APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION REGION IV

NRC Inspection Report: 50-382/83-27

Docket: 50-382

Construction Permit: CPPR-103

Licensee: Louisiana Power & Light Company (LP&L) 142 Delaronde Street New Orleans, Louisiana 70414

Facility Name: Waterford Steam Electric Station, Unit 3

Inspection At: Taft, Louisiana

Inspection Conducted: August 2-5, 1983

Inspector:

C. R. Oberg, Reactor Inspector Reactor Project Section B

Approved:

W. A. Crossman, Chief Reactor Project Section B

8/14/83 Date

8/24/83 Date

Inspection Summary

Inspection Conducted August 2-5, 1983 (Report 50-382/83-27)

<u>Areas Inspected:</u> Routine, unannounced inspection of 10 CFR 50.55(e) reporting program and 50.55(e) reports. The inspection involved 28 inspector-hours onsite by one NRC inspector.

<u>Results</u>: Within the two areas inspected, no violations or deviations were identified.

DETAILS

1. Persons Contacted

Principal Licensee Personnel

*R. S. Leddick, Senior Vice President, Nuclear Operations
*R. P. Barkhurst, Plant Manager, Nuclear
*W. M. Morgan, Operations Quality Assurance Engineer
*T. F. Gerrets, Quality Assurance Manager
*L. L. Bass, Project Quality Assurance Engineer (Construction)
*M. A. Livesay, Onsite Licensing Engineer
*G. Pittman, Quality Assurance Engineer

Ebasco Services Incorporated (Ebasco)

*H. J. Kunis, Jr., Site Supervisor, Quality Assurance
*J. Pertuit, Quality Assurance Engineer
*C. E. Bishop, QA Specialist
A. Cutrona, QA Engineer

*Present at exit interview.

2. Significant Construction Deficiency Reporting Program

The NRC inspector reviewed the following procedures as applicable to the reporting of 10 CFR 50.55(e) construction deficiencies:

- NAP-117, "Identification, Evaluation, and Reporting of 10 CFR 50.55(e) Deficiencies," Revision 0, March 15, 1983
- ^o Ebasco Procedure N-23, "Reporting a Defect/Noncompliance to the NRC," revised, March 20, 1983
- ^o LP&L Procedure NAP-105, "Compliance with J' CFR 21 Reporting of Defects and Noncompliances," Revision 2, March 8, 1983

The procedures were found to be lacking in the following areas:

- Specific procedure for handling 10 CFR 50 Part 21 reports, received from sources outside of LP&L and Ebasco.
- Detailed information on 50.55(e) report content was not apparent in LP&L procedures and the Ebasco procedure was incomplete.
 Specifically, information sufficient to permit analysis and evaluation of the construction deficiency was not required.

During the exit interview, a licensee representative stated that other procedures cover these items.

This apparent lack of specific Part 21 procedural requirements and 10 CFR 50.55(e) report content is considered to be unresolved item (8327-01). This area will be examined further during a subsequent NRC inspection.

Potentially Reportable Deficiency (PRD) 54 - Repetitive Failures of Limitorque Operators

The PRD was reported as the result of IE Information Notice 81-08. Ebasco determined with the manufacturer that the valve operators at Waterford 3 were not safety-related and thus not reportable. The PRD action was documented in LP&L letter W3K-81-0453 dated December 16, 1981, and confirmed by the NRC inspector. This item is closed.

4. Significant Construction Deficiency (SCD) 54 - Tube Steel Laminations

The final report regarding this SCD was submitted to Region IV on June 23, 1983. Mercury Company of Norwood, Inc., the onsite instrumentation contractor, issued an Nonconformance Report on tube steel (HT 16600) used in the installation of 33 safety-related pipe hangers and supports.

The mill test report described the steel as hot rolled electrical resistance welded hollow structural steel tubing to ASTM A500 Grade B. It was supplied by Mills Alloy Steel Company of Twinsburg, Ohio.

The steel (3" x 3" x 3/8") contained material lamination defects. All components utilizing HT 16600 were replaced with acceptable material. This was evaluated as an isolated case by Ebasco and concurred in by LP&L. This SCD is considered closed based on the corrective action taken.

5. SCD 64 Safety Injection Tank (SIT) Discharge Flow Rates

This SCD described a condition identified during preoperational testing. The safety injection tank blowdown rates for SIT 1A, 1B, and 2B were below minimum predictable rates established by Combustion Engineering. The reason for the reduced rates was determined to be increased flow resistance from spring loaded valves installed in vertical legs of the discharge piping. SIT 1B (horizontal leg) has a conventional swing-check valve with a lower flow resistance.

The ECCS performance was reevaluated for the limiting break (0.8 x DER/PD) using the actual flow resistance K-factors for the safety injection lines. It was demonstrated that the plant meets the 10 CFR 50.46 acceptance criteria at a peak linear heat generation of 13.4KW/ft. This was documented in FSAR Amendment 31 (March 1983) and included in the proposed plant Technical Specifications (TS). The NRR Project Manager was contacted regarding this SCD, the FSAR amendment and the proposed TS.

This SCD is considered closed based on the corrective action taken.

 SCD 69 - Crosby Valve and Gage Company Stellite Alloy 6B Discs (Replacement Parts)

Replacement valve discs were purchased from Crosby Valve and Gage Company. These discs were made from solid Haynes Stellite Alloy 6B wrought bar stock. The licensee initially reported that the disc material did not meet ASME requirements. After further evaluation, the licensee determined that the discs did meet the ASME requirement based on an evaluation made by Ebasco dated March 28, 1983. This evaluation considered the ASME code requirements including ASME III (1974) paragraphs NC-2121 (c) and (d), NC-2541, and NB-2510.

The initial report was made based on the requirements of the Ebasco purchase specification, 850-73, which required NDE for all pipe systems, materials, welds, and components. Design Change Notice (DCN) ME-61 was issued on Ebasco Specification LOU-1564-124 exempting the valve discs (2 inches and less) from nondestructive examination. This action was in agreement with the above applicable ASME code sections. This item is considered closed.

7. SCD 72 Radiation Monitoring System RM-23 Control Modules

SCD 72 involved deficiencies existing in radiation monitoring system RM-23 modules. During startup of a GA Technologies, Incorporated (GA) system at other facilities, an intermittant lock-up of the RM-23 display was observed. The lock-up caused the channel activities to freeze at the most recent activity. RM-23 modules are safety-related and used on the main control room board alarms. NCR W3-5744 was issued to track and document the corrective action.

This deficiency was identified to LP&L through Ebasco (New York) to the Ebasco site offices. As verified from documents and interviews, the following reporting sequence was determined:

- 1/31/83 Ebasco New York office notified by GA of intermittant lock up of RM-23 displays (letters dated January 25, 1983). This letter indicated that the NRC would be notified of the Part 21 report.
- 2/22/83 Ebasco site office notified of deficiency by telecopy of GA letter.
- 2/23/83 LP&L site personnel notified by Ebasco site of problem through internal mail system.
- S/1/83 LP&L received notification of problem.

- 3/2/83 NRC Region IV notified of Potential Reportable Deficiency (PRD-103)
- 3/15/83 PRD-103 upgraded to SCD-72
- 3/22/83 Interim Report supplied to NRC Region IV
- 5/11/83 Second Interim Report to Region IV
- 7/5/83 Third Interim Report to Region IV
- 7/28/83 Final Report to NRC, Region IV

This deficiency was reported to the NRC as a Part 21 report by GA (GA letter to Ebasco, New York dated January 25, 1983). GA recalled all RM-23 Display Control Modules. Thirty units were returned by LP&L for modifications. Subsequently, six modified units failed to establish communications when inserted into the control room safety cabinets. Replacement of 8085 microprocessor chips corrected the problem. All RM-23 modules were then inserted into their proper main control room safety cabinets and were observed to function properly. All corrective action has been completed and considered. This SCD is closed.

The length of time required to report this event indicates an inadequate procedure (see paragraph 2). It was also noted that this event appears to have been an isolated case. However, pending additional review during a subsequent NRC inspection, late reporting of this item is considered unresolved. (8327-02)

8. Additional SCD's Reviewed

In addition to the above, the following SCD's were examined, but not closed.

- SCD 31 Incorrect Friction Factor Used
- SCD 48 (R1) Design Application of Break Flanges at Elevated Temperature
- SCD 61 Linear Cracks in Steel Tubing
- SCD 62 Undersized Welds on ½ inch Schedule 160 Pipe

Additional information may be requested from the licensee on these reportable items by separate correspondence.

9. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations. Two new unresolved items disclosed during this inspection are discussed in paragraphs 2 and 7.

10. Exit Interview

The NRC inspector met with Mr. R. S. Leddick and other licensee personnel on August 5, 1983 (as indicated in paragraph 1) to discuss the scope and findings of the inspection. The unresolved items were discussed with the licensee representatives. The NRC Senior Resident Inspector attended the meeting.

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