existing Commitment Description:

Make appropriate changes to the ventilation filter testing program (VFTP) and associated procedures and ST's to incorporate the GL 99-02 requirements.

Revised Commitment Description:

The wording of RCTSAI 2270 is not being changed. The RCTSAI will be transitioned from Trend Code Active Y to Trend Code Active N, as the appropriate changes were being made to TS 5.5.11, consistent with NRC GL 99-02 request #2.

Justification of Change:

As described in NRC GL 99-02: Laboratory Testing of Nuclear-Grade Activated Charcoal, the NRC issued the letter to:

1. Alert addressees that the NRC has determined that testing nuclear-grade activated charcoal to standards other than American Society for Testing and Materials (ASTM) D3803-1969, "Standard Test Method for Nuclear Grade Activated Carbon," does not provide assurance for complying with the licensing basis as it relates to the dose limits of General Design Criterion (GDC) 19 of Appendix A to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR) and Subpart A of 10 CFR Part 100.
2. Request that all addressees determine whether their Technical Specifications (TS) reference ASTM D3803-1989 for charcoal filter laboratory testing. Addressees whose TS do not reference ASTM D3803-1989 should either amend their TS to reference ASTM D3803-1989 or propose an alternative test protocol and provide the information discussed in the requested actions.
3. Alert addressees of the staff's intent to exercise enforcement discretion under certain conditions.
4. Request that all addressees send NRC written responses to this generic letter relating to implementation of the requested actions.

APS took the following actions in response to NRC GI 99-02:

1. On July 14, 1999, PVNGS initiated LDCR #99-T009 to conform to the ASTM D3803-1989 recommendations of the GL and process a change to TS Section 5.5.11, VFTP, Part c.
2. On November 19, 1999, APS provided a response to NRC GL 99-02 in APS letter #102 04373. Consistent with the guidance in the GL, APS agreed with no exceptions and requested an amendment to TS 5.5.11.c, Ventilation Filter Testing Program (VFTP).

Justification of Change: (continued)

3. On November 8, 2000, TS amendment #130 was issued with the revision to TS 5.5.11.c that references ASTM D3803-1989 for charcoal filter laboratory testing, consistent with NRC GL 99-02 request #2.
4. The following procedures implement the VFTP (33DP-0AP03) described in GL 99-02, which has since been incorporated into TS 5.5.11:
 - 33ST-9HF03 (Carbon Analysis For The Aux/Fuel Building Nuclear Air Treatment System)
 - 33ST-9HJ03 (Carbon Analysis For The Control Room Essential Nuclear Air Treatment System)
 - 33ST-9HP01 (Carbon Analysis For The Containment Hydrogen Purge Nuclear Air Treatment System)
 - 33TI-9AR02 (Carbon Analysis – Condenser Air Removal)
 - 33TI-9CP02 (Carbon Analysis – Containment Purge)
 - 33TI-9HA02 (Carbon Analysis – Auxiliary Building)
 - 33TI-9HC02 (Carbon Analysis – Containment Pre-Access)
 - 33TI-9ZY04 (Carbon Analysis – EOF)
 - 33TI-9ZY05 (Carbon Analysis – TSC)

As documented in CR 16-09130-007, it was identified during a recent Nuclear Assurance Division audit of PVNGS TS, that the subject RCTSAI had not been transitioned from an Active Y Trend Code to an Active N Trend code upon completion of TS amendment #130. RCTSAI 2270 no longer needs to be tracked as an NRC commitment, as the appropriate changes were made to TS. 5.5.11, by TS amendment #130. RCTSAI 2270 no longer needs to be tracked as an NRC commitment, as the appropriate changes were made to TS 5.5.11, by TS amendment #130 issued on 11/08/2000.

Additionally, NEI-99-04, Guidelines for Managing NRC Commitment Changes, page 8, indicates that commitments moved into another licensing basis document can be removed from the commitment tracking systems, as follows:

“Licensees who employ a formal commitment tracking system may choose to remove items from their tracking systems upon placement of the information into another licensing basis document (e.g., updated FSAR and QA Program), to the extent that controls and reporting requirements for subsequent changes are consistent with expectations mutually agreed upon by the licensee and NRC staff. [Decisions to maintain or delete items covered by other controls are left to the discretion of licensees considering site-specific procedures, information management systems and other factors.]”

NEI 99-04 has been endorsed by the NRC staff in Regulatory Information Summary (RIS) 2000-17, Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff, dated September 21, 2000. Change management will be in accordance with 10 CFR 50.59, the surveillance frequency control program or 10 CFR 50.90, as appropriate, in lieu of the commitment management process.