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August 28, 2009

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, Arizona 85007

RE: PVNGS SEMI-ANNUAL REPORT
DECISION NO. 69663
DOCKET NO. E-01345A-05-0816, E-01345A-05-0826, E-01345A-05-0827

Pursuant to Decision No. 69663:

“Arizona Public Service Company shall file with Docket Control as a compliance item in this Docket, a semi-annual report describing plant performance, explaining any negative regulatory reports by the NRC or INPO, and providing details of corrective actions taken, until further order of the Commission.”

Enclosed please find the semi-annual report for the Palo Verde Nuclear Generating Station for the period of January 1 through June 30 of 2009.

If you have any questions, please call Jeff Johnson at 602-250-2661.

Sincerely,

Leland R. Snook

Arizona Corporation Commission

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cc: Brian Bozzo
Steve Olea
Terri Ford

**SEMI-ANNUAL REPORT
PALO VERDE NUCLEAR GENERATING STATION
IN COMPLIANCE WITH DECISION NO. 69663
FOR THE PERIOD OF JANUARY 1, 2009 THROUGH JUNE 30, 2009**

In Decision No. 69663, dated June 27, 2007, the Commission required APS to submit a semi-annual report describing plant performance and explaining any negative regulatory reports by the Nuclear Regulatory Commission ("NRC") or the Institute of Nuclear Power Operations ("INPO") as a compliance item in Docket No. E-01345A-05-016, et al. APS submits this report in compliance with the requirement for the reporting period of January 1, 2009 through June 30, 2009.

PERFORMANCE OVERVIEW

The three Palo Verde Nuclear Generating Station ("PVNGS" or "Palo Verde") units generated over 4.5 million MWh for APS from January through June of 2009, providing almost 36% of the Company's generating resource output during the reporting period. Any planned or unplanned outages experienced during the reporting period, including applicable net replacement costs, have been described in the Company's PVNGS outage reports that have been filed with the Commission in accordance with additional compliance requirements in Decision No. 69663.

On March 24, 2009, the NRC issued its Followup Assessment and Closure of Confirmatory Action Letter ("CAL") which concluded that safety performance at PVNGS has notably improved over the last year. The letter also concluded that the plant has effectively addressed the causes that led to Unit 3 entering Column IV of the NRC's Action Matrix in 2007, which resulted in increased regulatory oversight:

“The commitments described in the CAL have been completed and these actions have been effective in addressing the specific performance issues. Therefore, CAL 4-07-004, dated February 15, 2008, is closed.

Additionally, NRC is closing the substantive cross-cutting themes in both the human performance and problem identification and resolution areas that were discussed in the 2008 PVNGS Annual Assessment Letter.....Consequently, PVNGS Units 1, 2, and 3 will be transitioned to Column I, the Licensee Response Column, of the Action Matrix.”

INPO REPORTS

The Institute of Nuclear Power Operations did not issue any reports for PVNGS during the reporting period.

NRC REPORTS

The NRC issued the following integrated inspection reports during the reporting period that falls within the scope of this report:

- NRC Integrated Inspection Report 2008005 for 10/1/08 - 12/31/08
- NRC Integrated Inspection Report 2009002 for 1/01/09 - 3/31/09
- NRC Followup Inspection Report 2009006 for the period 2/02/09 - 2/27/09
- NRC Inspection Report 2009404 for 4/7/09

Full copies of each of these reports can be found on the NRC website at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/listofrpts_body.html .

The NRC Reactor Oversight Process inspection findings are classified by color based on their safety significance. All the findings identified in these reports are classified as very low safety significance "Green" finding. These findings were also classified by the NRC as "non-cited" violations, which mean that the findings do not require a written response to the NRC from Palo Verde.

Inspection findings fall into three categories, which are differentiated by how the violation was identified. "Licensee-identified" findings are those findings identified by Palo Verde employees and documented through programs or processes in place at Palo Verde and for which the NRC confirms that the licensee has made effective evaluations and has taken (or will take) appropriate corrective actions. "NRC-identified" findings are those findings that were initially identified by NRC inspectors or those which the licensee had initially identified but in the NRC's estimation had not fully evaluated or had not taken appropriate actions to correct. "Self-revealing" findings are those that reveal themselves to either the NRC or the licensee through a change in process, capability or functionality of equipment, operations, or programs during routine operation. Although licensee-identified findings are mentioned in NRC reports, the NRC does not list these on their website and those findings are not included herein. Consistent with the Company's prior semi-annual filings, only NRC-identified and self-revealing findings are included in this report.

The following summarizes, for each of the NRC reports, a description of the findings made and the corrective actions taken.

NRC Integrated Inspection Report
05000528/2008005, 05000529/2008005, and
05000530/2008005 issued February 11, 2009

On December 31, 2008, the NRC completed an integrated inspection at Palo Verde Units 1, 2, and 3. The inspection examined activities conducted under PVNGS licenses as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of the PVNGS licenses. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

The results are included in NRC Integrated Inspection Report 2008005 - 10/1/08 – 12/31/08 issued February 11, 2009, and noted one NRC identified finding, and one self-revealing finding. Each of these findings was found to have very low safety significance and therefore all were determined to be Green findings.

The NRC identified finding involved identification and correction of degraded hydrostatic barriers that prevent water from leaking into buildings or between rooms and protect safety-related equipment from flooding. Corrective actions included assessment and repair of the degraded seals.

The self-revealing finding involved personnel procedure compliance when operating the refueling machine. This occurred when an operator incorrectly directed the use of an interlock override bypass switch. Corrective actions included inspections of equipment. No damage to plant components was identified. Procedures were revised to enhance and clarify refueling machine operation and controls. Personnel were briefed on refueling machine procedure compliance.

NRC Integrated Inspection Report
05000528/2009002, 05000529/2009002, and
05000530/2009002 issued May 5, 2009

On March 31, 2009, the NRC completed an integrated inspection at Palo Verde Nuclear Units 1, 2, and 3. The inspection examined activities conducted under PVNGS licenses as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your licenses. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

The results are documented in the NRC Integrated Inspection Report 2009002, 1/1/09 – 3/31/09 issued May 5, 2009 and noted three NRC identified findings, two of which were non-cited violations. Each of these findings was found to have very low safety significance and therefore all were determined to be Green findings.

The NRC identified cited finding involved implementation of corrective actions to address deficiencies associated with the Unit 2 spray pond B chemical addition system. On January 28, 2009, a hypochlorite addition valve was found to be leaking after it had been verified closed the previous day. An analysis showed that no adverse or degraded conditions for the spray pond existed at any time as a result of the leaking valve and spray pond chemistry did not fall out of procedure operational limits. Corrective actions included revising procedures, enhancing preventive maintenance, and replacing all of the spray pond hypochlorite valves which were in service over one year.

The first NRC identified non-cited violation involved spray pond chemistry condition in Unit 2 spray pond "A" on November 13, 2008. The spray pond was

not declared inoperable as required by procedures. The violation also involved a regulatory screening that was not performed when acid addition was required. Corrective actions included implementing an interim standing order requiring that an operability determination (“OD”) be completed or the condition be corrected, performing a chemistry evaporation test to validate that the affected spray pond would have been able to perform its design function under the conditions that occurred, and developing a template to support ODs on the spray ponds when chemistry is out of specification. Information related to this condition was communicated to the Shift Managers and Shift Technical Advisors, and included in required reading for licensed operator training.

The second NRC identified non-cited violation involved examples of procedure compliance and adequate inspection and repair of fire penetration seals. The fire penetration seals provide protection to safety-related equipment during fire events. Based on the analysis performed, the inspector concluded that the degradation of the fire barrier penetration seals represented a low degradation of the fire confinement element of the fire protection program, the degraded fire barrier penetration seals had no credible fire damage state, and the fire ignition sources present could not damage the post-fire safe shutdown equipment. Corrective actions include development of annual required training for the qualification of fire seal and barrier surveillance inspectors on the fire surveillance process and associated procedures, benchmarking with other nuclear plants, developing of a seal inspection program, and procedure revision.

NRC Problem Identification and Resolution
and Confirmatory Action Letter Followup Inspection Report
05000528/2009006, 05000529/2009006, and
05000530/2009006 issued March 20, 2009

On February 27, 2009, the NRC completed a team inspection at Palo Verde Units 1, 2, and 3. The inspection examined activities related to problem identification and resolution, as well as activities related to the NRC Confirmatory Action Letter (CAL) Letter, dated February 15, 2008, and the Site Integrated Improvement Plan, dated December 31, 2007. The inspection team concluded that Palo Verde Nuclear Generating Station's implementation of the corrective action program has improved. The NRC team determined that site personnel were willing to raise safety issues and document them in the corrective action program. The team observed that workers at the site felt free to report problems to their management and were willing to use the employee concerns program.

The associated NRC Integrated Inspection Report, 2009006 - 02/02/2009 - 02/27/2009; was issued March 20, 2009. The report contains seven identified Green findings of very low safety significance.

The NRC identified cited violation noted that Condensate Storage Tank (CST) maximum temperature requirements had not been incorporated into plant procedures to ensure the plant system would operate within its design basis. Corrective actions included procedure revisions and development of a new conduct of engineering procedure to include engineering principles and standards.

The first NRC identified non-cited violation was noted on November 8, 2008, when Palo Verde did not test the emergency diesel generator to verify that

a newly identified equipment issue would not cause the emergency diesel generators start time to exceed the allowable limit of 10 seconds. As an immediate corrective action, PVNGS reevaluated the issue and specified additional testing requirements that included specific acceptance criteria for the affected emergency diesel generators pending completion of a hardware modification that would eliminate the issue. The hardware modification was developed to eliminate the issue.

The second NRC identified non-cited violation involved procedure compliance when identifying a significant condition categorized as adverse to quality. On September 10, 2008, a Palo Verde Action Request (PVAR) documented that an essential cooling water pump leak which constituted a degraded non-conforming condition was adverse to quality when it should have been classified as significant. Corrective actions included personnel briefings and procedure revisions.

The third NRC identified non-cited violation was identified on February 10, 2009 and involved scaffolding that had been installed greater than 90 days without an engineering evaluation. Corrective actions included completion of the required engineering evaluations, scaffold changes and enhanced communication between the engineering and carpenter departments.

The fourth NRC identified non-cited violation involved prompt identification and correction and incorporation of preventative maintenance requirements to prevent age related degradation of safety related inverter components. Corrective actions included re-evaluation of an Engineering Work Request (EWR) 3259107 related to inverters.

The fifth NRC identified non-cited violation noted that between December 21, 2006, and January 30, 2009, adequate ODs of Palo Verde Action Requests

("PVARs") were not performed. These PVARs were associated with the component design basis review project and other site projects. Corrective actions included implementing an Operations Night Order that requires that all Component Design Basis Review (CDBR), Westinghouse, and License Renewal PVARs have at least a Control Room review performed. Additional corrective actions include procedure and training enhancements, and revision of the OD quality metric.

The sixth NRC identified non-cited violation noted that between January 18, 1989, and October 12, 2006 select sections of Unit 1 high pressure safety injection train B piping were not inspected to prevent erosion due to cavitations. This resulted in a through-wall leak in the high pressure safety injection Train B recirculation line. Corrective actions included replacement of the failed pipe in all three units, a formal cavitation erosion assessment of PVNGS safety related systems, and inspection of components potentially susceptible to flow assisted corrosion.

**NRC Material Control and Accounting Program Inspection Report
05000528/2009404, 05000529/2009404, and
05000530/2009404 issued May 1, 2009**

On April 7, 2009, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of an event that occurred at Palo Verde Units 1, 2, and 3 on January 22, 2009. The inspection covered a key attribute of the Security Cornerstone of the NRC's Reactor Oversight Process, Material Control and Accounting of Special Nuclear Material.

The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. This inspection report documented one Green NRC-Identified violation of very low safety significance which has not been made public due to security-related concerns.