

**SOUTHWEST
FABRICATING**
G WELDING CO. INC.
A Subsidiary of IU International

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October 27, 1980

U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Dr., Suite 1000
Arlington, TX 76011

Attention: Mr. Uldis Potapovs, Chief
Vendor Inspection Branch

Subject: QA Inspection Report No. 99900025/80-04
Special Inspection Conducted September 2-3, 1980

Gentlemen:

As stated in the Notice of Deviation covering the subject inspection, indications were observed that one of the SF&W activities was not conducted in accordance with the NRC requirements that are stated in Criterion V of Appendix B to 10 CFR 50 which states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstance and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Paragraph L on Page V of Gilbert Specification SP-545-04461-000 states, "Code Class 1 pipe and fittings with a design pressure greater than 275 psig shall be supplemented with the nondestructive examination requirements of AEC Regulatory Guide 1.66." However, contrary to the above, the nondestructive examination requirements of AEC Regulatory Guide 1.66 were not implemented for all pipe items in nine (9) piping assemblies and one (1) pipe, which were required to be furnished in accordance with Gilbert Specification SP-545-04461-000 for installation in ASME Section III Class 1 systems with a design pressure greater than 275 psig. Therefore, nine (9) discrepant piping subassemblies were furnished for the Safety Injection System with Piece Mark Numbers as follows: 1-S1-24-12, 1-S1-19-01, 1-S1-21-01, 1-S1-21-03, 1-S1-22-01, 1-S1-22-03, 1-S1-23-01, 1-S1-23-03, and 1-S1-23-04. The ultrasonic examination for the materials incorporated into these pieces had been

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US Nuclear Regulatory Commission
October 27, 1980
Page Two

performed in accordance with either an internal SF&W procedure or ASTM E213. This indicated that the discrepancies were not detected, because personnel performing the material certification review were unable to evaluate the applicability of specific ultrasonic nondestructive examination procedures.

In accordance with your requirements, we are outlining the following action that has been taken to control discrepancies as noted above:

1. Corrective action to reconcile the discrepancies on the nine (9) piping subassemblies was completed during the period from 10/6/80 through 10/10/80.
 - A) Messrs. R. P. Bornes, QA Manager, and H. During, UT Technician, visited the V. C. Summers Nuclear Station Unit #1 at Jenkinsville, SC; then located and identified the discrepant pieces, with the assistance of Mr. A. A. Smith, South Carolina Electric Gas Co. Operations QA Supervisor. Mr. H. During (UT Level III) evaluated each of the pieces in accordance with the applicable ultrasonic examination requirements for a 4-way scan, in accordance with Regulatory Guide 1.66. The examination did not disclose any rejectable defects.
 - B) One (1) piece of SA376 Type 304 Class 1, 1-1/2" Schedule 160 pipe was furnished as a "ship loose" item without the 4-way UT scan per Regulatory Guide 1.66 requirements. This pipe was cut into several lengths and employed in fabrication at the jobsite. This discrepant material was identified by Daniel Construction Company Nonconformance Report No. 2206 dated 5/28/80. During Mr. R. Bornes' visit to the jobsite in October 1980, SCE&G decided that this discrepant piece of material would be replaced wherever used in lieu of performing in-place 4-way UT scan in accordance with Regulatory Guide 1.66.
2. Corrective action and preventive measures have been completed:
 - A) The materials that were involved in this deviation from commitment were reviewed for material certification and released to production in 1978. In May 1979 changes were made in the practice of reviewing, verifying, and approving materials for production to prevent QA release of materials that do not comply with requirements, and detecting errors prior to shipment, of the Shop Detail Sheet. The practices that were employed prior to May 1979, compared to practices since May 1979 are summarized below.

US Nuclear Regulatory Commission
October 27, 1980
Page Three

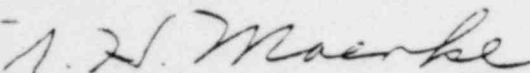
- B) Prior to May 1979 the basic practices for approving material for release to production were as follows:
- (1) Prior to accepting incoming materials, QA reviewed and accepted all documents as complying with the purchase order requirements.
 - (2) A QA stamp of acceptance was placed on each document prior to filing.
 - (3) Warehouse personnel placed the heat and serial numbers of each item intended for use, on the Shop Copy or Material Release.
 - (4) The Shop Copy or Material Release containing these numbers was presented to QA for release prior to moving materials into production areas.
 - (5) QA was then responsible for verification that mill test reports were on file for each item that is listed on the drawing or material release. This was done by verifying that heat numbers and serial numbers that were listed on drawings or material releases were identical to those shown on the mill test report that was approved by QA when the material was received.
- C) During May 1979 two additional levels of data verification by QA were initiated to prevent release of materials to production that do not comply with requirements of the Shop Detail Sheet. This was further supplemented by introducing an independent level of checking by a QA Documentation Checker.
- (1) The QA Documentation Clerk, responsible for releasing materials, verifies that the complete description of materials, including heat and serial numbers, listed on the drawing is identical to that shown on the material test report; then an independent review is performed by a QA Documentation Checker.
 - (2) The QA Documentation Clerk checking documentation packages after manufacture also verifies the complete description of materials on the final drawing of the item is identical to the description on the mill test report for each item; then an independent review is performed by a QA Documentation Checker.

US Nuclear Regulatory Commission
October 27, 1980
Page Four

- D) The measures that have been initiated since May 1979 have reduced the number of errors on materials being released into production to a very minimal level. Further, this coupled with the final redundant final checking of the final documentation package, has enabled the errors to be detected and then corrected prior to shipment.

Please contact us if you have any question concerning the information furnished above.

Yours very truly,



N. H. Moerke
Vice President-Engineering

NHM:dc

cc: B. J. Goodwin
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