



UNITED STATES  
 NUCLEAR REGULATORY COMMISSION  
 REGION II  
 131 MARIETTA STREET, N.W.  
 ATLANTA, GEORGIA 30323

MAY 22 1985

Report Nos.: 50-424/85-13 and 50-425/85-13

Licensee: Georgia Power Company  
 P. O. Box 4545  
 Atlanta, GA 30302

Docket Nos.: 50-424 and 50-425

License Nos.: CPPR-108 and CPPR-109

Facility Name: Vogtle 1 and 2

Inspection Conducted: March 23 - May 6, 1985

Inspectors:	<u>W. H. Rankin</u>	<u>5/22/85</u>
	for W. F. Sanders, Senior Resident	Date Signed
	<u>J. F. Rogge</u>	<u>5/22/85</u>
	for J. F. Rogge, Senior Resident	Date Signed

Accompanying Personnel: R. J. Schepens, Resident Inspector, Construction

Approved by:	<u>M. V. Sinkule</u>	<u>5/22/85</u>
	M. V. Sinkule, Section Chief	Date Signed
	Division of Reactor Projects	

SUMMARY

Scope: This routine, unannounced inspection entailed 409 resident inspector-hours on site (64 hours were on backshifts) inspecting: quality assurance, fire protection/prevention, containment dome reinforcing steel and tendon sheathing, cavity liner plate welding, containment post tensioning, reactor coolant system primary loop piping installation and welding, safety-related piping installation and welding, reactor vessel internal and integrated head removal/storage activities, storage and protection of safety-related equipment, emergency operating procedure validation, and Train A and B Class 1E electrical DC Trains.

Results: No violations or deviations were identified.

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MAY 22 1985

REPORT DETAILS

1. Persons Contacted

Licensee Employees

D. O. Foster, Vice President and Project General Manager  
P. D. Rice, Vice President and General Manager, QA  
W. T. Nickerson, Deputy Project General Manager  
W. C. Ramsey, Readiness Review Manager  
\*H. H. Gregory III, General Manager Nuclear Construction  
\*M. H. Googe, Project Construction Manager  
G. Bockhold, Jr., General Manager Nuclear Operations  
O. Batum, General Manager Engineering and Licensing  
\*C. W. Hayes, Vogtle Quality Assurance Manager  
\*C. E. Belflower, Quality Assurance Site Manager - Construction  
\*E. D. Groover, Quality Assurance Site Manager - Construction  
S. D. Haltom, Quality Assurance Engineering Support Supervisor  
W. E. Mundy, Quality Assurance Audit Supervisor  
J. E. Sanders, Project Construction Manager - Unit 1  
D. M. Fiquett, Project Construction Manager - Unit 2  
B. C. Harbin, Manager Quality Control  
J. L. Blocker, Assistant Quality Control Manager  
T. L. Weatherspoon, Assistant Quality Control Manager  
\*G. A. McCarley, Project Compliance Coordinator  
W. C. Gabbard, Assistant Project Compliance Coordinator  
\*J. O. Dorrough, Administrative Manager  
L. B. Glenn, Quality Concerns Manager  
\*J. F. D'Amico, Supervisor, Regulatory Compliance - Nuclear Operations  
\*E. A. Meadows, Regulatory Compliance Engineer - Nuclear Operations

Other licensee employees contacted included craftsmen, technicians, supervision, engineers, inspectors, and office personnel.

Other Organizations

F. B. Marsh, Project Engineering Manager - Bechtel  
M. Malcom, Deputy Project Engineering Manager - Bechtel  
D. L. Kinnsch, Project Field Engineering - Bechtel  
D. W. Stroham, Project Quality Assurance Engineer - Bechtel  
R. J. George, Mechanical Discipline Manager - Bechtel  
G. H. Fredy, Project Field Engineer/APE - Bechtel  
\*S. S. Hayter, Engineering Construction Supervisor - Bechtel  
G. Introcaso, Administration Manager - Pullman Power  
\*D. R. Murphy, Construction Engineer - Oglethorpe Power Corporation

Nuclear Regulatory Commission

\*W. H. Rankin, Project Engineer

\*Attended Exit Interview

## 2. Exit Interview (30703C)

The inspection scope and findings were summarized on May 6, 1985, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings listed below. No dissenting comments were received from the licensee.

(Closed) Unresolved Item 50-424,50-425/85-05-01 "Reportability of Centrifugal Charging/Safety Injection Pumps" - Paragraph 3

(Opened) Unresolved Item 50-425/85-13-02 "Loop No. 3 Hot Leg Elbow Repair" - Paragraph 18

(Opened) Inspector Follow-up Item 50-424/85-13-01 "Review Implementation of FECO N17BF to Install 2 Piece Balance Drum Locknuts Into the Charging/Safety Injection Pumps" - Paragraph 3

(Opened) Inspector Follow-up Item 50-425/85-13-01 "Review Implementation of FECO N99BF to Install 2 Piece Balance Drum Locknuts Into the Charging/Safety Injection Pumps" - Paragraph 3

(Opened) Inspector Follow-up Item 50-424/85-13-02 "Resolution of VSL DR#19" - Paragraph 7

(Opened) Inspector Follow-up Item 50-424/85-13-03 "Falsification of NDE Records" - Paragraph 21

The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

## 3. Licensee Action on Previous Enforcement Matters (92702)

(Closed) Unresolved Item 50-424/85-05-01 and 50-425/85-05-01 "Reportability of Centrifugal Charging/Safety Injection Pumps." The inspector reviewed a Westinghouse letter, dated April 4, 1985, which verified the design configuration of the Vogtle pumps. Upon completion of the Field Change Orders (FECO) Nos. N17BF and N99BF the pumps will have a design life of over 40 years. The implementation will be verified by the inspector prior to fuel load for each unit. With regard to 10 CFR 50.55e reportability the licensee based an evaluation on the October 28, 1980 Westinghouse letter which states in part that plants can operate safely within the framework of their Technical Specification while the problem is resolved.

(Opened) Inspector Follow-up Item 50-424/85-13-01 "Review Implementation of FECO N17BF to Install 2 Piece Balance Drum Locknuts Into the Charging/Safety Injection Pumps." (Opened) Inspector Follow-up Item 50-425/85-13-01 "Review Implementation of FECO N99BF to Install 2 Piece Balance Drum Locknuts Into the Charging/Safety Injection Pumps."

## 4. Unresolved Items (92701)

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. One unresolved item was identified in Paragraph 18.

## 5. Construction Inspection - Units 1 &amp; 2 (92706C)

Periodic inspections were made throughout this reporting period in the form of general type inspections in different areas of both facilities. The areas were selected on the basis of the scheduled activities and were varied to provide wide coverage. Observations were made of activities in progress to note defective items or items of noncompliance with the required codes and regulatory requirements. On these inspections, particular note was made of the presence of quality control inspectors, supervisors, and quality control evidence in the form of available process sheets, drawings, material identification, material protection, performance of tests, and housekeeping.

Interviews were made with craft personnel, supervisors, coordinators, quality control inspectors, and others as they were available in the work areas.

- a. Unit 1 independent inspection encompassed but was not limited to the following areas:

Crane Rail Blockout - Periodic inspections were conducted during the preparation of the refuel bridge north track anchor bolt installation. The purpose of these inspections were to determine that the requirements of applicable specifications, codes, standards, work performance procedures and QC Procedures were being followed. During the inspection period the following work was observed: Anchor bolt installation and alignment, rebar inspection, and cleanout of the area to be poured.

- b. Unit 2 independent inspection encompassed but was not limited to the following areas:

- (1) Cavity Liner Plate Welding - The inspector conducted a general inspection of the welding operation, i.e., weld filler metal control and storage, fit-up cleanliness requirements, slag removal and grinding.
- (2) Auxiliary Hook Load Test - The inspector was on hand to observe the load test for the polar crane 50 ton capacity auxiliary hook load test; however, due to identified equipment problems, the test was delayed. A review of Procedure HRP-59, Rev. 0 Load Test for Polar Crane Unit 2 50 Ton Capacity Auxiliary Hook was conducted.

No violations or deviations were identified.

## 6. Containment (Structural Concrete) - Unit 2 (47053C)

## a. Procedure and Document Review

The inspector reviewed and examined implementation portions of the following procedures pertaining to the placement of concrete to determine whether they comply with applicable codes, standards, NRC Regulatory Guides and licensee commitments.

- CD-T-02, Rev. 14 Concrete Quality Control
- CD-T-07, Rev. 7 Embed Installation and Inspection
- CD-T-06, Rev. 9 Rebar and Cast Weld Quality Control
- CD-T-20, Rev. 6 Installation and Inspection of Trumpets Rigid Extensions, and Duct Sheathing

## b. Installation Activities

The inspector witnessed portions of concrete placement indicated below to verify the following:

## (1) Forms, Embedment, and Reinforcing Steel Installation

- Forms were properly placed, secure, leak tight and clean.
- Rebar and other embedment installation was installed in accordance with construction specifications and drawings, secured, free of concrete and excessive rust, specified distance from forms, proper on-site rebar bending (where applicable) and clearances consistent with aggregate size.

## (2) Delivery, Placement and Curing

- Preplacement inspection was completed and approved prior to placement utilizing a Pour Card (Exhibit CD-T-02\*18).
- Construction joints were prepared as specified.
- Proper mix was specified and delivered.
- Temperature control of the mix, mating surfaces, and ambient were monitored.
- Testing at placement location was properly performed in accordance with the acceptance criteria and recorded on a Concrete Placement Pour Log (Exhibit CD-T-02\*20).
- Adequate crew, equipment and techniques were utilized.
- Inspections during the placement were conducted by qualified personnel.
- Curing temperature was monitored.



## (3) Installation of Trumpets, Tendon Sheaths and Anchorage Components

- Trumpets, sheaths and anchorage components were oriented properly, installed within specified tolerances, clear and free of damage.

<u>Pour No.</u>	<u>Location</u>
2-01C-154	Containment 2 South Steam Generator Walls to Elevation 238'-0"
2-05D-014A	2A NSCW Tower
2-05D-014B	2A NSCW Tower
2-010-018	Containment Shell Wall 324'-237'9"
2-010-035	Containment 2 Dome 327'-9" -335 1-3/8"

No violations or deviations were identified.

## 7. Containment (Prestressing) - Observation of Work Activities - Unit 1 (47063C)

## a. Procedure and Document Review

The inspector reviewed and examined implementation portions of the following drawings and documents pertaining to the installation of vertical tendons, to determine whether they comply with applicable codes, standards, NRC Regulatory Guides and licensee commitments.

-AX2AF04-77-4	Vertical Tendon Stressing Data
-AX2AF04-109-4	Tendon Grease Caps
-AX2AF04-85	Tendon Sheathing Corrosion Protection Material
-AX2AF04-107-1	Storage Requirement for VSL E5-55 Anchor Heads
-AX2AF04-99-X2	Temporary Corrosion Protection Visconorust 1702 & 1601 Amber
-AX2AF04-89-2	Visconorust 2090 P-4 Casing Filler Stability
-AX2AF04-89-0	Visconorust 2090 P-4 Casing Filler Vogtle Nuclear Units
-AX2AF04-106	Procedures Manual for Fabrication of VSL E5-55 Post-Tensioning System
-1X2AF04-14-0	100 Ton Hydraulic Jack
-142AF04-111-5	Split Shim and Anchor Head Details
-142AF04-36-6	Anchorage Details

## b. Installation Activities

The inspector witnessed portions of the installation activities indicated below to verify the following:

- The latest issue (revision) of applicable drawings or procedures is available to the installers and were being used.

- Tendons were free of nicks, kinks, corrosion; were installed in designated locations; and that the installation sequence and technique was per specified requirements.
- Installation crew was properly trained and qualified.
- QC inspection was properly performed by qualified personnel in accordance with applicable requirements.
- Adequate protective measures were being taken to ensure mechanical and corrosion protection during storage, handling, installation, and post installation.
- Tendons were stressed in the proper sequence.
- All strands in the tendon were moving together during the stressing and the tendon is being stressed from both ends simultaneously.
- Elongation measurements were being taken properly and being compared to the calculated elongation.
- Anchor head lift-off force was being taken and documented properly.
- The stressing operation was being monitored to identify any strand slippage.

The following tendons were observed:

<u>Vertical Tendon No.</u>	<u>Seq. No.</u>	<u>Activity</u>
22-90	2	Tendon Initial Installation
26-86*	4	Tendon Initial Installation
20-92	1	Mopping Tendon Sheathing
18-94*	1	Tendon Stressing
20-92	1	Tendon Stressing
4-108*	8	Tendon Stressing

\*Surveillance Tendon

A periodic inspection was being conducted on the post-tensioning operation on Friday, May 5, 1985, when the licensee identified the following problem to the inspector. A VSL QC inspector discovered water dripping from tendon No. 10-102 on the No. 20 side only at the anchor head. This tendon was stressed but not greased. The inspector observed VSL Corporation take immediate action to apply filtered air at the dome vent on the No. 20 side to blow the sheathing dry. During the course of this operation the Resident Inspector was informed that the vent had been left opened on the subject tendon and four (4) additional tendons were identified as having been found with their vents opened.

They are Nos. 14-98, 12-100, 8-204, & 6-106. No visual signs were evident of water dripping from these tendon anchor heads. These tendons were stressed but not greased likewise. VSL was going to monitor these tendons over the weekend for any water leakage. VSL identified this problem as VSL DR#19. The inspector advised the licensee that, pending review of the method used to resolve VSL DR#19, this matter will be identified as Inspector Follow-up Item 50-424/85-13-02, Resolution of VSL DR#19.

No violations or deviations were identified.

8. Containment (Steel Structures and Supports) - Units 1 & 2 (48053C)

Periodic inspections were conducted to observe containment steel and support installation activities in progress, to verify the following:

- Components were being properly handled (included bending or straightening).
- Specified clearances were being maintained.
- Edge finishes and hole sizes were within tolerances.
- Control, marking, protection and segregation were maintained during storage.
- Fit-up/alignment meets the tolerances in the specifications and drawings.

No violations or deviations were identified.

9. Safety-Related Structures (Structural Steel and Supports) - Units 1 & 2 (48063C)

Periodic inspections were conducted to observe construction activities of safety-related structures/equipment supports for major equipment outside the containment to verify that:

- Materials and components were being properly handled to prevent damage.
- Fit-up/alignment were within tolerances in specifications and drawing requirements.
- Specified clearances from adjacent components were being met.

No violations or deviations were identified.



10. Reactor Coolant Pressure Boundary Piping, Safety Related Piping - Observation of Work and Work activities - Unit 1 (49053C) (49063C)

During the inspection period a review of the following "Draft" Flush Procedures was conducted:

HBB-01	Reactor Coolant System Pressure Relief Tank Connections
HBB-02	Spray Line Flush
HBB-03	Pressurizer, Relief Lines and PRT
HBB-04	RTD Bypass Loops and Vessel Level Piping
HBB-05	Reactor Coolant Pump Oil Spill Protection System
HBB-06	Loop and Vessel Hand Cleaning
HBB-07	RCS Drains and Instruments
HBB-08	Reactor Bottom Mounted Instruments

The flushing program was discussed with the NSSS Lead Flush Engineer to determine the flushing group's knowledge of the implementation and Flush Operation Phase per the requirements of the Start-Up Manual. The licensee's plan to flush the first NSSS subsystem was reviewed for the following:

- SIS Hot Leg Injection
- RCS Pressurizer Spray
- SIS Boron Injection
- CVCS Charging Pump Normal and Alternate

The following procedures that will be utilized by the flushing organization were reviewed:

SUM 12B, Rev. 0	Flush Procedure Implementation
SUM 15, Rev. 3	Flush Procedure Preparation, Review and Approval
SUM 16, Rev.	Cleanness Verification Guidelines

No violations or deviations were identified.

11. Reactor Vessel Protection - Unit 2 (50053C)

The inspection consisted of examination of the Unit 2 Reactor Vessel installed in containment to determine that proper storage protection practices were in place and that entry of foreign objects and debris was prevented. The inspector noted that protective covers were installed on the bottom mounted instrumentation penetrations.

No violations or deviations were identified.

12. Reactor Vessel Integrated Head Package - Unit 1 (50053C)

The inspection consisted of examination of the Unit 1 integrated head package stored on the Reactor Vessel Flange to determine that proper storage protection practices were in place, entry of foreign objects and debris was prevented, and that access was controlled.

During the inspection period the integrated head package was removed from the Reactor Vessel Flanges and stored in its designated laydown area in preparation of the first NSSS Subsystems Flush. Cleanliness was monitored and maintained throughout the operation.

No violations or deviations were identified.

13. Reactor Vessel Internals - Unit 1 (50063C)

Periodic inspections were conducted during the inspection period when the upper and lower internals were stored in the Reactor Vessel. The inspection also included the removal of the upper and lower internals from the Reactor Vessel and placement into their respective laydown area in preparation for the first NSSS Subsystem Flush.

The inspector witnessed portions of the above Reactor Vessel internals removal operations to verify the following:

- Lifting and handling are consistent with established requirements and precautions.
- Lifting equipment is as specified and required testing has been completed prior to lifting.
- Core barrier, upper internals, and integrated head package are lifted within the levelness requirements and that the weight being lifted reflects no binding as verified through use of a dynamometer.
- Proper cleanliness and storage protection practices were in place, entry of foreign objects and debris were prevented and access was controlled.

No violations or deviations were identified.

14. Safety Related Components - Units 1 & 2 (50073C)

The inspection consisted of plant tours to observe protection of installed components to determine that adequate protection from dirt, dust, debris, water, or adjacent construction activities were in place. Unit 1 equipment examined included:

- Residual Heat Removal (RHR) Pumps
- Diesel Generators
- Boric Acid Storage Tank
- Containment Spray (CS) Pumps
- Containment Penetration Encapsulation Vessel for Train A&B RHR and CS
- Auxiliary Feed Pumps
- Pressurizer

- Main Coolant Pump Casings
- Steam Generators
- Safety Injection Pumps
- Auxiliary Component Cooling Water (ACCW) Heat Exchangers
- Component Cooling Water Heat Exchangers
- ACCW Pumps
- Reactor Makeup Pumps
- Boron Injection Tank
- Cable Spreading Room Train A & B
- Integrated Reactor Pressure Vessel Head
- Reactor Vessel Lower Internals
- Reactor Vessel Upper Internals

Unit 2 Equipment Examined Included:

- Residual Heat Removal (RHR) Pumps
- Containment Spray (CS) Pumps
- Containment Penetration Encapsulation Vessel for Train A&B RHR and CS
- Pressurizer
- Steam Generators
- Safety Injection Pumps
- Reactor Vessel
- Diesel Fuel Oil Tanks

The installation of the Reactor Coolant Pump internals on Loop Nos. 2 and 4 in Unit 1 were reviewed. The applicable process control sheets as listed below were reviewed:

- Loop No. 2 NISCO No. 125-6, Rev. 0 Rigging, handling and installation of RCP internals and motor support bases
- Loop No. 4 NISCO No. 125-8, Rev. 0 Rigging, handling and installation of RCP internals and motor support bases

During the installation process and the following items were found to be in accordance with the applicable requirements:

- Cleanliness
- Handling/Rigging
- Alignment
- Levelness
- Gasket Installation

No violations or deviations were identified.

## 15. Electrical (Components and Systems) - Units 1 &amp; 2 (51053C)

Periodic inspections were conducted during the inspection period to observe safety-related electrical equipment to verify that the installation and storage were accomplished in accordance with applicable requirements. The following areas were examined during the inspections:

- Location and alignment
- Type and size of anchor bolts
- Identification
- Segregation and identification of nonconforming items
- Equipment space heating
- Rotation of motor shafts
- Lubrication and fluid levels
- Protective coatings, preservations, dessicants, inert gas blanket, etc.

A specific inspection was conducted of the Train A and B Class 1E electrical DC trains. The following equipment was examined:

## a. Train A

- 125 V DC Battery Banks 1AD1B and 1CD1B
- Battery Chargers 1AD1CA and 1AD1CB, 1CD1CA and 1CD1CB
- 125V DC Switchgear 1AD1 and 1CD1

## b. Train B

- 125V DC Battery Bank 1BD1B and 1DD1B
- Battery Chargers 1BD1CA, 1BD1CB, 1DD1CA, 1DD1CB

It was noted that the battery chargers were being supplied with temporary power with batteries 1AD1B and 1CD1B on a float charge, 1BD1B chargers tripped and 1DD1B disconnected.

No violations or deviations were identified.

## 16. Electrical (Cables and Terminations) - Unit 1 (51063C)

Periodic inspections were conducted during the inspection period to determine whether the raceway installation and protection of installed cable is in accordance with applicable codes, standards, and NRC Regulatory Guides.

In reference to the raceway installation, the following areas were inspected to verify compliance with the applicable requirements:

- Identification
- Alignment
- Bushings (Conduit)
- Grounding
- Supports and Anchorages

In reference to the installed cable, the following areas were inspected to verify compliance with the applicable requirements:

- Protection from adjacent construction activities (welding, etc.)
- Coiled cable ends properly secured
- Unterminated cable ends taped
- Cable trays, junction boxes, etc., reasonably free of debris
- Conduit capped, if no cable installed
- Cable supported

No violations or deviations were identified.

17. Reactor Coolant Pressure Boundary (Welding) - Unit 2 (55073C)

Periodic inspections were conducted on Reactor Coolant System Primary Loop pipe welds at various stages of weld completion. The purpose of the inspection was to determine whether the requirements of applicable specifications, codes, standards, work performance procedures and (QC) procedures were being met as follows:

- Work was conducted in accordance with a process sheet which identifies the weld and its location by system, referenced procedures or instructions, and provides for production and QC signoffs.
- Welding procedures, detailed drawings and instructions, were readily available and technically adequate for the welds being made.
- Welding procedure specification (WPS) were in accordance with the applicable ASME Code requirements and that a Procedure Qualification Record (PQR) is referenced and exists for the type of weld being made.
- That the base metals, welding filler materials, fluxes, gases, and insert materials were of the specified type and grade, have been properly inspected, tested and were traceable to test reports or certifications.
- That the purge and/or shielding gas flow and composition were as specified in the welding procedure specification and that protection was provided to shield the welding operation from adverse environmental conditions.
- That the weld joint geometry including pipe wall thickness were specified and that surfaces to be welded have been prepared, cleaned and inspected in accordance with applicable procedures or instructions.



- That the pipe to be welded to the component were assembled and held in place within specified gap and alignment tolerances allowed by the ASME Code.
- That a sufficient number of adequately qualified QA and QC inspection personnel were present at the work site, commensurate with the work in progress.
- That disbursement of welding materials was controlled in accordance with approved procedures.

a. Installation Activities

During an inspection on March 26, 1985 a discontinuity was observed on the Loop No. 3 Hot Leg Elbow identified as Heat No. 03109-2, on spool No. 003-S-01, LP3-HL, Spin No. GBE-RCPCFB-07. A Pullman Power inspector was questioned to determine if a work order was issued to work on this discontinuity since it was not blended uniformly into the surrounding surface as required by the ASME Code Section III, Division I, Subsection NB, Paragraph NB-2539.3. The elbow was fabricated in accordance with ASME Section II, III & IX, 1974 Edition with addenda through Winter 1975. The Pullman QC inspector subsequently determined that no-one was working on this discontinuity at that time and therefore wrote a DR No. PP-09684. The inspector then conducted a detailed inspection of the paperwork documenting welding history and radiographs of weld repairs performed on this elbow during fabrication. The entire documentation package was reviewed on LP3-HL, Spin No. GBE-RCPCFB-07, HT No. 03109-2, PAV 546-CVH-208758. This 31"x29"x50 degree ell with tangent supplied by ESCO Corporation was accepted by Westinghouse on Quality Release #33433 dated June 8, 1977, and was again accepted by Westinghouse on Quality Release #59303 dated December 17, 1981 from TUBECO The Spool Piece Fabricator. The first radiograph examination on March 1, 1977, identified nine (9) major defects all of which were repaired and re-radiographed. Another radiograph examination on March 11, 1977, revealed one (1) more major defect which was subsequently repaired and re-radiographed. On March 16, 1977, all repair radiographs were complete and found to be acceptable. Nowhere in the paperwork was this discontinuity found to be documented as being acceptable as is but yet the paperwork said it met Code requirements. As a result of DR No. PP-096784 Westinghouse wrote a FDR identified as GBEM-0150 dated 4/2/85 to document the deficiency and a recommended disposition to remove the visual porosity, blend the area to a 4-1 taper, and perform a final PT and check for minimum wall by UT. This disposition was approved by Westinghouse-Pittsburg and then put on the DR No. PP-09684 on April 4, 1985. Prior to this on March 28, 1985, the DR was evaluated to be not reportable by 10 CFR 21. The repair work has not been performed as of the conclusion of this inspection period. This is considered an Unresolved item until further information is available to answer how this elbow got out of both the elbow and

pipespool fabricator shops under the ASME QA Program and the 10 CFR 50 Appendix B Program and why is this not considered to be reportable under 10 CFR 50.55e and 10 CFR 21.

b. Procedure and Document Review

The following weld history documentation was inspected on the elbow identified as HT. No. 03109-2, Spin No. GBE-RCPCFB-07; and spool piece identified as spool No. 003-S-01, LP#-HL on Purchase Order No. PAV 546-CVH-208758:

\*Procedures and Personnel Qualifications Applicable to Westinghouse PO#546-CVH-178047-Sandusky Foundry & Machine Co.

- Heat Treatment Procedure No. 3W74WN8A90, Rev. 0
- Liquid Penetrant Inspection Procedure No. 3W74WN8A30, Rev. 0
- Ultrasonic Test Procedure No. 3W74WN8A70, Rev. 0
- Radiographic Examination Procedure No. 3W74WN8A80, Rev. 1
- Welding Procedure Specification-SMAW, P-8-1G-NHT, Rev. 0
- Repair Welding Procedure No. 3W7WN8A50, Rev. 1
- Cleaning Procedure No. 3W74WN8A20, Rev. 0
- Packaging Procedure No. 3W74WN8460, Rev. 2

\*Form NPP-1, TUBECO Data Report LP3-HL

\*Weld Wire Certified Material Test Reports

\*Process Control Sheets - TUBECO

\*QR#34734 Reactor Coolant Pipe dated 8/19/77

\*QR#33433 Reactor Coolant Fitting dated 6/8/77

\*Radiographic Standard Shooting Sketch No. 75-R-61, ESCO Corp.

\*Material Test Report HT. No. 03109-2, ESCO Corp.

\*Quality Assurance Statement of Compliance, ESCO Corp. Heat No. 03109-2

\*Heat Treatment Charts/Certification

\*NDE/Welding Record

\*Radiographic Report-Weld Preps, HT. No. 03109-2

\*Radiographic Report 31"x29"ID 50 degrees Reducing Elbow with Tangent, HT. No. 03109-2

\*Defect Chart-Repair Records A, B, C, D, E, ID Plate, X, 4 Lift Lugs

The following Radiographic Film was reviewed:

Chart D	Nos. 1	JK 1-2
	2	GH 4-5, GH 5-6
	3	GH 6-7
	4	DE 1-2
	5	DE 2-3
	6	AB 2-3, AB 3-4
	7	EF 5-6
	8	EF 5-6, DE 5-6
	9	DE 5-6

Chart E	No. 1	AB 2-3, AB 3-4
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An inspection was also conducted of the weld history paperwork on the Loop #1 Hot Leg Elbow identified as HT. No. 03631-2 on Spool No. 001-S-01, LP1-HL, Spin No. GBE-RCPCFB-05. This elbow had nineteen (19) major repairs identified during the fabrication process. The paper contained in the vault revealed that all repairs had been made in accordance with the applicable Code requirements. An inspection of the elbow in the field revealed that the repaired areas were blended uniformly into the surrounding surface as required by the ASME Code.

The following weld history documentation was inspected on the elbow identified as HT. No. 03631-2, Spin No. GBE-RCPCFB-05 and the spool piece identified as Spool No. 001-S-01, LP1-HL on purchase order No. PAV 546-CVH-208785:

- Quality Release No. 59719, Rev. 0 LP1-HL
- Form NPP1 Data Report LP1-HL
- Process Control Sheets - TUBECO
- Weld Wire Certified Material Test Reports
- Quality Release No. 34734, Reactor Coolant Pipe LP1-HL
- Heat Treatment Charts/Certification
- Quality Release No. 33433, Heat No. 03631-2
- Radiographic Report - Weld Preps
- Radiographic Standard Shooting Sketch 75-R-61
- Radiographic Report - 31 29" ID 50 Degree Reducing Elbow with Tangent, HT. No. 03631-2
- NDE/Welding Record
- Defect Chart Repair Records A, B, C, D, E, F, G, X, 4 Lift Lugs, ID Plate

19. Safety Related Piping (Welding) - Unit 1 (55083C)

Periodic inspections were conducted on safety-related pipe welding at various stages of weld completion. The purpose of the inspection was to determine whether the requirements of applicable specifications, codes, standards, work performance procedures and QC procedures are being met as follows:

- That the weld area cleanliness was maintained and that pipe alignment and fit-up tolerances were within specified units.
- That weld filler material being used was in accordance with welding specifications, that unused filler material was separated from other types of material and was stored in heated cans, and stubs properly removed from the work location.
- That there were no evident signs of cracks, excessive heat input, sugaring, or excessive crown.

During the inspection period, welds at various stages were observed in the following systems:

- Residual Heat Removal System
- Component Cooling Water System
- Chemical & Volume Control System
- Nuclear Service Cooling Water System

No violations or deviations were identified.

20. Emergency Operating Procedure (42452B)

The validation process for emergency operating procedures (EOP) was inspected. The inspector observed that the process was being conducted in a controlled manner. Portions of the following scenarios were witnessed to ascertain the operator's abilities to execute the EOPs:

- Steam Generator Depressurization, Scenario 24
- Small Break LOCA with loss of offside power, Scenario 2
- Steam Generator tube rupture with Steambreak III, Scenario 10
- Steam Generator tube rupture with Steambreak II, Scenario 9

The inspection also included attending the debriefing for Scenario 24.

No violations or deviations were identified.

21. Follow-up of Construction Deficiency Report - Units 1 and 2 (92700)

CDR 84-62 (Open) Falsification of NDE Records. This item was initially reported as a potential deficiency (M-62) on April 24, 1984, which involved an incident where an LPE Examiner was suspected of falsifying Liquid Penetrant inspection reports. Subsequent to this incident, another examiner was also suspected of submitting erroneous Liquid Penetrant examination reports, resulting in additional reinspections of both individuals. The two situations, for reporting purposes pursuant to the requirements of 10 CFR 50.55(e), were combined and documented in this CDR. A review was made of the licensee program for the reinspection of selected welds related to a quality concern involving erroneous liquid penetrant examination (LPE) records. The reinspection plans for each individual were developed specifically for the particular person and circumstances to determine if tests had been falsified and if so, what period in their working tenure at the site did this start. The re-examination results have been plotted in graphic form to show the percentage of tests performed and the resultant discrepancies as percent re-examined for each month. The data plotted in this manner does provide meaningful information; however, this review raised several questions which more information will be needed. The licensee plans to perform additional reinspections of the tests performed for the selected months.

(Opened) 50-424/85-13-03 Inspector Follow-up Item. Review the Results of Additional re-examinations of weld LPE.