United Engineers and Constructors, Inc. Docket No. 99900510/80-01

## NOTICE OF DEVIATION

Based on the results of an NRC inspection conducted on May 5-9, 1980, it appears that certain of your activities were not conducted in accordance with NRC requirements.

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. Contrary to this requirement, a procedure or instruction does not exist which prescribes UE&C's activities related to the identification, review, and subsequent notification of the client for items identified by UE&C as being reportable under the requirements of 10 CFR 50.55(e).

Corrective action on this item was completed by UE&C prior to the conclusion of the inspection (See Details Section I, paragraph C.3.d.). UE&C need only address action to prevent recurrence in their response to this item.

B. Paragraph II.A.2 of Quality Assurance Procedure QA-5 (Instructions, Procedures and Drawings) states in part that, "UE&C and vendor instructions, procedures and drawings are initiated, reviewed, approved, issued and revised to meet the requirements of ANSI N45.2.11 and ANSI N45.2.13."

Specific requirements and deviations therefrom are as follows:

 Section II of procedure GAP-0014 (Document Control Center) states in part that, "Superceded issues of Controlled Documents must be destroyed, or marked void, by the holders of such documents . . ."

Contrary to the above, four (4) of eight (8) controlled structural engineering drawings examined in the Structural Engineering Discipline File were superceded, but were not destroyed nor marked void by the holder of the drawings.

Paragraph III.E of procedure GEDP-0013 (Preparation of Drawings) states in part that after a drawing is prepared, reviewed, comments incorporated and verified, "The drawing is then reviewed by the SDE (Supervising Discipline Engineer) and revised and/or approved and certified . . . ."

Contrary to the above, eight (8) of twenty-one (21) issued drawings examined were not certified.

3. Section "GEDP-0013" of procedure AP-28 (Exceptions to General Engineering and Design Procedures) states in part that, "Seabrook drawings which require identification denoting nuclear class will be stamped with 'N-Stamp Item' or 'S-Safety Related Item' . . . "

Contrary to the above, nine (9) of twenty two (22) issued Seabrook drawings denoting nuclear class items were not stamped, nor otherwise identified, as an "N-Stamp Item" or an S-Safety Related Item."

C. Paragraph IV.A.2 of Quality Assurance Procedure QA-3 (Design Control) states in part that, "All design work is performed in accordance with UE&C Corporation General Engineering Design Procedures as specifically implemented for the Project by Administrative Procedures No. 28 and 28A."

Specific requirements and deviations therefrom are as follows:

1. Paragraph III.B.9.b of procedure GEDP-0014 (Preparation of Design Specifications for Structures, Systems and Components (ASME B&PV Section III Division 1)) states in part that, ". . . the only authorization that a vendor has to perform Technical Work is the Certified Lesign Specification accompanying the Purchase Order (or Change Notice) . . . "

Contrary to the above, change notice #14 to Purchase Order 5NH-7 9763.006-246-1 authorized Pittsburgh DeMoines Steel Company to perform technical work on the Refueling Water Storage Tank without a certified design specification accompanying the purchase order change notice.

 Paragraph III.B.4 of procedure GEDP-0014 states in part that, "The SDE (Supervising Discipline Engineer) will then review (the) Final Draft Specification and arrange a Project Level Design Review in accordance with GEDP-0022 . . . " Contrary to the above, neither the SDE, nor anyone else, arranged for a Project Level Design Review in accordance with GEDP-0022 for six (6) examined specifications issued for ASME Code items.

3. Paragraph III.B.7 of procedure GEDP-0022 (Project Level Design Review and Design Verifications) states in part that, "The Design Specification cover sheet (after resolution of owners comments) shall be noted as Revision 0 - 'FOR CONSTRUCTION' . . . "

Contrary to the above, the cover sheet for six (6) issued design specifications examined did not exhibit the required notation; "Revision 0 - FOR CONSTRUCTION."

4. Paragraph IV.E.2.g of procedure QA-3 (Design Control) states in part that, "After internal review, the design specification is revised where appropriate, and submitted to the checker in accordance with GEDP-0022 . . . ."

Contrary to the above, engineering procedure GEDP-0015 (Preparation of Design Specifications) does not impose the QA requirement that the specification be submitted to the checker (verifier) after internal review and revision.

Corrective action on items E. and C. above was completed by UE&C prior to the conclusion of the inspection (See Details Section II.B.3.a). UE&C need only to address Action to prevent recurrence in their response to this item.

- D. Concerning instructions, procedures and drawings inspected on the WPPSS project:
  - 1. WPPSS Projects No. 1 & 4 Project Procedures Manual, Procedure No. 21, Drawing Practices & Approvals, states in part in paragraph 4.12, Maintenance of Stick Files, "Upon receipt of revised prints, the outdated ones must be replaced. If outdated ones are kept for reference, they must clearly indicate they are not the latest revision and be physically separated from current drawings."

Contrary to the above, outdated drawings were not physically separated from current drawings on one stick file in Instrumentation and Control (I&C); also the same stick file did not have one currently approved drawing but instead had only the unsigned preliminary drawing of the next revision of the drawing.

Corrective and preventive actions were taken during the course of the inspection. No response is required. (See also Report Details Section III B.3.a.(1).)

UE&C QA Manual for WPPSS, Procedure QA-3, IIIc., states in part:

"The Discipline Supervising Engineer prepares System Descriptions from the appropriate section of the PSAR. These documents will designate referenced codes, ASME Section III Classification, Seismic classification, Quality Classification, and will be updated periodically and reissued."

Contrary to the above, implementing Project Procedure No. 28, System Descriptions, does not require System Descriptions to designate reference Codes and Standards, and therefore does not implement the above QA Manual requirements, and the systems descriptions for two I&C systems did not designate referenced codes. For example, the Containment Atmospheric Monitors (CAM) system descriptions did not include nine IEEE standards required by the PSAR and the area Radiation monitor system descriptions did not include all applicable standards. (See Details Section III.B.3.a.(2) for additional related information).

E. WPPSS Nuclear Projects 1&4 Preliminary Safety Analysis Report (PSAR), Table 7.1-1 titled "Application of Criteria in the Design of Safety-Related Instrumentation Systems" requires application and use of IEEE Standard 382 (Guide for Type Test of Class I Electric Valve Operators) for Containment Atmospheric Monitoring Systems (CAM).

Contrary to the above, application and use of IEEE Standard 382 was not required by the appropriate sections of the procurement documents for the CAM System. Specifically P.O. 9779-130Q, Section 15Q which includes CAM Hydrogen Analysers with solenoid operated valves does not reference or impose the requirements of IEEE Standard 382.