

SSER

Task No.: Allegation A-128d, A-212, A-275

Reference No.: 4-84-A-06/23d; 4-84-A-06/100; 4-84-A-06/157

Characterization: It was alleged in a newspaper article of January 14, 1984 that there were undersized welds in work performed by the Mercury Construction Company.

Assessment of the Allegation: The NRC staff reviewed records of Mercury activities and learned that undersized welds had been discovered by LP&L in Mercury socket weld fittings. Upon their discovery, LP&L issued Significant Construction Deficiency (SCD) 62, "Undersized welds on  $\frac{1}{2}$ " schedule 160 pipe." Resolution of this SCD was controlled by EBASCO NCRs W3-4410, Revision 1, W3-4365, and W3-4366.

According to the ASME Code, the size of a weld is determined by the wall thickness of piping or tubing. At locations of low stresses, alternative rules as delineated in Code Case N-316 may be used for reduced weld size. The code case is acceptable to NRC as indicated in Regulatory Guide 1.84. The reason Mercury gave for the deficient welding and inspection was that both were based on criteria for  $\frac{1}{2}$ " stainless tubing with a thinner wall thickness of 0.065", rather than for the Schedule 160 piping installed, which has a wall thickness of 0.188". A large share of Mercury's work involved the installation of the thinner tubing. The tubing required a 1/8" fillet weld rather than the 1/4" fillet required for schedule 160 pipe. The SCD and NCR's resulted in a reinspection of all welds. Those found to be undersized were rewelded. Those inspected and found to be of satisfactory size were accepted "as is." The rewelds were reinspected by LP&L and found adequate. SCD 62 was reported to the NRC in accordance with 10 CFR 50.55(e) requirements. The NRC staff concurred in the need for SCD 62, but QA controls were adequate to recognize and correct the problem. It may have been a concern at some time prior to the issuance of SCD 62.

In assessing this allegation, the NRC staff visually inspected portions of 20 systems welded by Mercury and found no undersized welds in tubing or support welding. Based on its review of the records and on a visual inspection of accessible portions of 20 systems, the staff believes that the allegation has neither safety significance nor generic implications. The NRC staff has discussed their findings with the allegor and he agreed and expressed satisfaction with the staff's efforts and conclusions.

Potential Violation: None.

Action Required: None.

References:

1. Significant Construction Deficiency No. 62.
2. NCR W3-4410.
3. NCR W3-4365.
4. NCR W3-4366.
5. List of systems inspected.

Prepared by:

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Date

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