

CONTROL BOARD WELDED CONNECTIONS

Description of the Deficiency

The design details for attaching the Comanche Peak Unit 1 main control boards to support embeds provide for 4 inch long, 1/4 inch fillet welds on 12 inch centers. The panels are also specified to be set flush against the embeds. Inspection of the panels on February 28, 1980 by QA staff personnel revealed the following:

- 1) The specified eight inch spacing of the welds from end to end was found to vary from sixteen to eighteen inches on several panels.
- 2) Some of the panels had been set on buttered weld surfaces some 1/4 to 5/16 inches above the embed surfaces.
- 3) Where the panels were resting on the buttered weld surfaces, the embed to panel welds were undersize and in many cases did not possess sufficient leg or throat dimensions to be considered a fillet weld.

Following formal identification of the matter, site engineering personnel prepared as built drawings of the welds on each panel. The resulting data was comparable to that determined by QA staff personnel.

Analysis of Safety Implications

The as built weld configurations, if they had gone undetected, would not have provided assurance of panel integrity under a postulated seismic event.

Corrective Actions

The following actions have been taken to correct the welded connections:

1. The control boards supplier and Architect Engineer are currently reviewing the as built weld configurations in order to provide detailed rework requirements for each panel. Implementation of the required rework will be under the direction and control of the site Project Civil Engineer. It is anticipated that rework will be completed by May 1, 1980.

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2. The construction defects were uncovered as part of a planned reinspection of electrical equipment foundations. These currently planned actions are considered adequate to assure that any required generic problems which may exist are properly identified and corrected.
3. In order to preclude recurrence, the personnel involved with the welding activities on the electrical equipment have been scheduled to attend training classes on Procedure CP-CPM 6.9. This effort is to be completed by March 31, 1980. In addition to the above training classes, a representative of Comanche Peak Welding Engineering has been assigned to monitor the activities of the Electrical Department Welding personnel.