U. S. NUCLEAR REGUTATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT REGION IV

Rep rt No.

99900239/79-01

Program No. 51300

Company:

Fisher Controls Company Continental Division

200 Main Street

Corapolis, Pennsylvania 15108

Inspection

Conducted: August 6-10, 1979

Inspector:

J. W. Sutton, Contractor Inspector

9-10-79 Date

Components Section I

Vendor Inspection Branch

Wm. D. Kelley, Contractor Inspector

7-10-19 bite

Components Section I Vendor Inspection Branch

Approved by:

D. E. Whitesell, Chief Components Section I Vendor Inspection Branch 9-10-7. Date

Summary

Inspection on August 6-10, 1979 (99900239/79-01)

Areas Inspected: Implementation of 10 CFR 50, Appendix B, and applicable codes and standards, including action on previous inspection findings, calibration, NDE Personnel Qualifications, NDE Procedures (Radiographic Examination), review of the vendor's activities and a reported possible valve malfunction. The inspection involved thirty-four (34) inspector-hours on site by two (2) NRC inspectors.

Deviations

None

Unresolved Items

- Clarification and training is required to prevent inconsistancies in the use of "Out of Service Notice," tags, and better control of the status records for defective measuring equipment. (Details Section I, Paragraph C.3.b.)
- Clarification and training in the proper use of the system implemented to record the interrupted service duration of NDE personnel, to provide traceability concerning qualification status. (Details Section I, Paragraph D.3.b.)

DETAILS SECTION I

(Prepared by J. W. Sutton)

A. Persons Contacted

*B. Ganatra, Manager Manufacturing Engineering

*J. A. Kemp, General Manager

E. Kapaldo, Inspection Foreman

*E. Recchion, QA Manager

*T. Santa Croce, Supervisor-Contract Administrative

P. Santucci, QA Coordinator

Hartford Steam Boiler Inspection and Insurance Company

*D. A. Canfield, ANI Shop Inspector

*R. F. Slack, Assistant Regional Manager

*Denotes those persons who attended the exit interview.

B. Action on Previous Inspection Findings

(Closed) Deviation (Report No. 77-01): Requirements to control the issue and calibration of production and inspection tools and gages were not being correctly implemented.

The inspector reviewed the corrective action taken by the vendor to correct and prevent reoccurence of the items brought to vendor's attention during our previous inspection.

The following corrective action and documentation was reviewed:

- QA reaudit of personally owned devices.
- Review of calibration files of measuring devices for correct color coding.
- Revisions to QCP 5-14 and CMP 2.1 for compliance.
- 4. Random sampling of manufacturing and inspection devices for compliance.

(Closed) Unresolved Item. A procedure/instruction to control new/additional personally owned tools/gages is not addressed in the calibration program.

The inspector reviewed a written instruction dated July 25, 1977, regarding registration of all personally owned tools/gages. In addition, CMP 2.3, Revision 3, was reviewed for required changes.



C. Calibration

1. Objectives

The objectives of this area of the inspection were to verify that:

- a. Calibration activities are performed and controlled in accordance with the QA Manual commitments and the applicable NRC regulations and ASME Code requirements.
- b. A system has been established, and is maintained, to assure that tools, gages, instruments and other measuring devices used in activities affecting quality are properly calibrated and adjusted at specified periods to maintain accuracy within the specified limits.
- c. Calibration records are kept for each instrument indicating the calibration results.
- d. The calibration system is being properly implemented.

2. Method of Accomplishment

The preceding objectives were accomplished by:

- a. Review of the QA manual, Section 9.0, Revision 0, dated March 21, 1979, titled, "Calibration of Measurement and Test Equipment," to verify that provisions have been established to assure that equipment requiring calibration had been identified, the calibration frequency is specified, the calibration standards are identified, the traceability of standards is required, and a recall system is in effect.
- b. Review of QCP 5.14, 9.3, and 9.4 calibration controls.
- c. Review of continental manufacturing Procedure CMP 2.1 issue control procedure.
- d. Review of QCP 5.17, Revision 1, corrective action deficient inspection devices and affected items.
- e. Review of calibration records for the following:

Personally owned tools of M. Marson, J. Creslak, L. Marceri, G. Cyrilla and B. Webber.

f. Inspection room calibration records and files.

- g. Gage out of service records and forms.
- h. Review of the index system calibration record cards.
- i. Review of the calibration recall system.
- j. Discussion with management and technical personnel.

3. Findings

a. Deviations

None.

b. Unresolved Item

During the review of the out of service tagging system, it was noted that the control and use of out of service tags was not consistent. The records of the inspection department and manufacturing department that document the specific tools that are out of service were not consistent. Clarification for the use and control of the out of service tags, and instructions regarding the proper use of the tags are required. Management will review the entire system, to prevent future inconsistencies.

D. Nondestructive Examination (NDE) Personnel Qualifications

Objectives

The objectives of this area of the inspection were to verify that Fisher Controls had developed and implemented detailed procedures for the qualification and certification of NDE personnel, in accordance with the QA Manual commitments and applicable NRC regulations and ASME Code requirements.

2. Method of Accomplishment

The preceding objectives were accomplished by:

- Review of the QA manual Section 8.0, Revision 1, dated May 15, 1979.
- b. Review of Level III personnel qualification records.
- c. Review of SNT-TC-1A 1975, "Personnel Qualifications and Certification in Nondestructive Testing."

- Review of audits performed on suppliers of subcontracted NDE work.
- e. Review of QCP 5.3.18, "Qualification and Certification of NDE Level III Personnel", QCR 5.3.19, Revision 0 "Training, Qualification and Certification of Leak Testing Personnel", 5.3.20, Revision 0, "Training, Qualification and Certification of Visual Examination Personnel," and 5.3.1, Revision 2, "Training, Qualification of PT, MT, RT and UT Personnel."
- f. Review of five (5) NDE Personnel Records.
- g. Review of Subcontractor NDE personnel records.
- h. Discussion with Level III examiners.

3. Findings

From the documents and records reviewed, it was determined that the system for control of NDE personnel qualification is consistent with the NRC rules and code requirements, and the system is being properly implemented.

a. Deviations

None

b. Unresolved Item

During the review of the QA manual Section 8.0, Subparagraph 8.4.5, "Duration of Interrupted Service," it was noted that there was no definite instructions provided concerning how this item is to be documented to provide appropriate traceability to the qualification status of the NDE personnel. Management is reviewing this item.

E. Radiographic Examination (RT)

1. Objectives

The objectives of this area of the inspection were:

- a. To verify that radiographic examination procedures used by the manufacturer meet the requirements of the Code, and contract.
- b. To verify that radiographic examination is being performed by properly qualified personnel, in accordance with the approved procedures.

Method of Accomplishment

The preceding objectives were accomplished by:

- Review of Section 8.0, Revision 1, of the QA manual, dated May 15, 1979, titled, "Nondestructive Examination."
- Review of Pittsburgh Testing Laboratory RT procedure QC-RT-1, Revision 9.
- c. Review of Peabody Testing RT Procedure 3.20.A.1-2, Revision 0, with Addenda 1, dated August 9, 1979.
- Review of nonconformance report No. 366 for specification LOU-1564.109A.
- e. Review of the qualification records of the RT personnel.
- f. Review of Fisher Controls Company Purchase Order 9x01958.
- g. Discussions with Level III examiners.

3. Findings

Within this area of the inspection no deviations or unresolved item were identified.

F. Review of Vendor's Activities

1. Objectives

The objectives of this area of the inspection were:

- a. To review the nuclear activity and work load to assess their impact on future NRC inspection.
- b. To evaluate the vendor's fabrication/manufacturing equipment and capabilities.

Method of Accomplishment

The foregoing objectives were accomplished by observing the manufacturing/fabrication in progress, and discussions with the cognizant vendor personnel.

3. Findings

The vendor has the capability to design, manufacture, and test ASME Code Class 1-2 and 3 Nuclear valves of the butterfly type.

The vendor is capable of both manual and automatic machining operations of valves and parts from castings, forgings and bar stock.

The vendor performs all NDE activities with the exception of Radiographic which is subcontracted. He also subcontracts his heat treating operations.

The vendor holds valid ASME Certificates of Authorization No. 1387 for Class 1-2 & 3 valves, No. 1388 for shop assembly of stamped Class 1-2 & 3 components, appurtenances and piping subassembles, and No. 1389 for Class 1-2 & 3 valve parts and appurtenances and piping subassemblies at the Corapolis location only. Twenty six (26) Nuclear contracts are currently being processed by the vendor, which represents approximately 50 per cent of the total workload.

G. Exit Interview

The inspector met with management representatives (denoted in paragraph A) at the conclusion of the inspection. The inspector summarized the scope and findings of the inspection. The management representatives had no comment in response to the items discussed by the inspector.

DETAILS SECTION II

(Prepared by Wm. D. Kelley)

A. Persons Contacted

Fisher Controls Company - Continental Division (FC-CD)

- R. Kessler Manager, Design & Development
- E. Recchion Manager, Vendor Inspection
- J. Weekley Assistant Sales Manager

B. Follow-up on Reported Possible Valve Malfunction

- 1. The inspector was informed by FC-CD management that two NRC personnel from NRR, accompanied by two NRC consultants from Brookhaven, had visited FC-CD at Corapolis, Pennsylvania, on June 12, 1979, and had reviewed the problem in detail. FC-CD presented the inspector with a copy of the minutes of the June 12, 1979 meeting and it appeared that all pertinent technical information had been adequately covered.
- 2. The inspector verified that FC-CD has developed a computer program which is used to calculate the maximum differential pressure that each containment isolation valve could withstand.
- 3. NRR requested the number of formal quotations that has been issued to utility companies, for providing travel stops on their containment isolation valves. FC-CD responded that only three utilities and identified the plants for which they submitted formal quotations.