



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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March 2, 2005

Gregg R. Overbeck, Senior Vice
President, Nuclear
Arizona Public Service Company
P.O. Box 52034
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SUBJECT: ANNUAL ASSESSMENT LETTER - PALO VERDE NUCLEAR GENERATING
STATION (REPORT 05000528/2005001; 05000529/2005001; 05000530/2005001)

Dear Mr. Overbeck:

On February 3, 2005, the NRC completed its end-of-cycle plant performance assessment of the Palo Verde Nuclear Generating Station. The end-of-cycle review for Palo Verde involved the participation of reactor technical divisions in evaluating performance indicators for the most recent quarter and inspection results for the period from January 1 through December 31, 2004. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections that may conflict with your plant activities.

This performance review and enclosed inspection plan do not include physical protection information. A separate end-of-cycle performance review letter designated and marked as "Exempt from Public Disclosure in Accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Overall, Palo Verde operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, was within the Licensee Response Column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all performance indicators indicating performance at a level requiring no additional NRC oversight (Green). However, two apparent violations, including the final significance determination of an associated potentially greater than Green finding, involving the voiding of the emergency core cooling system containment sump suction piping is still under review as part of the significance determination and traditional enforcement processes. These apparent violations were discussed at a conference on February 17, 2005.

During the assessment process, the staff identified a substantive crosscutting issue in the area of human performance. The adverse trend in human performance issues indicates that you have not effectively addressed the underlying causes associated with this substantive crosscutting area. The substantive crosscutting issue involved 16 Green findings. These

findings shared several common performance characteristics; however, they were dominated by personnel errors (e.g., instances of failing to follow procedure) and resource issues (e.g., inadequate procedures and work instructions). These problems were identified across several cornerstones and involved multiple groups within your organization. Specifically, nine Green findings involving personnel errors were primarily associated with a failure to follow procedures. Three of these findings involved personnel failing to implement emergency procedures during the loss of offsite power event in June 2004, while other findings pertained to personnel errors involving the movement of irradiated fuel. In addition, four findings were identified regarding the adequacy of procedures and work instructions. In one example, the work instructions for pressurizer spray valve maintenance were not adequate and the valve failed open shortly after maintenance on the valve and valve positioner.

Additionally, a substantive crosscutting issue in problem identification and resolution has been identified based on a number of corrective action findings. The adverse trend in problem identification and resolution issues indicates that you have not effectively addressed the underlying causes associated with this substantive crosscutting area. The substantial crosscutting issue involved 18 Green findings. These findings were indicative of implementation problems within the specific areas of identifying problems and entering them in the corrective action program, evaluating conditions in the corrective action program, and implementing effective corrective actions. These problems were identified across several cornerstones and involved multiple groups within your organization. Specifically, four findings were identified with a common performance characteristic associated with the failure to adequately identify problems in your corrective action program. In two of these cases, NRC inspectors had to prompt Palo Verde staff members to enter problems into your program. In addition, seven findings shared a common performance characteristic associated with a failure to adequately evaluate conditions. Four of these examples involved the failure to promptly evaluate the operability of degraded or nonconforming equipment. This included the failure to promptly evaluate voided suction piping in the emergency core cooling systems. Also of concern were seven Green findings with a common performance characteristic associated with inadequate corrective actions. Several of these findings resulted in plant events or the failure of safety equipment to operate correctly during an event. For example, the failure to take adequate corrective actions for a failure of an emergency diesel generator excitation circuit contributed to the failure of the Unit 2, Train A emergency diesel generator to respond as designed to the loss of offsite power event in June 2004.

Through implementation of the baseline inspection program, we will assess your actions to address both of these crosscutting issues. The closure of these issues will be based on whether your corrective actions reduce the number of findings.

As noted in our previous annual assessment letter, a meeting was conducted at the NRC Region IV Office on January 14, 2004, to discuss aspects of safety conscious work environment at Palo Verde. This issue was discussed again in our midcycle assessment letter, dated August 30, 2004. During the January 14 meeting, you discussed plans to conduct additional employee training related to safety conscious work environment and conduct a site survey in 2005 to gauge the work environment and employee willingness to raise safety issues. We understand that the training has been completed and the site survey is scheduled to be completed by March 2005. We will continue to focus our baseline inspection activities on your actions to address your assessments in this area.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through September 30, 2006. In addition to the baseline inspections, NRC will also be conducting inspections related to Inspection Procedure 50001, "Steam Generator Replacement Inspection," Temporary Instructions 2515/150, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles," and 2515/160, "Pressurizer Penetration Nozzles and Steam Space Piping Connections in U.S. Pressurized Water Reactors (NRC Bulletin 2004-01)." The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the midcycle review meeting.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at 817-860-8173 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Troy W. Pruett, Chief
Project Branch D
Division of Reactor Projects

Dockets: 50-528
50-529
50-530

Licenses: NPF-41
NPF-51
NPF-74

Enclosure:
Palo Verde Nuclear Generating Station
Inspection/Activity Plan

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SISP Review Completed: TWP__ ADAMS: / Yes G No Initials: TWP__
 / Publicly Available G Non-Publicly Available G Sensitive / Non-Sensitive

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RIV:DRP/D	D:DRS	D:DRP	For signature	
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2/23/05	2/25/05	2/25/05	3/2/05	

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Palo Verde
Inspection / Activity Plan
03/04/2005 - 09/30/2006

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	OB-EP EX - EMERGENCY PREPAREDNESS EXERCISE		5			
1, 2, 3	IP 7111401	Exercise Evaluation		02/28/2005	03/04/2005	Baseline Inspections
1, 2, 3	IP 7111404	Emergency Action Level and Emergency Plan Changes		02/28/2005	03/04/2005	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		02/28/2005	03/04/2005	Baseline Inspections
	EB17B - PERMANENT PLANT MODS		2			
1, 2, 3	IP 7111117B	Permanent Plant Modifications		03/07/2005	03/11/2005	Baseline Inspections
	PEB-12B - MAINTENANCE EFFECTIVENESS		2			
1, 2, 3	IP 7111112B	Maintenance Effectiveness		03/07/2005	03/11/2005	Baseline Inspections
	SG REPL - U1 STEAM GEN REPLACEMENT		4			
1	IP 50001	Steam Generator Replacement Inspection		02/28/2005	12/31/2005	Other Routine
	EB - 10CFR50.59		1			
1, 2, 3	IP 7111102	Evaluation of Changes, Tests, or Experiments		03/07/2005	03/11/2005	Baseline Inspections
	EB08P - ISI U2 - VESSEL VOL (TI 150/152) AS REQ		2			
2	IP 2515/150	Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC Bulletin 2002-02)		04/04/2005	04/15/2005	Safety Issues
2	IP 2515/160	Pzr Pene Nozzles & Stm Space Piping Connections in U.S. PWRs [NRC Bulletin 2004-01]		04/04/2005	04/15/2005	Safety Issues
2	IP 7111108P	Inservice Inspection Activities - PWR		04/04/2005	04/15/2005	Baseline Inspections
2	IP 7111108P	Inservice Inspection Activities - PWR		04/11/2005	04/22/2005	Baseline Inspections
	OB-INIT - INITIAL EXAM		3			
1	X02282	PALO VERDE UNIT1 (05/05) INITIAL EXAM		07/11/2005	07/15/2005	Not Applicable
2	X02283	PALO VERDE UNIT 2 (11/05) - INITIAL EXAM		07/11/2005	07/15/2005	Not Applicable
3	X02284	PALO VERDE UNIT 3 (11/05) - INITIAL EXAM		07/11/2005	07/15/2005	Not Applicable
1	X02282	PALO VERDE UNIT1 (05/05) INITIAL EXAM		08/01/2005	08/05/2005	Not Applicable
2	X02283	PALO VERDE UNIT 2 (11/05) - INITIAL EXAM		08/01/2005	08/05/2005	Not Applicable
3	X02284	PALO VERDE UNIT 3 (11/05) - INITIAL EXAM		08/01/2005	08/05/2005	Not Applicable
	EB08P - ISI U1 - VESS VOL (TI 150/152) AS REQ		2			
1	IP 2515/160	Pzr Pene Nozzles & Stm Space Piping Connections in U.S. PWRs [NRC Bulletin 2004-01]		10/10/2005	10/14/2005	Safety Issues
1	IP 7111108P	Inservice Inspection Activities - PWR		10/10/2005	10/14/2005	Baseline Inspections
1	IP 7111108P	Inservice Inspection Activities - PWR		10/24/2005	10/28/2005	Baseline Inspections
	ACRSA - ACCESS CONTROL TO RAD SIGNIFICANT AREAS		1			
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		10/17/2005	10/21/2005	Baseline Inspections
	EB21 - ENG-SSD&PC		6			
1, 2, 3	IP 7111121	Safety System Design and Performance Capability		01/09/2006	02/24/2006	Baseline Inspections
	OB-EP2 - EMERG PREPAREDNESS PROGRAM INSPECTION		1			
1, 2, 3	IP 7111402	Alert and Notification System Testing		01/23/2006	01/27/2006	Baseline Inspections
1, 2, 3	IP 7111403	Emergency Response Organization Augmentation Testing		01/23/2006	01/27/2006	Baseline Inspections

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Palo Verde
Inspection / Activity Plan
03/04/2005 - 09/30/2006

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	OB-EP2	- EMERG PREPAREDNESS PROGRAM INSPECTION	1			
1, 2, 3	IP 7111404	Emergency Action Level and Emergency Plan Changes		01/23/2006	01/27/2006	Baseline Inspections
1, 2, 3	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		01/23/2006	01/27/2006	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		01/23/2006	01/27/2006	Baseline Inspections
	ALARA1	- ALARA PLANNING AND CONTROLS	1			
1, 2, 3	IP 7112102	ALARA Planning and Controls		02/13/2006	02/17/2006	Baseline Inspections
	PEB-05T	- TRIENNIAL FIRE PROTECTION	4			
1, 2, 3	IP 7111105T	Fire Protection		04/10/2006	04/14/2006	Baseline Inspections
1, 2, 3	IP 7111105T	Fire Protection		04/24/2006	04/28/2006	Baseline Inspections
	EB08	- U3-ISI	1			
2	IP 7111108P	Inservice Inspection Activities - PWR		04/03/2006	05/05/2006	Baseline Inspections
	ACRSA	- ACCESS CONTROL TO RAD SIGNIFICANT AREAS	1			
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		04/10/2006	04/14/2006	Baseline Inspections
	PEB	- PV PIR INSPECTION	3			
1, 2, 3	IP 71152B	Identification and Resolution of Problems		05/08/2006	05/12/2006	Baseline Inspections
1, 2, 3	IP 71152B	Identification and Resolution of Problems		05/22/2006	05/26/2006	Baseline Inspections
	PEB	- HX PERFORMANCE	1			
1, 2, 3	IP 7111107B	Heat Sink Performance		06/05/2006	06/09/2006	Baseline Inspections
	OB-RQ	- PV REQUALIFICATION INSP	3			
1, 2, 3	IP 7111111B	Licensed Operator Requalification Program		08/07/2006	08/11/2006	Baseline Inspections