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

Report No. 9990011 '79-01

Program No. 51300

Company: Pathway Bellows, Incorporated 1452 North Johnson El Cajon, California 92022

Inspection Conducted: October 15-18, 1979

Inspectors:

V. H. Hunter, Contractor Inspector Components Section I Vendor Inspection Branch

Approved by

D. E. Whitesell, Chief

Components Section I Vendor Inspection Branch

Summary

Inspection on October 15-18, 1979 (99900115/79-01)

<u>Areas Inspected</u>: Implementation of Appendix B criteria including management meeting, QA program review, ANI interface, manufacturing process control, calibration control, and audit control. The inspection involved thirty-two (32) inspector-hours on site.

<u>Results</u>: In the six (6) areas inspected there were no apparent deviations or unresolved items identified in four (4) areas. The following deviations were identified in the two (2) remaining areas.

Deviations: Manufacturing process control; unauthorized by-pass of manufacturing sequences. (See Notice of Deviation, Item A.) Audit control: System number eleven (11) was not audited within the required time frame. (See Notice of Deviation, Item B.)

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DETAILS SECTION

A. Principle Persons Contacted

- *J. Meyer, President
- *N. Moss, Operations Manager
- *J. J. Lewallen, Quality Control Manager
- *A. Ladd, Authorized Nuclear Inspector for the Royal Globe Insurance Company
- T. Meador, Inspector Leadman
- D. W. Reed, Production Supervisor
- R. E. Pastre, Quality Control Supervisor

*Denotes those present at the Exit Interview meeting.

B. General

An initial meeting was held with Pathway Bellows (PB) management where the inspector explained the internal policy of the Vendor Inspection Branch that provides for periodic turn-over of principal inspectors. Also, explained were phase I, II, and III type inspections and that this visit initiated phase I of our program.

PB management provided the inspector with, or information relative to, the following:

- 1. Copy of the ASME accepted QA Manual.
- 2. Current organization chart.
- 3. Current list of on-going projects.
- 4. Functional lines of communications.
- 5. Approved Vendor List.

C. QA Program Review

1. Objectives

The objectives of this area of the inspection were to verify that the QA program changes have been documented in writing, and have been implemented to control quality related activities. Also to ascertain that the program provides for the following:

- a. Management's policy statements concerning QA.
- b. The QA organization structured to achieve organizational independence and freedom to:

- (1) Identify quality problems.
- (2) Initiate appropriate resolutions.
- (3) Verify corrective actions.
- c. Provide the QA staff with the authority, and access to a level of management that ensures effective implementation of the QA program elements, and to enforce positive and timely corrective action.
- d. The duties, responsibilities, and the authority of the QA staff is clearly delineated in writing.
- e. Detailed written procedures, properly reviewed and approved are available to control quality activities.
- 2. Method of Accomplishment

The preceding objectives were accomplished by:

a. Review of the ASME accepted QA Manual, revision 4.

b. Review of representative copies of the QA Manual.

- c. Review of QA audits of the QA Manual.
- d. Interviews with vendor personnel.
- 3. Inspection Findings

Within those areas inspected there were no deviations or unresolved items identified.

D. Review of Vendor's Activities

1. Objectives

The objectives of this area of the inspection were:

- a. To review the vendor's activities to assess its impact on future IE inspections.
- b. Review of fabrication/manufacturing techniques and equipment.
- c. Review of current work loads.

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2. Method of Accomplishment

The preceding objectives were accomplished by observing the manufacturing/fabrication processes implemented by the vendor, and discussions with the vendor's cognizant personnel.

3. Findings

a. The ASME issued the following Certificates of Authorization to PB:

Certification No.	Symbol	Product
N-1834	N	Class 3 Vessels
N-1835	NPT	Class 1, 2, 3, and MC Parts and Appurtenances and Penetration assem- blies and Class 1, 2, and 3 Piping Subassem- blies.

These certificates expire on August 19, 1980.

- b. The Authorized Inspection Agency is the Royal Globe Insurance Co. with the Authorized Nuclear Inspector assigned in an itinerant capacity.
- c. PB has the design, manufacturing, and test capability to produce flued head bellows penetrations, drywell seal expansion joints, refueling bellows, and condenser expansion joints.
- d. PB has supplied the above types of components to approximately forty (40) nuclear projects including one (1) expansion-joint assembly weighing twenty (20) tons.
- Current active nuclear contracts represent approximately twenty (20) percent of the present shoploading.

E. ANI (Authorized Nuclear Inspector) Interface

1. Objectives

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The objectives of this inspection were to verify that:

a. The ANI has direct contact with the cognizant plant QA/QC representative.

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- b. The ANI has free access to all parts of the plant concerned with supply or manufacture of ASME Code work.
- c. All applicable documents are available to the ANI for review.
- d. The ANI identifies and signs off on witness hold points or process control documents and witnesses the qualification of special NDE procedures.
- e. The ANI maintains a log of activities reviewed and/or witnessed.
- 2. Method of Accomplishment

The preceding objectives were accomplished by:

- a. Review of revision 4 of the ASME accepted QA Manual.
- b. Discussion with the ANI.
- c. Review of the ANI log book of inspection activities.
- 3. Findings
 - a. The ANI is an itinerant inspector assigned to this shop.
 - b. All necessary documents are made available to the ANI. The ANI has access to all plant facilities related to his work.
 - Review of the ANI inspection log established it was consistently maintained.
 - d. Within this area of the inspection, no deviations from commitment or unresolved items were identified.

F. Manufacturing Process Control

1. Objectives

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The objectives of this area of the inspection were to verify that the vendor's manufacturing processes were:

a. Performed under a controlled system which meets the NRC rules and regulations, ASME Code requirements, the vendor's commitments in his ASME accepted Quality Assurance Program, and contract requirements. 1740 545

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b. Effective in assuring product quality.

2. Method of Accomplishment

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The objectives of this area of the inspection were accomplished by:

- a. Review of the ASME accepted Quality Assurance Manual, Section 5.0, titled "Instructions, Procedures and Drawings," to verify that procedures had been established which prescribes a control system of the manufacturing processes.
- b. Review of the following procedures:
 - (1) Q-5.2., Revision 0
 - (2) Q-9.1., Revision 0
 - (3) Q-9.3., Revision 0

to verify that the control system requires shop travelers or process control check lists, to be prepared which identifies the document numbers and revisions to which the process must conform. Also to verify that all processes and tests are to be performed by qualified personnel using qualified procedures. The operation or test was performed, and space for signoff and date by the authorized nuclear inspector, to document his acceptance of activities that he has selected as mandatory hold points.

- d. Review of selected shop travelers;
 - (1) N2-842
 - (2) N2-846
 - (3) N2-850

to verify their compliance with the above referenced procedures, and the overall QA program documentation requirements, including the establishment of mandatory hold points by the authorized nuclear inspector.

e. Observed in-process welding of three (3) bellows attachment welds in accordance with welding specification T-18, revision 6, as identified by shop traveler N2-850.

Interviews with personnel to verify that they are knowledgeable in the procedures applicable to manufacturing process control.

- 3. Findings
 - a. Deviation

Refer to Notice of Deviation, Item A.

b. Unresolved Items

None were identified.

- G. Calibration Control
 - 1. Objectives

The objectives of this inspection were to:

- a. Ascertain that 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 controlled, calibrated and adjusted at specified periods to maintain accuracy within specified limits.
- b. Verify that the system described in (1) above, has been adequately documented with approved procedures and that these procedures are being implemented.
- 2. Objectives Accomplished by:
 - a. Review of Section 12 of the ASME accepted QA Manual.
 - b. Review of calibration master file.
 - c. Review of identifying codes and tool recall system.
 - Visual observation of calibrated tools and gages at all major work stations.
 - e. Interviews with cognizant technical and management personnel.
- 3. Findings

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The objectives of the inspection were met with no deviation from commitments identified.

H. Audit Control

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1. Objectives

The objectives of this area of the inspection were to verify that procedures had been prepared and approved by the vendor that prescribed a system for auditing which is consistent with the commitments of the ASME accepted Quality Assurance M nual. Also, verify that these audit procedures were being properly and effectively implemented by the vendor.

2. Method of Accomplishment

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The objectives of this area of the inspection were accomplished by:

- a. Review of the ASME accepted Quality Assurance Manual, Section 18.0, titled "Audits" to verify that procedures had been established to prescribe a system for auditing.
- b. Review of the following documents:
 - (1) Current audit check list
 - (2) Current audit schedule
 - (3) Audit personnel qualifications

to verify that they had been prepared by the designated authority, approved by management, and reviewed by quality assurance.

- c. Review of the following procedures
 - (1) 18.1, revision 2, titled "Pathway Bellows Inc. Internal Audits."
 - (2) 18.3, revision 0, titled "Qualification of QA Auditors/ Surveyors."
 - (3) 18.2, revision 3, titled "Pathway Bellows Inc. External Audits."

to verify that they identify the organizations responsibile for auditing and their responsibility; establish audit personnel qualifications and training and the audits are performed by these personnel; and establish the essential elements of the audits system.

- d. Review of selective audit reports to verify that they identify the written plan, team selection, team orientation, audit notification, pre-audit conference, audit performance, and post-audit conference.
- e. Review of randomly selected audit reports to verify that the distribution to management, and the audited organization, and follow-up regarding corrective action had been accomplished.
- f. Review of internal and external audit reports to verify that the applicable procedures were available to the audit team personnel, and that the audit procedures were properly and effectively implemented.
- 3. Findings
 - a. Deviation

Refer to Notice of Deviatica, Item B.

b. Unresolved Items

None were identified.

I. Exit Interview

The inspector met with those individuals noted in paragraph A above at the conclusion of the inspection on October 18, 1979. The inspector summarized the scope and findings identified during the inspection. Management acknowledged the inspector's comments regarding the scope and findings as presented.