U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-528/86-04

Docket No. 50-528

License No. NPF-41

Licensee: Arizona Public Service Company
P. O. Box 21666
Phoenix, Arizona 85036

Facility Name: Palo Verde Nuclear Generating Station - Unit 1

Inspection at: Palo Verde Site, Wintersburg, Arizona

Inspection conducted: January 27 through January 31, 1986

Inspector: W. J. Wagner — 2/5/86
W. Wagner, Reactor Inspector — Date Signed

Approved By: Talbert Young Jr. — 2-5-86
T. Young, Jr., Chief — Date Signed
Engineering Section

Summary:

Inspection on January 27 through January 31, 1986 (Report No. 50-528/86-04)

Areas Inspected: Routine, unannounced inspection by regional based inspector of licensee action on inspector identified items in Unit 1. NRC Inspection Procedures 92701 and 92702 were covered during this inspection. The inspection involved 35 inspector hours onsite by one NRC inspector.

Results: No violations or deviations were identified.

DETAILS

1. Persons Contacted

a. Arizona Nuclear Power Project (ANPP)

*W. E. Ide, Director Corporate QA/QC
*C. N. Russo, Manager, Quality Audits and Monitoring
*W. Montefour, QA Engineer
*R. J. Poche, Compliance Engineer
*D. Lanier, Licensing
K. R. Daley, QA Engineer
D. LeBoeuf, QA Engineer
L. A. Harris, Operations Engineer

b. Bechtel Power Corporation (Bechtel)

*D. R. Hawkinson, Project QA Manager
D. J. Freeland, Engineer Group Supervisor (Plant Design)
R. M. Rosen, QA Engineer
D. L. Postina, QA Engineer

* Denotes those attending the exit meeting on January 31, 1986.

2. Licensee Action on Previously Identified Items

(Closed) Notice of Violation No. 50-528/84-47-01 "Improperly Welded Pipe Support"

The inspector observed that pipe support 1-AF-005-H-007 was welded on the east and west sides to the lower I-beam flange, contrary to the design drawing which specified welding on the north and south sides across the flange. This was identified while the inspector was reviewing the licensee corrective action taken concerning DER 84-38 which documented an identical problem with the same support in Unit 2. This is documented in Inspection Report 50-528/84-47.

The licensee response, to the Notice of Violation, of January 4, 1985 stated that the violation for the Unit 1 pipe support is documented on DER 84-97 and NCR SM-5204. The response also stated that engineering calculation 13-MC-AF-502R reported that pipe support 1-AF-005-H-007 would adequately transfer the loading to the adjacent pipe supports if the capacity of the support is exceeded. It was therefore concluded that, if left uncorrected, the pipe support would not be a significant safety hazard. However, as a result of NCR SM-5204 the pipe support was welded on the north and south side in accordance with the design drawing. The inspector visually inspected the pipe support in question and verified that the additional welds were made as specified on pipe support assembly drawing 13-AF-005-H-007.

The inspector reviewed design calculation 13-MC-AF-502R and discussed the rationale and results with the Bechtel Plant Design Engineering Group

Supervisor. The piping system was remodeled for ME 101 run, a computer program, without the improperly welded pipe support. The calculation sheets contained computations designed to (a) verify that the pipe stresses are acceptable, (b) redetermine pipe support loading, (c) verify that the nozzle loads are still within the manufacturer's allowables (force and momentum), and (d) to reverify that the pipe support designs are adequate for the revised load. The design calculation concluded that the piping system is adequate without pipe support (hanger) 13-AF-005-H-007.

Additional action to preclude any future occurrence is documented in licensee response to DER 84-38. The licensee's corrective actions concerning this DER, which was reviewed and closed by the inspector, is documented in Inspection Report 85-18.

NRC Region V in a letter to the licensee on January 21, 1985 requested additional clarification or action regarding the licensee's corrective actions. The request was to include statistics in the analysis of the Unit 2 and 3 reinspection program for heavily loaded supports attached to light structural members where the bracket weld orientation problem exists. The statistical evaluation, including a safety significance analysis, is documented in Bechtel letter B/ANPP-E-140058 to ANPP dated September 11, 1985. The statistical evaluation was provided on all nonconforming items relative to the mounting bracket configuration. The inspector reviewed and discussed the evaluation with the licensee. Of 1209 supports inspected for Unit 2, 4% resulted in nonconformances; for Unit 3 374 supports were inspected with 1% being nonconformances. All the nonconforming conditions were dispositioned acceptable to "use-as-is". These dispositions were supported by engineering calculations that showed that the individual supports will not fail under the design loads.

Based on the licensee's corrective actions as indicated above and the inspector's examination of the licensee's stated actions, this violation is closed.

<u>(Closed) Followup Item No. 50-528/84-39-01 "Status of Misuse of FCR vs NCR"</u>

At the exit meeting held October 26, 1984 the licensee committed (a) to access the current use of FCR's and SFR's, and (b) to determine if the corrective actions taken as a result of the CAR's were effective. The first part of this commitment was completed and reported in Inspection Report 84-48. The CAR's of concern were CA-83-0091 and CA-83-0092. The inspector's review of these CAR's revealed that the licensee performed a satisfactory evaluation of the corrective actions. Final QA evaluation for Unit 1 was verified complete on July 5, 1985.

This item is closed.

<u>(Open) Followup Item 50-528/84-15-02 "Update Documentation to Reflect Design Change in RV Holddown Bolts"</u>

This item is concerned with timely completion of design changes committed to by Combustion Engineering (CE) in CE letter V-CE-10727 of July 1, 1980. The letter listed documentation that might require modification, and that the required changes would be completed within 3 months of ANPP approval. CE letter V-CE-31372 of November 13, 1984 responded to this concern by providing information on the changes which were made to the design documents. ANPP Monitoring Report No. SM-85-0885 documents verification that the design reports and drawings reflect the use of 10 reactor vessel pad support studs as committed in CE letter V-CE-31372. The licensee has requested CE to respond on what actions they have taken to assure timely completion of changes to CE design documents. This item will remain open pending the inspector's review of CE's response.

3. Exit Meeting

The inspector met with the licensee representatives denoted in paragraph 1 on January 31, 1986. The scope of the inspection and the inspectors' findings as described in this report were discussed. Licensee representatives acknowledged the inspectors' findings.