



July 3, 1980

Mr. Uldis Potapovs, Chief
Vendor Inspection Branch
Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012

Reference Docket No. 99900259/80-01

Dear Mr. Potapovs:

This letter is written to delineate the corrective action taken by C-E Avery in regard to the findings noted during your recent Quality Program inspection.

Item A.1.

A Deviation Notice was generated on July 3, 1980 to document the use of the unauthorized Detailed Weld Procedures. A determination has been made by Weld Engineering that product quality was not violated. The DWP used is acceptable as an alternate procedure for the application specified by the Manufacturing Process Sheet.

Training sessions were conducted during the week of June 16, 1980 by the Production Superintendent with all Manufacturing Foremen to stress the importance of issuing the proper DWP's for production welding. Records of the training sessions are maintained in Manufacturing Training files.

Effective June 16, 1980 Quality Assurance Weld Engineering reviews each DWP against the applicable process sheet to verify its authorization for use. Those found nonconforming are brought to the attention of Weld Engineering for evaluation.

Item A.2.

The arc voltage meter on the power source was replaced on May 23, 1980 with a calibrated meter after it had been established that the volt meter needle was bent. Subsequent delta ferrite readings of the Safety Injection Tank nozzle indicated an acceptable range of actual deposited ferrite. Effective immediately, all ammeters and voltmeters (sealed units) will be checked for a similar condition and, if found defective, will be returned to the vendor for replacement.

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Item A.3.

As amperage is a non-essential variable for Manual GTAW of groove joints, the amperage range on the DWP was expanded on May 26, 1980 by Weld Engineering to reflect that actually used.

Non-essential variables specified on the DWP will continue to be monitored by our Weld Surveillance Program.

Item B.

A review of the Quality Assurance training records confirmed that inspectors involved in the nonconformance had previously been instructed on several occasions as to the proper technique for measuring arc voltage on manual welding operations. Inspection personnel involved have been given a verbal reprimand for failure to properly perform inspection, as instructed.

A refresher instruction session and demonstration concerning the proper techniques of performing welding surveillance will be given to all inspectors prior to July 15, 1980.

Item C.1.

Manufacturing Process Sheet 138-0154 will be revised prior to July 11, 1980 to include documentation of the actual work performed. In order to prevent recurrence, the following actions will be taken:

ENG-P-006 will be revised by August 30, 1980 to eliminate the base metal repair section. In the interim, all foremen will be re-instructed in regard to the requirements of ENG-P-006.

A final cleaning and base metal repair process sheet will be developed by September 30, 1980 to clearly establish the requirements and control the amount of base metal repair resulting from temporary attachments and shop handling damage. The intent of the process sheet will be to eliminate unnecessary welding repair and to document those repairs required by violation of design thickness.

Effective June 30, 1980 Quality Inspection will prepare a sketch of all temporary attachment areas for use in the control of base metal repairs.

Item C.2.

Manufacturing Process Sheet 138-0154 will be revised prior to July 11, 1980 to document the observed changes in sequencing and methods. In order to prevent

recurrence, a Manufacturing Instruction Sheet (MIS-100-002) has been developed to accomplish the rounding up of shells without the use of any temporary attachments other than those used to hold the round-up rings in place during machining operations. Implementation of the MIS will be effected prior to August 30, 1980.

In addition, a revised method of communicating allowable sequence variations using a bracketing system has been developed and will be included in the next revision of the Shop Traveler procedure. This action will be completed by July 25, 1980. All process sheets issued subsequent to this date will utilize the new bracket system.

Item D.

A test coupon of the 1/8", E8018-C2 electrode, Lot No. 02-2-D813E, has been welded and shipped to an outside laboratory for testing in the as-welded condition. Test results are due July 10, 1980. Test coupons of the remaining lots of E8018-C2 electrodes are also being tested with results due by July 18, 1980.

Future purchase orders for this type of electrode will require that the manufacturer test and certify the material in both the as-welded and post-weld heat-treated conditions.

Item E.

Determination has been made that the electrodes used for the first layer of the repair (Lot No. 02-2-D813E) was also used for the balance. The applicable DWP, RP-10-2, Rev. 00 dated December 5, 1979, has been corrected to document the complete repair. Training sessions as referenced in Item A.1. were held the week of June 16, 1980 with all fabrication forement in regard to the proper method of documenting welding operations.

Training sessions on the subject will be held prior to July 25, 1980 with all welders.

If you require additional information, please advise.

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