

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

50-528/78-07, 50-529/78-06 REGION V
50-530/78-05

Report No. _____

Docket No. 50-528, 50-529, 50-530 License No. CPPR-141, CPPR-142, CPPR-143 Safeguards Group _____

Licensee: Arizona Public Service Company _____

P. O. Box 21666 _____

Phoenix, Arizona 85036 _____

Facility Name: Palo Verde Units 1, 2 and 3 _____

Inspection at: Buckeye, Arizona _____

Inspection conducted: December 4-6, 1978 _____

Inspectors: H. S. North
H. S. North, Radiation Specialist _____

1/19/79
Date Signed _____

Date Signed _____

Approved By: H. E. Book
H. E. Book, Chief, Fuel Facility and Materials
Safety Branch _____

1/19/79
Date Signed _____

Date Signed _____

Summary:

Inspection on December 4-6, 1978 (Report No. 50-528/78-07, 50-529/78-06 and 50-530/78-05)

Areas Inspected: Audits of environmental program; implementation of environmental protection construction permit requirements; IE Bulletins and Circulars; site and water conveyance pipeline tour. The inspection involved 20 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

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DETAILS

1. Persons Contacted

- *E. E. Van Brunt, Jr., Vice President, Nuclear Projects
- *R. Robb, Manager, Nuclear Services
- *J. Allen, Engineering Group Supervisor
- *T. Mann, Senior Health Physicist
- *B. Kaplan, Q.A. Supervisor
- C. Young, Environmental Scientist
- J. Antieau, Supervising Archeologist
Museum of Northern Arizona

*Denotes those present at the exit interview.

2. Audits

Requirement E(2) of the respective construction permits requires the establishment of a control program which provides for periodic audits to determine the adequacy of implementation of environmental conditions. Audits of the environmental program were discussed and the records of audits were examined. Since the last inspection (October 11-12, 1977) two joint audits, Arizona Public Service (APS) and Bechtel Power Corporation (BPC), have been conducted of the environmental program. Records of the audits conducted in December, 1977 and October 1978 were examined. One item of an administrative nature was identified on which corrective action had been completed. Audits and corrective actions were appropriately documented.

No items of noncompliance were identified.

3. Implementation of Construction Permit Requirement E.(1)

The inspector discussed and examined documents which described the implementation of Sections 4.5.1 and 4.5.2 of the Final Environmental Statement (FES). The documents examined included the Bechtel Monthly Environmental Control Program Survey report to APS for the period October 1977 through September 1978; the monthly reports of the Environmental Scientist (APS) to the Manager, Site Construction (APS) for the period May 1978 through October 1978; and the Weekly Environmental Reports from the Environmental Scientist (APS) to the Manager, Site Construction (APS) for the period October 7, 1977 through November 17, 1977.

During a tour of the site and pipeline construction areas and the review of documents and reports, the inspector observed the results of the applicant's actions with respect to the following FES requirements:

FES Section 4.5.1

Item 1: Top soil is being stockpiled for recovery efforts. The applicant is working with the U. S. Department of Agriculture, Soil Conservation Service, on plans for revegetation of construction areas.

Item 4: Excess subsoil removed from the Units 1-3 excavations has been used to raise the ground level around the 80-acre reservoir.

Item 8: Water trucks are used for dust control. Dust control was adequate at the time of the inspection.

Item 9: Some temporary construction roads no longer required have been ripped to retain moisture.

Item 12: A second burn pit has been constructed and is in operation. A combustible waste storage enclosure has been constructed to aid in the control of wind-blown debris. County burning permit hour limitations, 0900-1700 summer, 1200-1600 winter, have presented some difficulty in disposing of combustibles. Combustible waste is being hand sorted to remove heavy smoke producers which are disposed in landfill disposal areas. Tumbleweed growth on cleared land presented problems for which various control measures including burning were considered. Such controls are now limited to the railroad right-of-way, ditches and fences. Tumbleweed is left undisturbed in other areas for its erosion control and moisture retention values.

Item 13: One truck and batch plant waste area has been closed and a new one opened.

Item 14: An onsite activated sludge sewage treatment system is now in operation. Waste from portable sanitary facilities were initially processed in the onsite facility, however, chemicals used in the portables were incompatible with plant operation. Portable sanitary waste is now disposed in a county approved landfill.

Item 15: A diesel fueling pad and sump has been installed to collect and control spillage. The applicant stated that petroleum product wastes were removed from the site.

Item 16: A fire station has been constructed. A firetruck and two ambulances were at the station at the time of the plant tour. A pumping station to supply the onsite fire fighting water distribution system has been installed.

Items 18 and 26.b: The onsite archeological and historical activities have been completed. The initial pipeline investigations were documented in a report titled Archeological Investigations - Arizona Nuclear Power Project - BLM and Private Land, Maricopa County, Arizona, Museum of Northern Arizona, Department of Anthropology, Final Report for PVNGS Waste Water Conveyance System A-76-38, February 2, 1977. The report identified 13 sites along the pipeline route including five large Hohokam villages and eight historic sites dating to the 20th century. The Museum of Northern Arizona submitted an Archeological Research Design for the pipeline. Archeological investigations at certain locations have been completed and the land released for construction. Excavations are continuing at certain locations and were underway at the time of the inspection. The inspector observed excavations at the Morocco site near Cottonlane and the Buckeye Irrigation District Canal. The pipeline route missed the main village site but traversed a location where two prehistoric irrigation canals had existed.

Item 22.a: Pipeline construction is progressing from the Hassayampa pumping station 100 yards east of the east bank of the Hassayampa river bed eastward through Buckeye and beyond. Construction activities had not entered riparian areas at the time of the inspection.

Item 22.c: During a tour of the pipeline and pipeline construction areas; rubber-tired vehicles and construction equipment were observed. No indications of vehicle operation off of established construction roads or the trenching and backfill areas was observed.

Item 24: Pipeline construction had been limited to developed agricultural areas at the time of the inspection. In these areas, the areas were being restored to the original condition.

Item 26.a: The applicant has decided to underground the Hassayampa river crossing. The applicant discussed this decision with the Environmental Project Manager (EPM), NRC. The EPM agreed that this type of river crossing would reduce the impact on the river area and that notice to NRC pursuant to Section E(3) of CPPR's was not required.



Item 27: The inspector observed that disturbed agricultural land, roads, ditches and topsoil were being reconstructed and/or replaced following construction.

FES Section 4.5.2 - General

Item 3: Dewatering of Unit 3 was in progress at the time of the inspection. The waste water was being pumped to an onsite evaporation pond.

Item 4: The well water monitoring program previously identified (IE Inspection Report 50-528/77-05, 50-529/77-05, 50-530/77-05) was continuing.

Item 7: A total of three cases of coccidioidomycosis have been identified in the construction work force and reported as required. One of the three cases was identified in the report of the inspection of October 11-12, 1977. At the time of the inspection an onsite work force of approximately 5000 was estimated.

Transmission Line and Water Pipeline Corridor

Item 4: An APS biologist has examined and prepared a report on possible mitigation of the Hassayampa river pipeline crossing. The pipeline construction contractor is currently looking for an environmentally qualified foreman. At the time of the inspection, no construction had occurred within 100 feet of the Gila River or its tributaries.

Appendix C. - Staff Recommendations to Mitigate Construction Effects
Transmission Line and Water Pipeline Corridors

Item 12: Following discussions with the staff of the Museum of Northern Arizona, the applicant decided not to mark archeological sites in any way. It was the opinion of the applicant's archeological consultants that any type of marking would tend to enhance vandalism.

No items of noncompliance were identified.

4. Implementation of Construction Permit Requirement E.(2)

The applicant has established a control program which provides for periodic management audits (see Paragraph 2. Audits). The applicant has maintained sufficient records to furnish evidence of compliance with the environmental conditions in the FES. The program has not been changed significantly from that reported in the inspection of October 11-12, 1977.

No items of noncompliance were identified.



5. Implementation of Construction Permit Requirement E.(3)

The applicant in procedure NS-11, Environmental Evaluation Procedure and Bechtel in procedure No. 402.0 Environmental Control Program - Construction Activity Environmental Evaluation (CAEE) make provisions for the identification of the environmental impacts of construction activities not evaluated by the NRC.

The inspector examined CAEE reports 013-77 through 015-77 and 01-78 through 010-78. The applicant had documented the results of telephone conversations with the Environmental Project Manager (EPM) NRC concerning two CAEE reports. The first involved the construction of the northeast access road. It was concluded that this road construction did not involve an unevaluated construction activity. The second case concerned the environmental evaluation of the Hassayampa river crossing change from above ground to underground. The EPM concurred that the change reduced the environmental impact and that no written evaluation need be submitted to the NRC.

No items of noncompliance were identified.

6. Implementation of Construction Permit Requirement E.(4)

The applicant has established a procedure, NS-11, previously identified (Paragraph 5) which provides for response to identified unexpected harmful effects or evidence of serious damage detected during facility construction. The inspector's discussion with applicant personnel, examination of records and tour of the site did not disclose any unexpected harmful effects or evidence of serious damage.

No items of noncompliance were identified.

7. Implementation of Construction Permit Requirement E.(5)

The applicant has taken the following steps in the implementation of Section 6 Environmental Monitoring Programs of the FES:

FES Section 6.1.1.3 Treatment Plant Water: Water samples are collected quarterly and analyzed by Controls for Environmental Pollution (CEP). The applicant receives an annual summary of data from CEP as well as interim progress reports. The inspector examined the following reports: Progress Report - - -91st Avenue Sewage Plant Study Iodine-131 and Water Quality Analysis on the Effluent Sewage Water, March 1978; Annual Progress Report - - - 91st Avenue Sewage Plant Study Water Quality Analysis of the Effluent Sewage Water, June 1977; Iodine-131 Determination on the Effluent Sewage Water, February 1978 which covered the period July 1975 - March 1977.

No items of noncompliance were identified.



8. Implementation of Construction Permit Requirement E.(6)

Final transmission line routing has not been established. The required documentation concerning the pipeline was submitted for NRC staff review. The applicant was informed by the EPM on November 4, 1977 by telephone, that the requirements of item 7.f. page iii of the Final Environmental Statement had been satisfied for the pipeline corridor. A letter concerning archeological and historic values in the corridor was sent to the EMP by the Advisory Council on Historic Presentation.

No items of noncompliance were identified.

9. IE Bulletins and Circulars

IE Bulletins 78-07, Protection Afforded by Air-Line Respirators and Supplied-Air Hoods, and 78-08, Radiation Levels from Fuel Element Transfer Tubes were not sent to the applicant. The contents of the bulletins were discussed with the applicant's representatives during the inspection for information.

The applicant has established a procedure NS-14, Revision 1, Control of NRC Inspection Enforcement Circulars and Bulletins; March 13, 1978. The application of the procedures to the following IE circulars sent to the applicant was discussed:

Circular 77-14, Separation of Contaminated Water System from Non-Contaminated Plant System and Circular 78-03, Packaging Greater than Type A Quantities of LSA Radioactive Material for Transport. The inspector verified that both circulars had been received by the applicant, that a review for applicability was performed and that the action taken or planned by the applicant was appropriate.

No items of noncompliance were identified.

10. Exit Interview

The inspector met with the applicant representatives (denoted in Paragraph 1) at the conclusion of the inspection on December 6, 1978. The inspector identified the areas included in the inspection and informed the applicant that no items of noncompliance had been identified.

