



A subsidiary of Pinnacle West Capital Corporation

Palo Verde Nuclear
Generating Station

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

Dear Sir:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Docket Nos. STN 50-528/529/530
Annual Environmental Operating Report 2006**

Enclosed please find a copy of the Annual Environmental Operating Report for 2006. This report covers the operation of PVNGS Units 1, 2, and 3 during 2006, and is being submitted pursuant to Section 5.4.1 of Appendix B to the Operating License.

No commitments are being made to the NRC in this letter. If you have any questions, please contact Daniel G. Marks at (623) 393-6492.

Sincerely,

TNW/DGM/CJJ/gat

Enclosure

cc: B. S. Mallett
M. T. Markley
G. G. Warnick
A. V. Godwin

A member of the STARS (Strategic Teaming and Resource Sharing) Alliance

Callaway Comanche Peak Diablo Canyon Palo Verde South Texas Project Wolf Creek

ENCLOSURE

2006 Annual Environmental Operating Report

2006 Annual Environmental Operating Report

I. INTRODUCTION

The Palo Verde Nuclear Generating Station (PVNGS) is located in Maricopa County, Arizona, approximately 50 miles west of the Phoenix metropolitan area. The PVNGS site comprises approximately 4160 acres. Site elevations range from 890 feet above mean sea level at the southern boundary to 1030 feet above mean sea level at the northern boundary. The station consists of three pressurized water reactor electrical generating units. Unit 3 has a rated thermal power of 3876 MW. Units 1 and 2 have a rated thermal power of 3990 MW.

PVNGS was issued low power operating licenses NPF-34, NPF-46 and NPF-65 for Units 1, 2 and 3 by the United States Nuclear Regulatory Commission (NRC) on December 31, 1984, December 9, 1985, and March 25, 1987, respectively. The Unit 1 full power operating license NPF-41 was issued June 1, 1985. The Unit 2 full power operating license NPF-51 was issued April 24, 1986. The Unit 3 full power operating license NPF-74 was issued November 25, 1987. Appendix B to these operating licenses is entitled the "Environmental Protection Plan (Non Radiological)". The Environmental Protection Plans (EPP) for each of the current operating licenses are identical.

The EPP purpose is to provide for protection of environmental values during construction and operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the station is operated in an environmentally acceptable manner, as established by the FES (Final Environmental Statement) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and Local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and actions taken to control those effects.

This Annual Environmental Operating Report is required by Section 5.4.1 of the EPP. This report describes the activities during a specific calendar year related to the PVNGS EPP. For purposes of this report, references to the EPP are considered to be the EPP of NPF-41, NPF-51, and NPF-74.

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II. ENVIRONMENTAL MONITORING SUMMARIES AND ANALYSIS

A. Cultural Resources

Section 4.2.1 of the EPP requires that an archaeological survey be performed when final alignment of the PVNGS-to-Saguaro transmission line is completed. As of the date of this report, plans for this transmission line have been indefinitely suspended. Therefore, there has been no activity with regard to this requirement of the EPP.

B. Terrestrial Ecology Monitoring

As communicated in a letter from William F. Conway, APS, to NRC, dated December 30, 1991, the salt deposition monitoring program was discontinued at the end of 1991.

III. PLANT DESIGN AND OPERATION CHANGES

Section 3.1 of the EPP allows changes in station design or operation or the performance of tests or experiments affecting the environment provided that such changes, tests, or experiments do not involve an unreviewed environmental question and do not involve a change to the EPP. Changes, tests, or experiments in which all measurable non-radiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction or in which the environment is not affected are exempt from the evaluation and reporting requirements of Section 3.1.

Section 3.2 of the EPP also exempts changes, tests, or experiments, which are required to comply with other Federal, State, or local environmental regulations.

Three (3) design and operation changes were evaluated in 2006 to determine if they involved either an unreviewed environmental question or constituted a change in the EPP. Table III-1 summarizes the results of these evaluations. None of these changes involved an unreviewed environmental question or a change in the EPP.

IV. EPP NON-COMPLIANCES

There were no instances of non-compliance with the EPP identified during 2006.

V. NON-ROUTINE REPORTS

There were no non-routine reports required by Section 5.4.2 of the EPP submitted during 2006.

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TABLE III - 1
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2006
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
06-056 and 06-057	WDP-OW-799	Design and Construct Evaporation Pond #3 and Soil Investigation for Evaporation Pond #3 which will encompass new adjacent land to the site	Addition of Evaporation Pond #3 could affect offsite areas not previously evaluated in the FES.	<p>With respect to land use, the new land was included in the scope of the original assessment and was re-reviewed (in a report dated January 2007 from Archeological Consulting Services, Ltd.) to ensure that potential to disturb archeological sites or harm endangered vegetation / animals were evaluated. The actual construction site was inspected and no archeological or endangered species of plants / animals were identified. The Cultural Resources Survey from Archeological Consulting Services was provided to the State Historic Preservation Office for their review and concurrence. In a letter dated January 22, 2007 the State Historic Preservation Office confirmed that "No historic properties would be impacted / affected by the construction of the evaporation pond as described."</p> <p>The new Evaporation Pond is based on current technology and is an improvement on the original design, there are no adverse environmental impacts identified. The proposed change does not change the evaporation rate or effect plant operations. The total acreage of evaporation ponds will remain less than the acreage noted in the Environmental Report – Operating License Stage (670 acres).</p>	There was no unreviewed environmental question because the work activities will be conducted in accordance with federal, state, county and local regulations. In addition, the area to be disturbed was thoroughly inspected for environmental impacts, and the total acreage of Evaporation Pond will remain less than the acreage noted in the Environmental Report – Operating License Stage.

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TABLE III - 1
SUMMARY OF ENVIRONMENTAL EVALUATIONS PERFORMED DURING 2006
FOR PLANT DESIGN AND OPERATION CHANGES

Log #	Title	Description	Analysis	Interpretation	Evaluation
06-036	WDP-OW-784	Design and install new above ground Retention Basin Replacement storage tanks.	The replacement of the existing below grade retention basins with new concrete above ground retention basins will eliminate the possibility of leakage from the basins reaching groundwater.	The new Retention Basins (above ground tanks) are based on current technology and are an improvement on the original design, there are no adverse environmental impacts identified. The change does not change the way the plant operates but will reduce the possibility of a leak reaching the environment.	There was no unreviewed environmental question because the work activities will be conducted in accordance with federal, state, county and local regulations. In addition, the area where construction will take place has been disturbed for previous plant facilities.