

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

Region I

Report No. 50-412/80-02

Docket No. 50-412

License No. CPPR-105 Priority -- Category A

Licensee: Duquesne Light Company

435 Sixth Avenue

Pittsburgh, Pennsylvania 15219

Facility Name: Beaver Valley Power Station, Unit 2

Investigation at: Power Piping Company, Donora, Pennsylvania

Investigation conducted: January 7-11, 1980

Investigators: Jacque P. Durr
Jacque P. Durr, Reactor Inspector

2/6/80
date signed

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Approved by: L. E. Tripp
L. E. Tripp, Chief, Engineering Support
Section No. 1, RC&ES Branch

2/21/80
date signed

Investigation Summary:

Investigation on January 7-11, 1980 (Report No. 50-412/80-02)

Areas Investigated: Allegations relating to the vendors audit, training, and nondestructive testing programs. The investigation also included a facility tour and examination of fabrication practices. The investigation involved 33 inspector-hours on site by one NRC inspector.

Results: Two of the six allegations were substantiated. No noncompliance with regulatory requirements was identified.

DETAILS

1. Persons Contacted

- *R. Coupland, Director, Site Quality Control
- *D. Rohm, Quality Control Engineer

Power Piping Company

- *A. L. Bradshaw, Quality Control Manager
- *G. L. Cole, Welding Engineer
- *H. R. Good, Corporate Director, Quality Assurance
- *J. Husar, Nuclear Project Engineer
- *T. W. Inman, Director, Contract Administration
- *D. Leininger, Chief Engineer
- *A. J. McGlynn, Assistant to Board Chairman
- *R. A. Patterson, President
- *W. Patterson, Executive Vice-President
- *J. Perozzi, Shop Superintendent

Stone and Webster

- *J. Voelxen, Principal Piping Engineer

During the course of the investigation additional Power Piping employees were interviewed who had specific information relating to the areas of concern.

*Denotes those present at the exit interview.

2. Purpose

The investigation resulted from several sources of allegations against the Power Piping Company. The allegations were related to management practices, fabrication, and nondestructive testing. The Power Piping Company is currently fabricating safety related piping for Beaver Valley Station No. 2.

3. Definition of "Substantiated Allegation"

An allegation was considered to be substantiated if the information developed during the investigation demonstrated that: (1) it was reasonable to conclude that the alleged event did occur, (2) the event was contrary to requirements, and (3) the event had not been identified and suitably corrected by the licensee in the implementation of his quality assurance program.

4. Resolution of Allegations

a. Allegation as Understood by NRC

Re-audits of material suppliers were not being performed.

Findings

The ASME III Code requires that surveys of material suppliers be performed by the manufacturer. Once the survey has been performed the material supplier's name is maintained on an "Authorized Vendor List." The Power Piping Company (PPCO) Quality Assurance Manual, Procedure DQA-4, Revision 2, requires reaudits to be performed every 18 months.

A review of the Authorized Vendor List disclosed that suppliers were, in some cases, not being reaudited at the 18 month interval. However, the suppliers were being deleted from the list as their authorization expired. The failure on the part of PPCO to promptly distribute the updated list resulted in the Purchasing Agent issuing orders to a supplier who was not on the Authorized Vendor List. This was identified internally and dispositioned on Nonconformance and Disposition Report No. N1141-581.

Conclusion

This allegation was not substantiated. It does not violate any regulatory requirement. Internal corrective action appears to have adequately dealt with the cause of the unauthorized purchase orders.

b. Allegation as Understood by NRC

Internal audits were not being performed in the required time period.

Findings

The PPCO Quality Assurance Manual identifies two types of audits. The first is the management audit which is performed at the direction of corporate management. The most recent management audit was performed on November 20-21, 1979. Among other findings, this audit recommended that a reaudit be performed in the deficient areas on December 10, 1979. The reaudit had not been performed at the time of this investigation on January 9, 1980. In addition, the area of training was not audited due to the recent implementation of a new training program resulting from the revision of the Quality Assurance Manual.

The preceding management audit was performed on August 30, 1978. The maximum period between management audits is twelve months as provided by the Quality Assurance Manual, Procedure D-QA-15, paragraph 2.1. Therefore the November 20-21, 1979, Audit was three months late.

The August 30, 1978, audit identified the frequency, content, and records of the training program as a finding. In light of this finding, the current management audit has not been performed in this area to verify corrective actions.

The second type of audit is the quality assurance audit performed at the direction of the Corporate Director of Quality Assurance. A review of the 1978-79 quality assurance audit records disclosed that 18 audit areas had not been performed in 1979, at the twelve month interval as required by the Quality Assurance Manual, Procedure D-QA-15, paragraph 3.1.

Conclusion

This allegation was substantiated (50-412/80-12-01).

c. Allegation as Understood by NRC

Several allegations were made relating to nondestructive testing and the personnel qualifications. These are interrelated and will be discussed collectively.

- Unqualified persons are dispositioning liquid penetrant indications.
- Unqualified persons performing radiography.
- Liquid penetrant tests are not being performed as required.

Findings

The nondestruction test reports for liquid penetrant and radiography were reviewed for 1979. Six technicians were selected that (1) performed a majority of the testing; and (2) were initially qualified during that time period. The qualification records for those individuals were examined and it was verified that all were qualified to perform the tests on the dates which their signatures first appear on test reports.

Components rejected because of nondestructive tests are reported on Nonconformance and Disposition Reports. Approximately 100 of these reports were reviewed for proper processing and disposition adequacy. The review did not identify any adverse findings.

Conclusion

This allegation could not be substantiated.

d. Allegation as Understood by NRC

The training program is not adequate to satisfy regulatory requirements.

Findings

The training program was recently revised as outlined in the Quality Assurance Manual, Section D-QA-1, dated November 29, 1979. The management audit conducted on August 30, 1978, made several findings which indicated that training was not being performed at the scheduled frequencies nor were adequate records available to verify personnel participation.

The current management audit did not examine this area due to the recent implementation of a new training program and the obvious lack of records to support it.

Conclusion

This allegation was substantiated based on the previous management audit findings and informal interviews conducted with Power personnel (50-412/80-02-02).

e. Allegation as Understood by NRC

Duquesne Light Company resident inspectors are performing all final inspections because PPCO personnel are not competent.

Findings

Informal interviews were conducted with the Duquesne Light Company (DLC) resident inspectors. Although, they were concerned about certain management practices, they did not feel the PPCO quality control inspectors were incompetent. The DLC inspectors cited some practices which they felt were questionable. However, it was the NRC inspector's finding that these were not contrary to regulatory requirements. No objective evidence could be produced to support the DLC inspector's concerns.

The DLC inspectors stated that no adverse reports had been forwarded to their supervisors concerning questionable inspection practices at PPCO.

Conclusion

This allegation could not be substantiated.

f. Allegation as Understood by NRC

The new management is not following the old Quality Assurance Manual.

Finding

PPCO identified several internal problems early in 1979. As a result, program and personnel changes were effected to correct the situation. This would account for the "new management" referred to by the allegor.

The new managers initiated changes to the programs including changes to the Quality Assurance Manual. The new manual was reviewed by the ASME survey team and deemed adequate.

Conclusion

This allegation was not substantiated.

5. Facility Tour

During the course of the investigation, a tour of the facility was made to familiarize the NRC inspector with the process and to examine shop practices.

A large majority of the nuclear class 1, 2, and 3 piping has a weld buildup applied to the area adjacent to the weld preparation, 360 degrees around the outside diameter and extending for several inches back onto the base metal. The vendor stated that this buildup was to prevent encroachment on the minimum wall requirement when the pipe inside diameter was counterbored.

PPCO drawings, SK-101 and SK-103, specify a minimum depth of counterbore along the longitudinal axis of the pipe but no maximum. This permits the counterbore to extend beyond the weld buildup area and possibly encroach on the specified pipe minimum wall. Pipe spool N-1141, sheet No. 1017017-14, Revision 0, exhibited the aforementioned condition.

This item is considered unresolved pending further inspection to verify that this was a unique occurrence (50-412/80-02-03).

The ASME III Code, Paragraph ND-4130, provides for the repair of defects in the base materials, such as the weld buildup described above to repair the minimum wall condition. Paragraph ND-2539.4 prescribes that, for repairs which exceed 10% of the wall thickness, radiography shall be performed. The vendor could not provide objective evidence that measurements were being performed to establish the percentage of weld buildup and that radiography was being performed on class 3 pipe repairs. This item is unresolved pending further inspection at Beaver Valley Unit 2 to determine if any class 3 piping has been received and installed onsite which does not meet the foregoing requirements (50-412/80-02-04).

6. Unresolved Items

Unresolved items are matters about which more information is required to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items disclosed during this investigation are discussed in Paragraph 4.

7. Exit Interview

The inspectors met with the licensee's and vendor's representatives (denoted in Paragraph 1) at the conclusion of the investigation on January 11, 1980. He discussed the scope, purpose, and findings of the investigation.