

SSER

Task: Allegation A-58

Reference No.: A-83-A-88-10

Characterization: It is alleged that many permanent plant items were not being properly maintained by sub-contractors, EBASCO or LP&L and that the items are rusting in place, even though such maintenance was the responsibility of LP&L and its contractors.

Assessment of Allegation: The implied safety significance of this allegation is that permanent plant equipment may have been damaged due to lack of preventive maintenance.

During the review of this allegation, the NRC staff noted that LP&L, EBASCO and other sub-contractors had written care and maintenance procedures. These procedures appeared to be in accordance with ANSI N45.2.2, to which the licensee was committed.

The allegation stated that tube track, hangers, supports etc., were not maintained by Mercury or EBASCO. The NRC staff's detailed review of LP&L and EBASCO audits indicated that a basic maintenance program was utilized during construction. LP&L and Ebasco audit reports further indicated that Mercury had some deficiencies in their care and maintenance program. These deficiencies were cited in the audits and corrective action was initiated. These were no nonconforming conditions and the deficiencies did not require generation of an NCR.

Galvanized tube tracks, sway struts, and structural items were classified as storage level D items. Level D items could be stored outdoors in a designated area which was well drained and marked for storage. These items were to be stored on cribbing or equivalent means to allow air circulation and do not require a special care and maintenance procedure. They were inspected on an area basis, with the inspection documented by Mercury on Form 239, Material Handling and Storage Report.

Mechanical and hydraulic snubbers were classified as Level C storage items. Level C items require indoor or equivalent storage. These supports did have a special care and maintenance procedure. A sample review of EBASCO's main warehouse QC care and maintenance reports indicated that from February 1977 to September 1983 monthly reports were completed for care and maintenance of those items. To address the problem of rusting in the field, memo #F-55764E, dated October 14, 1981 was issued requiring all onsite contractors to notify EBASCO Services of any permanent materials requiring painting prior to installation in the reactor containment building.

NCR W3-6940 documented a good example of the concerns expressed in this allegation. The NCR stated that "Indications are the items identified in the component description above (Bergen Paterson Hangers issued to Mercury) were degraded by the Mercury Company as a result of storage and handling practices

and techniques." An NRC staff review of the above statement indicated that the supports in question were either sway struts or mechanical snubbers. Mechanical snubbers were Level C items and were stored in a warehouse. They were only requested from the warehouse prior to installation, so that there was little chance for their degradation. An EBASCO representative also stated that Mercury did not install any mechanical snubbers. Rigid supports such as sway struts were installed by Mercury. These were level D items and required very little maintenance, except to ensure that the grease preservatives were still effective. This was done during care and maintenance inspections performed by EBASCO and Mercury.

NCR W3-6940 also stated that "Inasmuch as there is no documentation (Form(s) 239) available, it is indeterminate as to whether the Mercury Company performed any final location inspection of items identified in the description above." A detailed examination of the issues raised in this statement by the NRC staff indicated that the review of the EBASCO records review group was done after Mercury left the site. Mercury in fact did not leave records (Form(s) 239) for permanent plant files. However, ANSI N45.2.2, paragraph 6.6 "Storage Records" does not require care and maintenance inspection results to be kept as permanent plant records. Contract specification W3-NY-15 did not require these records to be kept as permanent plant records.

Additionally, the NRC staff reviewed preventative maintenance performed on safety-related rotating shaft equipment, tanks, and instruments. EBASCO prepared Construction Maintenance Instructions for this equipment and issued these instructions to the responsible contractors.

Responsibility for preventative maintenance was transferred to LP&L at the time of equipment turnover. The NRC review of contractor maintenance records revealed an adequate history of preventative maintenance, from receipt through installation to equipment turnover. LP&L maintenance records were also reviewed and demonstrated a continuation of adequate preventative maintenance following equipment turnover. The review for contractor-controlled equipment included: low pressure safety injection and high pressure safety injection pumps and motors, emergency diesel generators, emergency feedwater pumps and motors, and shutdown heat exchangers. The review for equipment currently controlled under the LP&L system included: low pressure safety injection pumps and motors, various pressure indicators, and transmitters.

The safety significance of this issue would be minimal because even without in-place inspection of supports and hangers, existing onsite procedures ASP 121 and 138 were being implemented as final checks to assure that supports and restraints for the piping systems were properly installed and would perform their intended function.

In conclusion, LP&L and EBASCO surveillance audits indicated that Mercury did perform care and maintenance inspections. The NRC inspection of plant safety-related items, whether in storage or installed revealed no discrepancies. This allegation had no safety significance and no generic implications.

Potential Violations: None.

Actions Required: None.

References

1. Project Control Procedure PCP-2040 "Packaging, Shipping, Handling and Storage Procedure" (Mercury) Rev. 2, dated May 8, 1980.
2. ASP-IV-121, Issue A, dated December 7, 1982, "Inspection of Component Supports" (EBASCO).
3. LP&L Quality Assurance Procedures Manual #QP-17.1, Rev. 0.
4. Care & Maintenance Instruction (CMI) #47 "Station Mechanical Piping Supports", Rev. 6, dated March 13, 1981.
5. ASP-IV-10, Issue EE, dated 12-15-83, "Material Receiving, Warehousing & Control", (EBASCO) dated 12-15-83.
6. Pacific Scientific Doc. 141, "Installation and Maintenance of Mechanical Shock Arrestors".
7. ASP-IV-19, Rev. L, dated February 17, 1983, "Caring and Maintaining of Permanent Plant Items" (EBASCO).
8. Memorandum from J. L. Willis (LP&L) to all On-Site Contractors, dated October 14, 1981. Subject: Permanent Materials Requiring Painting.
9. LP&L Audits No. W3S 80-39 and W3S 81-36 Concern audit of Mercury for Caring & Maintenance.
10. Contract No. W3-NY-15, "Special Conditions, Installation of Pneumatic & Electronic Instrumentation & Performance of Related Work."
11. EBASCO Audit No. NB-79-4-5, NB-80-7-2, JWH-81-9-4 and RES-82-11-3 (Concerns audit of Mercury for Caring & Maintenance).
12. Material Maintenance Record by EBASCO QC (Main Warehouse) Inplace Storage Inspection (February 1977 to September 1983, CMI #47).
13. ASP-IV-138, "Inspection of Seismic Class I Piping Supports/Restraints, Issue B, dated November 8, 1983.
14. ANSI N45.2.2-1972, "Packaging, Shipping, Receiving, Storage and Handling of Items For Nuclear Power Plants" (During Construction Phase).

15. MD-1-077, Revision 1, dated August 8, 1983, "Preventative Maintenance Task Identification" (LP&L)
16. MD-1-004, Revision 5, dated August 8, 1983, "Preventative Scheduling"

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Document Name:
SSER A-58

Requestor's ID:
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Document Comments:

SSER

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Actions Required: None.

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