

SEABROOK STATION
Engineering Office:
1671 Worcester Road
Framingham, MA 01701

SBN-150
T.F. B4.2.7

February 13, 1981

United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Attention: Office of Inspection and Enforcement

Subject: Combined Inspection No. 50-423/80-13 and 50-444/80-13

Dear Sir:

Pursuant to receipt of your correspondence regarding the results of the subject inspection, we offer the following reply:

NRC Notice of Violation: (80-13-03)

10CFR50, Appendix B, Criterion III states, in part, that: "Design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design and be approved by the organization that performed the original design..."

The Seabrook Station PSAR for Units 1 and 2 states in part, in paragraph 17.1.3 that: "Controls for changes, including field changes, shall be commensurate with the controls applied to the original document." Furthermore, the PSAR states in paragraph 17.2.3 that notification to and approval by United Engineers and Constructors (UE&C) Engineering is required for all field initiated design changes and that "UE&C Engineering will assure that the impact of the change is considered, (and) required actions documented..."

Bethlehem Steel Drawings 016RW35AX (Revision 3) for the steam generator shield walls and 016RW38A (revision 1) for the pressurizer shield wall indicate UE&C Engineering checks and approval on September 3 and August 28, 1980 respectively, and illustrate the shield wall No. 9 rebar dowels as continuous bars out of the elevation 25' slab to the full height of the shield walls.

Contrary to the above, during the period of time just prior to the elevation 25' slab concrete placement, commencing on December 4, 1980, approximately one thousand shield wall No. 9 rebar dowels were cut below the required design height without documented evidence of UE&C Engineering review or approval of this field initiated change.

This is a severity Level V violation (Supplement II)

Response:

Corrective Action Taken and Results Achieved

It has been permissible, by UE&C procedures, for construction personnel to add Cadweld splices arbitrarily since QA procedures insure high-quality Cadweld splices capable of developing the specified minimum strengths. UE&C issued Engineering Change Authorization (ECA) 01-0619B which allows the Construction Manager to permit the cutting of rebar to facilitate certain construction operations. This ECA was based on UE&C engineering analysis which included the impact of allowing construction to cut-off all bars at the same elevation, 2 feet above the containment operating slab. The analysis determined that:

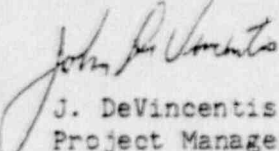
- a) The impact of omitting stagger in the Cadweld splice in the walls on the structural behavior and design basis forces is negligible.
- b) There is no reduction in structural capacity.
- c) These structural units will perform as designed.
- d) The QA procedures insure high-quality Cadweld splice capable of developing the specified minimum strengths.

Although UE&C believes that the Cadweld splices are considered continuations of the rebars, and the integrity of the structure is always maintained, additional guidelines will be established for bars to be cut by construction. In the interim, ECA 01/2127A requires that Cadwelds be staggered by 24' whenever possible, and engineering consulted when staggers cannot be achieved.

A review of UE&C procedures indicates that other changes require Engineering approval and thus, provide proper control mechanism.

Full compliance will be achieved by March 31, 1981.

Very truly yours,


J. DeVincentis
Project Manager

JDeV/dis