

NOTICE OF DEVIATION

Based on the results of an NRC inspection conducted on April 7-11, 1980, it appears that certain of your activities were not conducted in accordance with NRC requirements as indicated below:

Criterion V of Appendix B to 10 CFR 50 states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances 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." Deviations from these requirements are as follows:

- A. Paragraph 2.1.8 in QC Procedure No. 14.1, Revision F, states in part, "All shop traveler sequences shall be signed off in order except when specific approval deviate is shown on the traveler. This deviation authorization shall take one of the following formats:

2.1.8.1 Bracketed Operations:

- 10 Sequence within bracket may be performed in any order but  
20 must be completed prior to progressing beyond the bracket.  
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....."

Contrary to the above, the following was noted with respect to the shop traveler for a reactor vessel outlet nozzle, Contract No. 12678, Job and Control No. 771128-005:

1. Sequence 100 (Buttering) was observed in progress, although previous bracketed operations, Sequence 60 to 80, had not been signed off on the traveler.
  2. Sequence 115 and 117, which pertained to postweld preheat requirements after completion of the Sequence 100 welding operation, had been signed off in error, with the correct operations, Sequence 95 and 97 (which were hand entered on the traveler on the same day as the Sequence 115 and 117 signoff) still unsigned.
- B. Paragraph 2.4.2, sub-paragraph 2.4.2.1 in System No. 5, Revision E (Modifications for Nuclear Work Performed by Fossil Power Systems) in the QA Manual states in part, "Procedures for product control are those which detail the methodology, parameters, and acceptance criteria for manufacturing and appraisal operations required to be performed in

accordance with ASME Code, regulatory, and customer specifications. Included in this classification are Detail Welding Procedures and Detail Welding Procedure Specifications . . . ; Material and Process Specifications (M&P) . . . , controlling . . . metal forming operations . . . ."

Contrary to the above, M&P specification N-5.510.1(d), which was identified on the shop traveler for Contract No. 72473, Job and Control No. 725722-007, to be used for the forming of pipe segments, did not detail the necessary methodology, parameters and acceptance criteria for manufacturing and appraisal operations to assure accordance with ASME Code forming qualification requirements. (See Details I, C.3.a.(2)).

- C. Paragraph 2.3, sub-paragraph 3 in System No. 9 of the QA Manual states in part, "Prior to issuance of Detail Welding Procedures (DWP) . . . Design Engineering - Materials and Welding Group (DE-M&WG) shall assure they are qualified as being compliant with ASME Code and customer requirements. DE-M&WG shall be responsible for the preparation and maintenance of the Welding Procedure Qualification Record . . . which serves as the objective evidence of a satisfactory welding procedure . . . ."

Contrary to the above, the identified Welding Procedure Qualification Records applicable to DWP SAA-SMA-1.1-103-1 did not serve as objective evidence of a satisfactory welding procedure, in that they did not provide for full qualification of the permitted electrical parameter ranges. (See Details I, D.3.a.).

- D. QA Manual System No. 7, paragraph 2.1.8 states in part, "Vendor audits shall be performed in accordance with Paragraph 2.1.4 of this system . . . ." Paragraph 2.1.4 states in part, ". . . Personnel performing the survey shall be from one of the following organizations. A. Nuclear Quality Assurance. B. Other Combustion Engineering, Inc., Divisions or Groups. C. Qualified agencies . . . . The organizations shown in (B) and (C) above must be approved . . . ."

Contrary to the above, a vendor audit, the results of which have been accepted by Combustion Engineering, Chattanooga Nuclear Operations (CE-CNO) was performed by another Combustion Engineering, Inc. Division which had not been approved by (E-CNO).

- E. Quality Control Procedure No. 8.1, paragraph 2.2 states in part, ". . . ." At the end of each shift, all unused electrodes issued for use on jobs which are not completed shall be returned to their containers along with the applicable weld material requisitions."

Contrary to the above, unused electrodes were not returned to their respective containers, in that oven number-1608 had two containers designated for different size E8018 electrodes in which comparable

size E7018 electrodes were mixed in; e.g. one container had 1/4" E8018 and E7018 electrodes mixed together, and another container had 5/32" E8018 and E7018 electrodes mixed together.