

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-382/84-42

Construction Permit: CPPR-103

Docket: 50-382

Licensee: Louisiana Power & Light Company (LP&L)
142 Delaronde Street
New Orleans, Louisiana 70174

Facility Name: Waterford Steam Electric Station, Unit 3

Inspection At: Taft, Louisiana

Inspection Conducted: October 22-26 and December 3-7, 1984

Inspector: *W. Boardman* 2/14/85
Date
J. R. Boardman, Reactor Inspector, Special
Projects and Engineering Section, Reactor
Project Branch 1

Approved: *W. Crossman* 2/14/85
Date
W. A. Crossman, Chief, Project Section B,
Reactor Project Branch 1

Inspection Summary

Inspection Conducted October 22-26 and December 3-7, 1984 (Report 50-382/84-42)

Areas Inspected: Reactive, unannounced inspection of followup on previously identified items and licensee procurement of spare parts for safety-related applications. The inspection involved 71 inspector-hours onsite by one NRC inspector.

Results: Within the area inspected, one violation was identified (procedural deficiencies for procurement of spare parts for safety-related applications-lack of procedures to assure that retention and retrieval of all required procurement documentation, to assure that design control included purging or modification of affected spare parts, and to assure that spare parts which affect the safety function of safety-related component, structure or system were not downgraded to nonsafety-related).

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DETAILS

1. Persons Contacted

Principal Licensee Employees

- + R. S. Leddick, Senior Vice President, Nuclear Operations
- +*R. P. Barkhurst, Plant Manager
- + T. F. Gerrets, QA Manager
- *R. M. Nelson, Licensing Manager
- + R. F. Burski, Manager, Project Engineering
- *J. R. McGaha, Maintenance Superintendent
- +*K. W. Cook, Nuclear Support and Licensing Manager
- +*L. F. Storz, Assistant Plant Manager
- +*J. Woods, Plant Quality Assurance Manager
- +*T. Chiles, Material Superintendent
- +*K. Brewster, On-Site Licensing
- *G. Muller, On-Site Licensing
- D. Herring, On-Site Licensing
- +*P. V. Prasankumar, Technical Support Supervisor
- + W. M. Morgan, Operations Quality Assurance Manager
- + F. J. Englebracht, Manager Plant Administrative Services
- *D. E. Dobson, Project Manager
- +A. S. Lockhart
- *N. S. Carns, LP&L
- + J. D. Firestone
- *S. Alleman, Assistant Plant Manager
- + K. A. Simister, Commercial Department
- J. J. Zabritski, Plant Quality
- + J. E. Adkins, Procurement
- J. A. Canavier, Maintenance
- + J. B. Perez, Operation Quality Assurance
- + A. J. Marlborough, Purchasing
- + R. C. Brown, Purchasing
- + L. L. Bass, Construction Quality Assurance

NRC Personnel

- *G. L. Constable, Senior Resident Inspector
- + T. Flippo, Resident Inspector
- +*W. B. Jones, Reactor Inspector
- + A. Johnson, Reactor Inspector

*Denotes those attending the exit interview on October 26, 1984.

+Denotes those attending the exit interview on December 7, 1984.

The NRC inspector also interviewed other licensee personnel.

2. Licensee Actions on Previous Inspection Findings

(Closed) Unresolved Item (8435-01): Acceptability of safety-related cable ties. The licensee presented the NRC inspector with documentation satisfying the NRC inspector's concern about the acceptability of cable ties on LP&L purchase order L01369D.

(Closed) Unresolved Item (8435-02): Use of nonsafety-related thermocouples for safety-related applications (A94068D). The licensee presented the NRC inspector documentation that satisfied the NRC inspector's concern about the possible use of unqualified thermocouples.

3. Licensee Procurement of Spare and Replacement Parts for Safety-Related Systems, Structures, and Components

During this inspection, the NRC inspector reviewed licensee procedures, procurement packages, and "Parts Evaluation Sheets" for the procurement of licensee spare and repair parts used in safety-related applications, including those purchased as "commercial grade items."

a. Licensee Procedures Applicable to Spare Parts Procurement

Procedure UNT-8-001, "Preparation of Station Procurement Documents," was identified by licensee personnel as being the applicable procedure for procurement actions relating to all operation phase spare parts. This procedure replaced procedure UNT-AP-609 in May 1979.

The initial issue of UNT-AP-609 was Revision 0, dated September 7, 1978. Licensee personnel indicated that procurement of safety-related spare and replacement parts by plant personnel for the plant operation phase began in 1978, and that such parts were installed in safety-related systems and components after systems' turnover, beginning in 1980.

b. Procurement Data Requirements

Licensee procedures UNT-AP-609, Revision 0 and UNT-8-001, in Revision 0 through 7 (licensee personnel stated there was no Revision 1) have required specific documentation relating to procurement of spare parts, such as:

- (1) Major Component Data Sheets (MCDS) which identify the major component in which a purchased part is to be used, including quality and technical requirements, such as radiation class, seismic class, safety class, design specification and the original Nuclear Steam Supply System (NSSS) or architect engineer (AE) purchase order for installed plant equipment.

- (2) Sub-component/Parts Data Sheets for procurement of specific sub-components and parts for installed equipment. These sheets contain data from the MCDS and other technical data such as shelf life and storage level.
- (3) Equipment/Material Procurement Specifications which identify:
 - (a) Applicable codes, standards, and references, including revisions, to which the sub-components or parts are to be manufactured or procured.
 - (b) Specific technical requirements, including an exact description of the function that the item is to perform, interface requirements, and environmental requirements.

c. Procurement Data Packages

The NRC inspector reviewed for completeness and in-depth with licensee personnel, the data packages for the 17 purchase orders for spare and replacement parts used in safety-related applications. These purchase orders cover purchase requisitions issued from April 1980 until June 1984.

The purchase order data packages reviewed by the NRC inspector for completeness were:

A89511D	L20712D	L45816K
A94582D	L22269D	L47365K
L08404D	L22654D	L47967P
L17721H	L36746D	L48243K
L19471D	L43974D	L48354K
L19474D	L45308H	

None of the data packages (listed below) contained all records of actions affecting quality (a) required by licensee procedures, and (b) contained on the checklist for the completed purchase order data package.

- (1) Five of the 17 data packages contained none of the required records identified in paragraph 3.b.
- (2) Of the 12 data packages that contained some required records, 11 did not have a procurement specification.
- (3) Eight of the 12 data packages containing some required records were required by licensee procedure revision to have "Component Data Sheets" and "Sub-component/Parts Data Sheets". Five of these data packages were missing both data sheets, the remaining 3 data packages were missing one of the data sheets.

The licensee was unable to retrieve the missing records prior to the end of the inspection. Missing records included documentation of proper description, design requirements, qualification, and acceptability of spare and replacement parts for safety-related applications received, accepted, and in some cases, installed in safety-related applications.

The NRC inspector found no licensee procedures which specifically precluded this problem of retention and retrieval of required procurement documentation for safety-related spare parts.

d. Design Control of Spare Parts

Similarly, the NRC inspector could find no procedures requiring that previously purchased parts be purged or modified, as applicable, when affected by design changes.

e. Procurement and Use of Commercial Grade Spare and Replacement Parts in Safety-Related Applications

In the 17 purchase order packages reviewed by the NRC inspector, three purchase orders showing the procurement of commercial grade spare parts for use in safety-related applications were found. In each case the purchase requisition was initially designated as safety-related and subsequently downgraded. Documentation indicated that the licensee downgraded the end use application, not simply the procurement action with the intent to subsequently "dedicate" the part for safety-related applications prior to installation.

The licensee's procedures have provided for procurement of commercial grade spare parts for use in safety-related applications. In these cases the licensee has stated that the review by licensee personnel and the signature of the technical reviewer on the purchase requisition showing "safety-related/catalog" or "safety-related/commercial" documents the licensee certification of equivalency to the original design and "dedication" as required by 10 CFR 21 to use "commercial grade items" in "basic components" (safety-related applications).

Certain parts of safety-related systems, components and structures which do not affect the safety function may be designated nonsafety-related.

The three purchase orders identified by the NRC inspector as procuring commercial grade parts for safety-related applications included the following:

- (1) The containment building personnel access hatch main door gasket
- (2) Containment Spray Pump bearings
- (3) Circuit breakers and undervoltage relays for the Static Uninterruptable Power Supply (SUPS) (storeroom records show these breakers to have been issued for installation).

The NRC inspector determined that no documentation existed of the tests or analysis performed for the dedication of these commercial grade parts, nor would the licensee's procurement procedure positively preclude use of such parts in safety-related applications.

10 CFR Part 50, Appendix B, Criterion V, requires that activities affecting quality shall prescribe by documented instructions or procedures. The failure to the licensee to have procedures to (1) assure that all purchase order packages contained required documentation and that such documentation was retrievable, (2) to assure purging or modifying of spare and replacement parts as a result of design changes, and (3) to preclude the use of commercial grade spare parts in safety-related applications without proper dedication is an apparent violation of 10 CFR Part 50, Appendix B, Criterion V. (50-382/8442-01)

4. Exit Interviews

The NRC inspector met with the licensee representatives (denoted in paragraph 1) and the NRC resident inspectors at the conclusion of the inspection on October 26 and December 7, 1984. The NRC inspector summarized the purpose, scope, and findings of the inspection.

5. Meeting with LP&L concerning the Procurement of Commercial Grade Parts for Safety-Related Applications

On November 1, 1984, the NRC Region IV personnel and LP&L representatives listed below met to discuss procurement and dedication of "commercial grade items" when used in safety-related applications.

The discussion was based on the information presented in paragraph 3 of this report. Regional management emphasized the need for responsive LP&L action in the following areas:

- a. Review and revisions to licensee procedures to assure the adequate verification of equivalency and acceptability of "commercial grade items" when dedicated for use in safety-related applications.
- b. A review of all replacement parts installed in safety-related applications which have been purchased as commercial grade to assure their equivalency and acceptability.

- c. A program to assure that commercial grade parts now in spares are dedicated and the dedication process is documented either in advance or as they are used.

List of Attendees: W. A. Crossman, NRC Region IV
R. Ireland, NRC Region IV
E. H. Johnson, NRC Region IV
J. R. Boardman, NRC Region IV
W. J. Baldwin, LP&L
J. J. Denkevitz, LP&L
W. M. Morgan, LP&L
K. L. Brewster, LP&L
Rick Naylor, LP&L
Tracy A. Flippo, NRC Resident Inspector
A. Lockhart, LP&L
J. Woods, LP&L
F. J. Englebracht, LP&L
A. J. Marlborough, LP&L Purchasing
J. E. Adkins, LP&L Procurement

6. Meeting with LP&L To Discuss Procurement Of Commercial Grade Parts For Safety-Related Applications

On November 26, 1984, there was a meeting between the licensee and Region IV staff at Region IV offices. The licensee gave a presentation of their program for ordering and controlling commercial grade safety-related spare parts. Attendees were as follows:

NRC Attendees: R. D. Martin, Regional Administrator
R. P. Denise, Director, DRSP
J. E. Gagliardo, Site Director, Waterford 3 Task Force
W. A. Crossman, Chief, Reactor Project Section B
G. L. Constable, Senior Resident Inspector
J. R. Boardman, Reactor Inspector

Licensee Attendees: R. S. Leddick, Senior Vice President Nuclear Operations
R. P. Barkhurst, Plant Manager
K. W. Cook, Manager, Licensing
R. F. Burski, Manager, Engineering & Nuclear Safety
A. S. Lockhart, Consultant