U. S. NUCLEAR REGULATORY COMMISSION REGION V

Report Nos.	50-528/85-28, 50-529/85-28, and 50-530/85-22
Docket Nos.	50-528, 50-529, and 50-530
License No.	NPF-41
Construction Permit Nos.	CPPR-142 and 143
Licensee:	Arízona Nuclear Power Project Post Office Box 52034 Phoenix, Arizona 85072-2034
and the second	

Facility Name: Palo Verde Nuclear Generating Station Units 1, 2, and 3.

Inspection Conducted: August 7 - September 22, 1985.

Inspectors:	G. H. Hernandez Senior Resident Inspector	10-8-85 Date Signed
	J. R. Ball, Resident Inspector	10-8-85 Date Signed
Approved By:	Christigher Alyers for	<i>10-8-85</i> Date Signed
Summary	Reactor Projects Section No. 2	

Summary:

Inspection from August 7 - September 22, 1985 (Report Nos. 50-528/85-28, 50-529/85-28 and 50-530/85-22).

Areas Inspected: A routine, onsite inspection by the Construction Resident Inspectors of activities related to licensee action on NRC identified items; review of licensee action on a reported 50.55(e) item, inspector review of quality records related to electrical cable and terminations, instrument components, containment steel structures and supports, and safety related structures; observation of work related to safety related piping, and closure of Allegation No. RV-85-A-033.

The inspection involved 354 inspector hours onsite by two NRC Resident Inspectors.

The following I.E. Manual Chapters were covered during this inspection: Module Nes. 30703, 48055B, 48065B, 49063B, 51065, 52051, 52055, 92700, 92701, 92702, and 92706.

Results: In the areas inspected, no deviations or violations of NRC requirements were identified.

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1. Persons Contacted

- a. Arizona Nuclear Power Project (ANPP)
 - E. E. Van Brunt, Jr., Executive Vice President
 - *D. B. Karner, Assistant Vice President, Nuclear Production
 - *W. E. Ide, Corporate Quality Assurance Manager
 - D. B. Fasnacht, Nuclear Construction Manager
 - *W. F. Quinn, Licensing Manager
 - A. C. Rogers, Nuclear Engineering Manager
 - L. A. Souza, Assistant Corporate Quality Assurance Manger
 - *C. N. Russo, Quality Assurance Audits/Monitoring Manager
 - D. E. Fowler, Quality Control Manager
 - T. A. Shriver, Quality Systems Engineering Manager
 - R. J. Burgess, Field Engineering Supervisor
 - *S. G. Penick, Quality Assurance Monitoring Supervisor
 - J. C. Sherrin, Quality Document Review Group Supervisor
 - A. T. Ramey, Quality System Supervisor
 - K. R. Daley, Quality Assurance Engineer
 - M. L. Provost, Quality Assurance Engineer
 - W. W. Montefour, Quality Assurance Engineer
 - D. M. LeBoeuf, Quality Assurance Engineer
 - H. L. Green, Quality Assurance Engineer
 - W. J. Gratza, Quality Assurance Engineer
- b. Bechtel Power Corporation (Bechtel)
 - G. A. Hierzer, Field Construction Manager
 - S. M. Nickell, Project Superintendent
 - W. G. Bingham, Project Engineering Manager
 - *D. R. Anderson, Chief Resident Engineer
 - *T. L. Horst, Project Field Engineer
 - D. R. Hawkinson, Project Quality Assurance Manager
 - H. A. Foster, Project Quality Control Engineer
 - H. A. Mear, Assistant Project Quality Control Engineer
 - J. Waddington, Assistant Project Quality Control Engineer
 - R. Ruff, Lead Electrical/Instrumentation Quality Control Eng.
 - G. Griffin, Lead Civil Quality Control Engineer

*Denotes personnel attending the NRC Exit Interview conducted on September 20, 1985.

The inspectors also talked with other licensee and contractor personnel during the course of the inspection.

2. Plant Status

Unit Two:

The licensee is currently receiving fuel for Unit No. 2 with the last full shipment expected by September 23, 1985. The licensee has successfully completed Hot Functional Testing and Integrated Safeguards Testing. The next critical item for Unit No. 2 is fuel load which is projected for November 1, 1985.

Unit Three:

The project expects to complete preoperational testing of all Class 1E and non-class 1E electrical power supply systems by October 31, 1985. Construction completion of Unit 3 is estimated at 95% by the licensee.

3. Licensee Action on NRC Identified Unresolved Items - Unit 3

(Closed) Unresolved Item No. 50-530/85-18-01, "Seismic Qualification of Clamps Used in Control Room Panels"

During a tour of Unit No. 3, the inspector had questioned whether a number of small clamps used to support safety related electrical conduits (approximately one inch conduit) were seismically qualified. The clamps were apparently used to provide support for the conduit and to maintain the separation criteria requirements.

During this reporting period, the inspector reviewed the vendor seismic qualification data for the panels in question, which indicated that the panels as a complete unit had been qualified for their intended function. However, the documentation did not indicate that the clamps had been included in this qualification. Discussion with the licensee indicated the clamps were not installed by the field since this type of clamp was not an item procured by Bechtel Power Corporation for Palo Verde, but was believed to be vendor installed equipment. As a result of discussions with the inspector, the licensee generated special Construction Inspection Plans to determine the amount of torque currently on the clamps and to perform a comparison of the as-found torque to the minimum torque required by calculation.

The licensee determined that only 16 inch pounds of torque would be required and that all bolts examined exceeded this value by at least 4 inch pounds. The licensee committed to establishing a minimum torque value for the bolts, to insure that anytime a clamp was moved or removed the clamps would be sufficiently torqued.

Based on the licensee actions, the inspector considers this item closed.

4. Licensee Action on NRC Identified Enforcement Items - Units 1 and 2

(Closed) Notice of Violation Nos. 50-528/85-16-01 and 50-529/85-10-02 "Failure to Perform Inspection of Raceway Installations".

The inspector previously identified two instances of a failure by the licensee to perform QC inspections of raceways. The first instance involved the inspections of manholes in Unit 1. The licensee determined that at the time of area turnover from construction to operations it was recognized that these inspections had not been performed. However, the reviewing engineer mistakenly classified the inspections as a Category III items in accordance with the licensee's procedure No. 73AC-0ZZ05 "PVNGS Operation Open Item Completion" which meant that "No further

action was required". To determine the extent of the misclassification problem, the licensee conducted a 100% review of Unit 1 Area Subsystem Acceptance Packages. This review identified 18 additional items which involved missing inspections. All items, including the specific items identified by the inspector, were inspected and found to be acceptable. All identified deficiencies were found to be contained within packages evaluated by the same engineer. To prevent recurrence, the licensee revised its procedure for review of acceptance packages to more clearly define responsibilities of the reviewer and to specifically address the processing of open items such as those described in the Notice of Violation.

The second instance involved the inspection of pull boxes. The inspector initially identified two raceways in Unit 2 in which pull boxes were installed, but were not inspected when the raceway was accepted. As a result of this finding, the licensee performed a special inspection of all areas containing safety related conduit installation to determine where pull boxes were installed. During this inspection the licensee identified 160 raceways containing boxes. Of these 160 raceways, three were found to have pull boxes with support deficiencies. The following nonconforming reports were issued to document these deficiencies: NCRs EC-5982, EC-5983 and EA-6125. The root cause of these deficiencies in both hardware and inspection records was determined to be a failure of the Field Engineers to to submit inspection records to quality control for verification of installation, following raceway modifications, and a misunderstanding by the Quality Control Engineers of their responsibilities with regard to the manner in which these inspections were to be documented. To prevent recurrence the licensee revised its procedures for these inspections to assure clear and concise documentation. The licensee also provided additional training to both Field Engineers and Quality Control Engineers on the requirements for the performance and documenting of raceway inspections.

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

5. Licensee Action on 10 CFR 50.55(e) Construction Deficiencies

The following potential 50.55(e) item was reviewed by the inspector for reportability and to determine the thoroughness of the licensee's corrective actions.

(Closed) DER No. 85-12, "Evaluation Related to Cracking in the Auxiliary Building Walls" - Unit 2

On April 1, 1985, the licensee reported to the NRC that a number of cracks had been observed in four interior walls, at the 70' and 88' elevation of the Unit No. 2 Auxiliary Building. The identified discrepancies were observed to exceed the American Concrete Institute's (ACI-318) recommended widths for structural concrete and were subsequently documented on Nonconformance Report No. CA-5071. The maximum crack widths measured by the licensee was .060 and .040 inches

(for two cracks respectively). All other cracks were found to range from .006 to .030 inches.

To determine the effect of the cracks on the structural integrity of the Auxiliary Building walls, the licensee's investigation included taking eighteen 1 and 2 inch diameter core samples, removing floor coating in order to observe any signs of structural distress, taking compressive strength tests of the core samples, inspection of the Auxiliary Building walls of Unit Nos. 1 and 2, examination of the concrete records for the questionable concrete placements, and review of the building settlement data. All tests, inspections, and record reviews performed by the licensee were found to conform to the applicable requirements. The licensee concluded that the cracks were not caused by any structural overload condition, but were believed to be caused by the drying, shrinkage or thermal movement of the walls. The licensee's record review of concrete placement for these walls indicated that concentrated amounts of starter mix (grout) had been placed in some locations along where the cracks were found. Additional research by the licensee determined that the use of too much grout in any one location had been a concern, and in order to control the amount of grout used in the beginning of any concrete placement, Specification 13-CM-365 was revised in May 1981, to limit the depth of grout to 3 inches maximum at any location. The Auxiliary Building walls had been placed on August 17, 1978. On August 18, 1985, the NCR was closed with the repair of the cracks by the use of approved epoxy.

Further discussion with the licensee indicated that the licensee's use of ACI-318 applied only to beams and slabs subject to flexural loads. The particular walls identified in the NCR would not be subject to this type of loading. It was determined that there was no requirement in ACI-318, or in Project Specification 13-CM-365 limiting cracking in non-flexural zones resulting from drying shrinkage. This condition was evaluated by the licensee as not reportable under the requirements of 10 CFR 50.55(e) or 10 CFR Part 21.

The inspector's review determined that the licensee took appropriate and adequate corrective action with respect to this item.

This item is closed.

6. Electrical Cable and Terminations Review of Quality Records - Unit 2

The inspector reviewed cable installation and termination records for instrumentation installed in Unit 2. The following cable schemes for shutdown cooling monitoring instrumentation were reviewed:

Cable Num!	bers			Instrument De	scription			
2ESI80ACI	XA,	XC &	XE	2JSIAFT306	Shutdown Train A	Cooling	Flow	Rate -
2ES180AC2	XA,	& XE		2JSIATE303X	Shutdown	Cooling	Heat	Ex-
2ESI80AC3	XA,	XC &	XE	2JSIATE351X	changer Shutdown	Cooling	Tempe Heat	Ex-

					changer 1 Iniet Temperature
2ES180AC4	XA,	XC &	XE	2JSIATE351Y	Shutdown Cooling Heat Ex-
					changer 1 Outlet Temperature
2ESI81BC1	XA,	XC &	XE	2JSIBFT307	Shutdown Cooling Flow Rate -
					Train B
2ESI81BC2	XA,	& XE		2JSIBTE303Y	Shutdown Cooling Heat Ex-
					changer 2 Outlet Temperature
2ESI81BC3	XA,	XC &	XE	2JSIBTE352X	Shutdown Cooling Heat Ex-
					changer 2 Inlet Temperature
2ESI81BC4	XA,	XC &	XE	2JSIBTE352Y	Shutdown Cooling Heat Ex-
					changer 2 (hutlet Temperature

The following specifications and Work Plan Procedures/Quality Control Instructions (WPP/QCIs) governing the installation of electrical cables were utilized during this inspection:

0	13-EM-300,	Installation Specification	for	Electrical	Cables	in
0	13-EM-301,	Installation Specification	for	Electrical	Cables	in
0	13-EM-306,	Installation Specification Terminations, and Supports.	for	Cable Splic	cing,	
0	WPP/OCT 254.0	Cable Installations				

WPP/QCI 255.0, Cable Terminations

The records were reviewed to determine whether they reflected that items were installed in accordance with specification requirements usin; proper materials, and required inspections were properly performed, recorded. reviewed and evaluated by qualified personnel.

No deviations or violations of NRC requirements were identified.

7. Instrument Components - Review of Quality Records - Unit No. 2

Summary of Areas Examined a ..

The inspector examined quality records relating to the receipt, storage and installation of instrument components and systems in Unit 2 to determine if the records reflected that items were handled and installed in accordance with specification requirements, and required inspections were properly performed, recorded, reviewed and evaluated by qualified personnel. The inspector reviewed documentation concerning the resolution of nonconforming conditions identified by the licensee during the course of component installation. Records pertaining to changes in design or modifications to equipment already installed in the plant were also reviewed. Recent audits by the licensee in these areas were reviewed, as well.

Receiving Inspection and Storage of Instrument Components b.

A detailed inspection of the licensee's receiving and storage activities was previously conducted by a region based inspector

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during March 1985, and was documented in NRC Report Nos. 50-529/85-13 and 50-530/85-06. During this inspection, the inspector again toured the licensee's storage facilities to determine if the licensee was continuing to maintain components under proper storage conditions, that components were being properly identified and controlled, and that nonconforming items were identified and segregated to avoid their inadvertent use. The inspector also reviewed four recent quality assurance monitoring reports written by the licensee relating to material control and level of storage. The inspector reviewed the closeout of one Corrective Action Report (CAR) related to performance of preventive maintenance to assure the integrity of materials in storage. The inspector also reviewed a Nonconformance Report (NCR) which identified a lack of weather tightness in Warehouse "C" (which is used by the licensee as a Level B storage area). The licensee was proceeding to repair the structure in order to bring it into compliance with procedural requirements at the conclusion of this inspection.

No deviations or violations of NRC requirements were identified.

Installation of Instrument Components and Systems с.

The inspector reviewed documentation for installation of twelve resistance temperature detectors, four flow meters, and two differential pressure transmitters to determine if instrument installations were accomplished in accordance with the latest specifications, drawings and procedures and that appropriate inspections were conducted and documented. The following installed instruments were selected for inspection:

Instrument System	Transmitter Number	Description	Channel
Shutdown Cooling Monitoring	2JSIATE303X	Heat Exchanger 1 Outlet Temperature	A
	2JSIATE351X&Y	Heat Exchanger 1 Differential Temperature	А
	2JSIBTE303Y	Heat Exchanger 2 Outlet Temperature	В
	2JSIETE352XSY	Heat Exchanger 2 Differential Temperature	В
	2JSIAFT306	Hot Leg Injection Flowrate	A
	2JSIBFT307	Hot Leg Injection Flowrate	В

2JSIAFT390	Hot Leg Injection Flowrate	А
2JSIBFT391	Hot Leg Injection Flowrate	В
2JRCBPDT115B	Steam Generator No. 1 Differential Pressure	В
2JRCDPDT115D	Steam Generator No. 1 Differential Pressure	D
2JRCATE115	Reactor Coolant Loop 1B Cold Leg Temperature	А
2 JRCDTE 112 CD	Reactor Coolant 1B Cold Leg Temperature	D
2JRCBTE125	Reactor Coolant Loop 2B Cold Leg Temperature	В
2JRCCTE122CC	Reactor Coolant Loop 2A Cold Leg Temperature	С
	2JSIAFT390 2JSIBFT391 2JRCBPDT115B 2JRCDPDT115D 2JRCATE115 2JRCDTE112CD 2JRCBTE125 2JRCCTE122CC	2JSIAFT390Hot Leg Injection Flowrate2JSIBFT391Hot Leg Injection Flowrate2JRCBPDT115BSteam Generator No. 1 Differential Pressure2JRCDPDT115DSteam Generator No. 1 Differential Pressure2JRCATE115Reactor Coolant Loop 1B Cold Leg Temperature2JRCDTE112CDReactor Coolant 1B Cold Leg Temperature2JRCBTE125Reactor Coolant Loop 2B Cold Leg Temperature2JRCCTE122CCReactor Coolant Loop 2A Cold Leg Temperature

The following specification and Work Plan Procedures/Quality Control Instructions (WPP/QCIs) were used as a basis for this inspection activity:

- 13JM702 Installation Specification for Instrumentation and Controls.
- WPP/QCI 258.9 Electrical Instrumentation Installation.

WPP/QCI 302.0 Instrumentation Installation.

The inspector also reviewed applicable instrumentation loop diagrams, sensing line isometrics, and vendor documents for the selected instrumentation installations.

The inspector determined that the licensee's construction inspection plans called for the installation of a gasket and application of a specified torque to certain resistance temperature detector connection heads in accordance with the vendor's recommendation. At the time of installation, this task was apparently not being accomplished by construction or startup personnel. In discussions with the licensee, the inspector was informed that this task was being accomplished by operations subsequent to system turnover. Review of the licensee procedures for calibration of these instruments indicated that these tasks were indeed being accomplished by the licensee's Instrument and Control (I&C) staff subsequent to completion of startup activities. The licensee indicated that the construction inspection plans would be identified to reflect current practice.

The inspector also found during this inspection that the licensee had, in one instance, been inconsistent in the manner in which the final as-built configuratio, of an instrument tubing run had been documented. The inspector found that the licensee had documented the as-built configuration of sensing lines for 2JS1BFT391 differently on two separate field generated drawings, Numbers 62,954-J and 81,094-J. The licensee indicated that the apparent inconsistency between the two drawings was the result of a failure to use the correct revision of an earlier drawing during the preparation of 81,094-J. As a result of the inspector's concern, the licensee reviewed all other instrument sensing line isometrics and found five additional instances out of approximately 900 possible installations in which more than one drawing had been used to document the as-built configuration of a single installation. However, the licensee stated that in each of these five cases no inconsistencies were found with the as-built condition or the drawings. In these cases, the engineer has failed to indicate that one revision of one drawing had been superseded by another revision. Based on the licensee's review of these drawings the inspector concluded that the identified drawing error was an isolated occurrence.

Based on the inspector's observations, except for the aforementioned six cases, it was found that all instrument installation had been installed as specified by design documents and in accordance with approved procedures.

No deviations or violations of NRC requirements were identified.

d. Construction Testing and Calibration

This activity is no longer being performed by construction. All testing and calibration activities are done by the startup group.

e. Review of Nonconformance and Deviation Reports

The inspector reviewed ten NCRs, four written by construction, four by startup, and two by operations, which were related to instrument components or system installations. In each case, the inspector observed the records to be complete, adequately reviewed and appropriately dispositioned. The records were found to be properly identified and easily retrievable.

No deviations or violations of NRC requirements were identified.

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f. Design and Field Change Records (FCRs)

The inspector reviewed records for eight design change packages (DCPs) related to instrumentation installations. The inspector found the records to reflect that design changes were subject to adequate controls. The inspector found the changes to have received the appropriate reviews and that appropriate inspection records were found to exist for the modifications to the installed equipment.

No deviations or violations of NRC requirements were identified.

<u>Containment Structural Steel and Supports - Review of Quality Records -</u> Unit 3

The inspector reviewed documentation related to the installation of the upper seismic supports for the four safety injection tanks in Unit 3.

The following drawings and specifications were reviewed:

- N001-11.02-27 Technical Instruction Manual for Safety Injection Tanks - ANPP Palo Verde Nuclear Generating Station Units 1, 2, and 3, Revision 2.
- N001-11.02-13 ANPP Palo Verde Nuclear Generating Station Units 1, 2, and 3 Safety Injection Tank Outline Drawing.
- 13-C-ZCS-378 Containment Internals, Reinforcing Concrete, Pressurizer and Safety Injection Tank and Foundations.
- 13-C-ZCS-573 Containment Internals Structural Steel Sections and Details.

The inspector reviewed the completed construction inspection plans (CIP Nos. 350-79-3, 350-80-3, 350-81-3, 350-82-3 and 350-190-3) for each of the four safety injection tanks in Unit 3. The inspector also reviewed two nonconformance reports written against the installation of the supports (NCRs CC4671 and CC4688) and the final disposition of these reports. The inspector also reviewed one related design change package, DCP 3CC-ZC-157 and one field change request, FCR 32,656-C.

No deviations or violations of NRC requirements were identified.

9. Safety Related Structures - Structural Steel and Supports I - Unit 3

Review of Quality Records

The inspector reviewed the pertinent work and quality records associated with structural steel and supports outside of containment, to ascertain whether these records meet established procedures and whether these records reflect work accomplishment consistent with NRC requirements and FSAR commitments. The inspector noted that due to the design of the plant very few major components (located outside of containment) are supported by structural steel. Most major components located outside of containment are bolted directly to the floor to embed plates. The only major components located outside containment supported by structural steel are the Low Pressure Safety Injection (LPSI) and Containment Spray pumps, which had been examined previously in NRC Inspection Report No. 50-530/82-01. Therefore, after consulting with licensee personnel, the inspector selected four large structural steel pipe supports assemblies in the Auxiliary Building supporting 18" Safety Injection System lines, for examination.

The inspector examined the following pipe supports and the associated structural steel.

13-SI-009-H-001
13-SI-009-H-002
13-SI-009-H-004
13-SI-009-H-005

The inspector examined the associated records for these supports which included the material tests and certification records the receiving inspection, nonconformance, construction installation, and inspection reports for the structural steel. Additionally, the qualification records of the quality control inspectors who had accepted the structures were examined.

No deviations or violations of NRC requirements were identified.

- 10. Safety Related Piping Unit 3
 - a. Review of Quality Assurance Implementing Procedures

The inspector reviewed the following piping specifications and procedures to assure conformance to standard industry practices, the facility FSAR, the applicable codes and NRC regulatory requirements.

- WPP/QCI No. 202, Piping System Installation.
- Specification 13-PM-204, Field Fabrication and Installation of Nuclear Piping.
- ^o Specification 13-PM-205, Field Fabrication and Installation of Non-Nuclear Fiping.
- Specification 13-PM-302, Field Fabrication and Erection of Embedded Drainage, Domestic Water Piping and Floor and Equipment Drain System.
- Specification 13-CM-335, Underground Utilities.
- Specification 13-JM-702, Installation Specification for Instrumentation and Controls.

No deviations or violations of NRC requirements were identified.

b. Observation of Work and Work Activities

The inspector examined safety related piping activities in Unit No. 3 to ascertain whether the piping activities conformed to the established licensee specifications and procedures. The inspector verified that the licensee was performing quality control inspection for such activities as receiving, protection and storage, nondestructive examinations, hydrostatic testing, and installation of safety related piping. The following attributes were included in ascertaining whether the activities examined met the licensee's requirements.

- Conformance with inspection and work performance procedures.
- Conformance with record keeping requirements.
- Conformance with construction/installation specifications.
- Issuance and use of materials as specified.
- Performance of prescribed inspections.
- Performance of prescribed NDE activities.
- Calibration and use of proper measuring and test equipment.
- Utilization of qualified inspection and NDE personnel.
- 1. Findings

The inspector examined ongoing work related to Nonconformance Report No. PA-11101 wherein, upon removal of a butterfly valve, the mating flanges were found to have moved beyond allowable tolerances. The mating flanges were found to have a mismatch of about 11/16 inches in the vertical direction and about 9/16 inches in the horizontal direction. The interim disposition provided by the NCR was to cut a vertical section of the pipe and install a longer pipe spool, thus allowing the field the opportunity to align the mating flanges. However, because of the large mismatch of the mating surfaces the inspector became concerned that the field had "cold sprung" the pipe spools into place during the initial installation of the butterfly valve and thereby may have potentially exceeded the pipe stress and nozzle loading.

Discussion with licensee personnel indicated that they had previously addressed the subject of "cold springing of pipe" as a result of an NRC concern (see NRC Report 50-528/83-02). The licensee's engineering evaluation of the cold springing indicated that in all cases examined the resulting pipe stresses and nozzle loading were within acceptable limits. Further discussions with the licensee indicated that cold springing incidents are evaluated on a case by case basis and that based on the mismatch as indicated in NCR No. PA-11101 and the mismatches previously evaluated, the pipe stress could be considered within acceptable limits. However, because the NCR was still open, this particular case had not yet been specifically evaluated. The inspector's review of Bechtel Power Corporation letter No. B/ANPP-E-121742, dated September 25, 1984, and letter No. B/ANPP-E-136927, dated July 12, 1985, indicated that the licensee had evaluated the cold springing incidents on a number of cases involving significant mismatch or deflection of the pipe greater than that indicated in NCR No. PA-11101. In these case, all pipe stresses and nozzle loading were found within acceptable limits.

No deviations or violations of NRC requirements were identified.

2. The inspector examined ongoing work related to Design Change Package (DCP) No. 3-CJ-SG-121. This DCP required the addition of drain lines to the Main Steam Bypass and Atmosphere Dump System. The inspector examined the cut-out of the elbows and the ongoing work related to the addition of the drain to the system. The inspector examined the new spool pieces on all four lines to verify conformance to the DCP, the isometric drawings (No. 13-P-SGF-158 and 13-P-SGF-159) and the piping and welding procedures. The inspector determined that for the two completed lines (SG-E-103-DLBB and SG-E-070-DLBB) the as-built condition complied with the drawing requirements.

No deviations or violations of NRC requirements were identified.

3. The inspector examined completed work activities related to small and large piping installation. The following pipe spool were examined to assure conformance to the licensee's specifications procedures, and drawings.

Spo	ol Tag Number	Size
	3EC189N00A	1.1
1	3ÉC180N00B	1"
	3EC062S004	6**
1	3EC062S005	6"
	3EC063S001	6"
	3EC062S002	6"

No deviations or violations of NRC requirements were identified.

11. Closure of Allegation No. RV-85-A-033

Characterization:

Inadequate review of startup testing packages by document reviewers.

Implied Safety Significance to Plant Design, Construction, or Operations

Inadequate review of startup testing packages could effect the ability to determine whether required preoperational tests or maintenance actions had been performed as required.

Assessment of Safety Significance:

On May 15, 1985, the Senior Resident Inspector received a telephone call from an individual who stated that persons reviewing startup acceptance testing packages were marking "Not Applicable" (N/A) in places where the documentation asked whether a particular test or preventive maintenance action had been taken or would be required. This individual later contacted the licensee and provided the licensee with this and other allegations.

The inspector reviewed the licensee's investigation of this individual's allegations, reviewed the applicable licensee procedures utilized by document reviewers, and examined startup acceptance testing packages reviewed during the time the individual was in the document review group.

The inspector found that the alleger had identified to his supervisors in October 1984 that document reviewers were marking "N/A" on the document review report to indicate that they had not looked at a particular test or maintenance action during their review. The alleger indicated to his supervisor that if a particular test was not examined, then the correct entry in the document should be an explanation indicating that at the time of the review the particular test or maintenance had not been performed, was not required, or had not been examined. The alleger's supervisor agreed, and directed that the alleger and another Quality Assurance engineer review completed packages, correct the entries, and provide revised copies of the document review reports.

The inspector reviewed fifteen original copies, and the fifteen revised copies of the document review reports. The reports examined appeared to have been processed in accordance with ANPP Instruction No. 61417.12.01, which states in paragraph No. 4.3.1 that document reviewers sample selected preoperational, maintenance, and prerequisite tests required in the subsystem. Therefore, the document reviews were not required to review all preoperational test or maintenance required for the particular system, but only sample a number of the tests. In some cases when a particular test had not been completed prior to the review and therefore could not be reviewed at that time, the reviewers indicated this by marking "N/A". However, after the concern was raised by the alleger, the concern was addressed and corrected as indicated above.

Staff Position:

The allegation was substantiated; however, it had been previously addressed by the licensee and appropriately corrected.

This allegation is closed. No violations or deviations were identified.

12. Plant Tour of the Site

On a weekly basis, the inspector and licensee representatives tour the site to observe general housekeeping conditions, care and preservation of equipment, handling of components, tagging and identification of material. During this reporting period the inspector noted that housekeeping had deteriorated in certain levels of the Containment Building. After discussion with the licensee, the inspector noted that during subsequent housekeeping tours of both Unit Nos. 2 and 3, the housekeeping had substantially improved. The licensee has made a concerted effort to improve housekeeping at both units, by conducting meetings with craft and stressing the importance of housekeeping. Additionally, steps have been taken to limit food in the buildings, eliminate graffiti, and the establishment of a Housekeeping Marshall program. The Housekeeping Marshall has responsibility for conducting walkdowns of his particular area and assuring the cleanliness of his area.

No deviations or violations of NRC requirements were identified.

13. Exit Interview

The NRC inspectors met on September 20, 1985, with licensee management representatives denoted in paragraph 1. The scope of the inspection and inspection findings as noted in this report were discussed.