

APPENDIX B

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-382/88-23

Operating License: NPF-38

Docket: 50-382

Licensee: Louisiana Power & Light Company (LP&L)
317 Baronne Street
New Orleans, Louisiana 70160

Facility Name: Waterford Steam Electric Station, Unit 3 (W3)

Inspection At: W3, Taft, Louisiana

Inspection Conducted: August 22-26 and September 19-23, 1988

Inspector:

J. Barnes
for W. M. McNeill, Reactor Inspector, Materials
and Quality Programs Section, Division of
Reactor Safety

9-27-88
Date

Approved:

J. Barnes
I. Barnes, Chief, Materials and Quality
Programs Section, Division of Reactor Safety

9-27-88
Date

Inspection Summary

Inspection Conducted August 22-26 and September 19-23, 1988 (Report 50-382/88-23)

Areas Inspected: Reactive, unannounced inspection of potential enforcement findings which were identified by the Vendor Inspection Branch (VIB) in NRC Inspection Report 50-382/87-19. Included in this review was followup of a previously identified Region IV inspection finding.

Results: Within the area inspected, four violations (failure to process vendor information properly, failure to control the process of dedication, failure to correct identified misclassification of equipment, and failure to justify the acceptability of nonconforming circuit breakers for continued use, paragraph 2) were identified.

One unresolved item (procurement practice used for Okonite tape and cement, paragraph 2) was identified.

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DETAILS1. Persons ContactedLP&L

- *S. A. Alleman, Nuclear Quality Assurance (QA) Manager
- *D. E. Baker, Nuclear Operations Support & Assessments
- *R. P. Barkhurst, Vice President, Nuclear
- L. R. Bernadas, Associate Engineer
- *N. S. Carns, Nuclear Plant Operations Manager
- A. L. Cilluffa, Maintenance Engineer
- B. C. Collyer, Fire Protection Engineer
- *D. V. Gallodoro, Procurement Engineering Supervisor
- C. D. Groome, Licensing Engineer
- B. E. Haylock, Electrical Supervisor
- R. B. Hereford, Systems Engineer
- A. L. Holder, Loss Control Engineer
- *J. E. Howard, Procurement/Programs Manager
- *P. A. Jackson, Electrical Supervisor
- J. Johnston, Engineer
- M. J. Jordan, Data Base Maintenance Engineer
- G. F. Koehler, QA Audit Supervisor
- A. G. Larsen, Electrical Superintendent
- *L. W. Laughlin, Site Licensing Supervisor
- J. M. Mahoney, Lead Maintenance Planner
- D. Marpe, Lead Maintenance Engineer
- *G. S. Matharu, Senior Engineer
- *J. R. McGaha, Nuclear Operations Engineering & Construction Manager
- *B. G. Morrison, Licensing Engineer
- *P. V. Prasankumar, Assistant Plant Manager, Technical Services
- M. W. Ridley, Data Base Maintenance Engineer
- E. E. Rogers, Systems Engineering Department Head
- T. Smith, Plant Engineering Superintendent
- T. E. Watkins, Systems Engineer
- G. C. Wood, Nuclear Purchasing Supervisor
- *G. M. Woodard, Event Analysis Reporting & Response

*Denotes personnel attending exit meeting.

The NRC inspector also contacted other personnel including administrative and clerical personnel during the course of the inspection.

2. Followup on VIB Potential Enforcement Findings and A Previously Identified Inspection Finding (92701)

The objectives of this inspection were to further evaluate the potential enforcement findings identified in NRC Inspection Report 50-382/87-19 and determine appropriate enforcement actions. During this review, the

corrective actions taken by the licensee were also reviewed. In addition, a further review was performed of a previously identified Region IV open item.

- a. (Closed) Potential Enforcement Finding (382/8719-01): Service letters from an emergency diesel generator (EDG) vendor were not evaluated and necessary corrective actions taken. This finding identified that 17 vendor bulletins from Cooper Industries (formerly Cooper-Bessemer) were not reviewed. In addition, the corrective action recommended by Bulletin No. 691 was not implemented and several bolts of the turbocharger supports of the EDGs were found by the VIB inspectors to be loose or fractured.

The licensee documented this problem on Quality Notice (QN) QA-88-001 and identified corrective action in letters to the NRC (W3SA88-0035 and W3P88-0040). The root cause of the problem appears to be that the Operations Assessment and Information Dissemination (OA & ID) group reviewer assumed, erroneously, that the required review had been performed because the letters were sent to the OA & ID group by Plant Engineering. Normally the letters would have come directly from the vendor to OA & ID and then sent to Plant Engineering for review. The NRC inspector found that the bulletin in question has now been reviewed and the corrective action completed under Work Authorization No. 01009486. A preventive maintenance task has also been implemented to periodically verify the torque of the bolts in question. All of the remaining service letters from the same vendor have had a second review to assure that required corrective actions have been taken. Approximately 1600 service letters from other vendors have also been checked to verify documentation of a proper review. Seven hundred and seventy vendor letters had a second review and twenty items were identified where minor program or procedure changes were required. No hardware changes were indicated by the licensee to have been required other than that referenced above. Procedure NOSAP-201 (formerly NOSAI-201), "Process of Vendor Information," has been revised to require documentation of technical reviews. Training of affected personnel has taken place. Additional preventive action, which is not addressed in the letters to the NRC mentioned earlier, has been to establish a "Key Vendor List." The NRC inspector reviewed the current list (W3B88-1110) dated June 29, 1988. This list identifies the vendors of critical equipment such as high and low pressure safety injection pumps and motors, containment spray pumps and motors, emergency feedwater pumps and motors, charging pumps and motors, 480 V and 4.16 KV switchgear, emergency diesel generators, radiation monitors, main steam isolation valves, pressure instruments, safety-related valves, safety-related relays, and safety-related valve operators. This preventive action also addresses the request for additional information contained in Item 2.2 of Generic Letter 83-28. It is planned to ask each "Key Vendor" to identify all service letters that have been applicable to W3 and also establish a system for communication of any future letters to W3. The NRC inspector found that the procedures

controlling the activities in regard to the "Key Vendor List" have not been established as of the time of this inspection.

This Potential Enforcement Finding (382/8719-01) is identified as an apparent violation of Criterion V of Appendix B to 10 CFR Part 50 (382/8823-01). The NRC inspectors noted that the preventive actions in regard to the "Key Vendor List" have not been documented to the NRC and fully implemented. Other corrective actions have been verified.

- b. (Closed) Potential Enforcement Finding (382/8719-02): Okonite tape and cement were purchased without 10 CFR Part 21 being included as an applicable requirement in the purchase order. The tape and cement should have been classified as basic components because the purchase order identified that they were to meet the requirements of an environmental qualification (EQ) test report for nuclear applications.

This problem has occurred because the vendor will not accept 10 CFR Part 21 and Appendix B of 10 CFR Part 50. The NRC inspector found that LP&L has changed its procurement practices in Procedure NOEI-152, "Safety-Related Procurement Methods and Standard Technical & QA Statements," so that this material is ordered by a part number with the requirement that the lots supplied are certified as equivalent to the lots used for EQ testing. However, the EQ test is not referenced, only the lot numbers that were used in the testing. It should be noted, as stated in NUREG-0302, Revision 1, 21.21(a)-7, that the vendor is obliged to comply with 10 CFR Part 21 even though the procurement documents make no reference to it if a "basic component" is involved.

It appears that LP&L was following its procedures in regard to commercial grade procurement because of the vendor insisting that the product is a commercial grade item and not a basic component. From review of a record of an LP&L telephone communication with the vendor, it would also appear that other utilities have procured these items in a similar manner to the LP&L procurement practice. This subject is considered an unresolved item pending further NRC staff review (382/8823-02).

- c. (Closed) Potential Enforcement Finding (382/8719-03): Dedication of commercial grade items for safety-related applications was done improperly. This finding cited six examples of improper dedication of commercial grade materials for safety-related applications. Additional review by the NRC inspector of the cited examples found the following:

Example 1

The NRC inspector found, in regard to the Potter Brumfield relay which was dedicated for installation in the "A" emergency chiller by Parts Quality Determination (PQD) 491, that there was no documentation of the evaluation and dedication process. A

maintenance engineer had failed to follow Procedure UNT-7-021, "Spare Parts Equivalency Evaluation Report/Parts Quality Level Determination," Revision 3, paragraph 5.3.4.2 with respect to documentation of the evaluation process. A new PQD was initiated, PQD 812, dated January 5, 1988, which did properly document the dedication process. The procedure has been revised in this area to require more explicit documentation of the evaluation and dedication process. The failure to dedicate this item in accordance with established design control measures is an apparent violation of Criterion III of Appendix B to 10 CFR Part 50 (382/8823-03).

Example 2

In regard to the Limitorque hypoid gear that was dedicated for installation by PQD 0371, the NRC inspector found that the licensee had documented this condition on Discrepancy Notice 3910-87. In this instance, a systems engineer did not comply with the technical evaluation requirements of paragraph 5.3.4.2 of Procedure UNT-7-021. The gear in question was removed and replaced with an acceptable gear. The failure to dedicate this item in accordance with established design control measures is considered an additional example of the apparent violation discussed above in example 1 (382/8823-03).

Example 3

The NRC inspector found, in regard to the cited example of a failure to verify Potter Brumfield supplied information, that this had been done subsequent to the VIB inspection. The vendor's QA program and design control program were reviewed by the licensee. Letters documenting such were reviewed by the NRC inspector. This problem occurred because the original vendor of this commercial grade material was removed from the qualified supplier list (QSL) and its subtier vendor (Potter Brumfield) was used for procurement but was not on the QSL. The licensee reported that this sort of event is very rare.

Example 4

The NRC inspector found, in regard to Purchase Order L-48806-P for Westinghouse 600 volt molded case circuit breakers, that "Condition Identification" (CI) reports 253451 and 253452 and associated "Work Authorizations" (WA) 01010770 and 01010776 have been initiated. These documents will cause replacement of the nonsafety-related breakers with safety-related breakers. This activity has not been accomplished to date.

This finding was identified as a result of the VIB inspectors observing that a Certificate of Conformance (C of C) to the LP&L vendor (Systems Control) had been signed by sales personnel of a subtier vendor (Westinghouse Electrical Supply Company). It was additionally known that Westinghouse corporate policy authorizes only

the Nuclear Services Integration Division to supply and certify nuclear parts, materials, etc., even if commercial grade items. From the available information, it would appear in doubt whether Systems Control passed on LP&L procurement requirements to the subtier vendor. The results of this inspection would indicate that LP&L should have recognized the inadequacy of the C of C, in that Procedure NOEI-152, "Safety-Related Procurement Methods & Standard Technical & QA Statements," Revision 1, dated September 8, 1987, shows by reference to Westinghouse documents in Attachment 7.1 an awareness of Westinghouse corporate policy. The failure to dedicate these items in accordance with established design control measures is considered an additional example of the apparent violation discussed above in example 1 (382/8823-03).

In review of the replacement activity of the breakers, the NRC inspector noted the following problem. Originally, two other CIs and two other WAs addressed the replacement and required the breakers be replaced with nonsafety-related breakers. In the close out review of the WAs, the error of not using safety-related breakers was noted and documented in CI reports dated January 6, 1988. The NRC inspector found that the replacement error occurred because the "Station Information Management System" (SIMS) had failed to identify the parts as safety-related. An information field in SIMS was blank because the SIMS had not been updated after a modification done 6 months prior. With the information field blank, the replacement activity was assumed to be nonsafety-related. There appears to be a need for additional controls in the updating of SIMS and or the processing of SIMS information. This was identified as an open item (382/8823-04).

As noted above, replacement of the nonsafety-related breakers had not been accomplished as of this inspection, with the equipment remaining installed in a safety-related application for control room emergency lighting. This condition had not been evaluated in terms of a justification for continued use. The licensee developed the technical justification for continued use of the circuit breakers on September 21, 1988. The failure to prepare a technical justification for continued use of the circuit breakers after identification of their nonconforming status was identified to the licensee on September 26, 1988, as an apparent violation of Criterion XV of Appendix B to 10 CFR Part 50 (382/8823-05).

Example 5

The VIB inspectors found that Burns and Roe had audited the LP&L spare parts procurement program in 1983. The Burns and Roe audit was part of the corrective action to a 10 CFR Part 50.55(e) report, No. 63, issued in 1983 by LP&L. A vendor, Delta Electronics, had substituted Magnecraft relays for Potter Brumfield relays on one purchase order. This was identified on receipt in 1982 by the licensee in Discrepancy Notice 659-82. Discrepancy Notice 659-82 was dispositioned to accept "as is" and the purchase order changed to

reference Magnacraft relays. As a result, the relays were classified as Quality Class III (commercial grade that can be dedicated as safety-related grade) and not IV (nonsafety-related). Even though this was identified by Burns and Roe in 1983, these parts were not properly identified as Quality Class IV as of the time of the VIB inspection in 1987. As of this inspection, the parts had been properly classified as Quality Class IV. It should be noted that the Magnacraft parts could not be used without a "Spare Parts Equivalency Evaluation Report" (SPEER) in the W3 program. The failure to correct the identified misclassification of equipment is an apparent violation of Criterion XVI of Appendix B to 10 CFR Part 50 (382/8823-06).

Example 6

The NRC inspector found that the diesel generator vendor, Cooper, had taken exception to the purchase order in question and identified some parts as noncritical. Cooper's exceptions had not been acted upon to reclassify the parts in question to Quality Class IV. The licensee identified this problem in "Problem Evaluation/Information Request" 10465. The licensee did review a sample of other purchase orders to Cooper and found additional (41) parts which were reclassified. The reclassifications were from Quality Class III to IV in the LP&L system, or critical to noncritical in Cooper's system. In addition, the specification for procurement of Cooper spare parts was revised and clarified. This problem appears to be unique to the diesel generator vendor who classifies the parts. In addition, as noted above, parts could not be used in other systems without a SPEER. The parts are identified with part numbers unique to the diesel vendor.

Summary: The results of this inspection indicate, with respect to the examples discussed above, that examples 1, 2, and 4 are apparent violations of Criterion III of Appendix B to 10 CFR Part 50 and the LP&L dedication Procedure UNT-7-021 (382/8823-03). In addition, the failure of the licensee with respect to example 4 to prepare a technical justification for continued use of the nonconforming circuit breakers in a safety-related application is an apparent violation of Criterion XV of Appendix B to 10 CFR Part 50 (382/8823-05). The failure to correct identified misclassification of equipment, which is discussed in example 5, is an apparent violation of Criterion XVI of Appendix B to 10 CFR Part 50 (382/8823-06). The results of this inspection also indicate that example 3 would appear to be an isolated event of questionable significance, with the parts being verified to be acceptable. Similarly, example 6 would appear to be of limited significance, in that it involves one vendor who retains the authority to classify components, and who supplied components in accordance with his classifications. It was additionally noted during this inspection

that LP&L corrective actions taken to date, as a result of the VIB inspection findings, have been very specific in nature and with little evidence of generic assessment.

- d. (Closed) Potential Enforcement Finding (382/8719-04): A 10 CFR Part 50.59 review had not been performed in regard to procedure changes that were the result of a 10 CFR Part 21 report from the vendor of fire dampers. The vendor in question, Ruskin, supplied approximately 100 fire dampers to LP&L. It was found that they would not close under flow conditions when used in a multiple configuration. LP&L took corrective action by having its fire strategy procedure changed to have the fans secured in the event of a fire, so that there would be no flow.

The NRC inspector found that the dampers in question are not required by the Final Safety Analysis Report (FSAR) or the original design specification (LOU 156.744A) to close under flow conditions. National Fire Protection Association (NFPA) Code 90A does address this requirement; however, NFPA 90A was not a commitment in the FSAR. At W3, there are 11 applications of multiple damper sections in use in 10 different fire areas. In the Updated Safety Analysis Report, the loss of air flow and its consequences is analyzed and fan coolers in the areas in question are not required for accident mitigation or safe shutdown.

Therefore, this finding is not considered to be a violation, because the loss of air flow and its consequences is an analyzed event and a 10 CFR 50.59 review is not required in this instance.

- e. (Open) Open Item (382/8811-02): Review of the replacement activity of Heinemann breakers. This item dealt with the inspection of Heinemann breakers and their replacement. CI 254870 and the WA for this activity were not closed as of the time of this inspection. The NRC inspector found that the inspection for verification of manufacture dates was completed for the 11 breakers and the final close out of the WA was under way. The licensee had also documented this problem on Potential Reportable Event 88-033. The review of this report is also still ongoing.

3. Unresolved Item

Unresolved items are matters about which more information is required in order to ascertain whether or not the items are acceptable, violations, or deviations. The following unresolved item was discussed in this report:

<u>Paragraph</u>	<u>Item</u>	<u>Subject</u>
2.b	382/8823-05	Procurement practice used for Okonite tape and cement

4. Exit Meeting

The NRC inspector conducted an exit meeting on August 26, 1988, with the licensee personnel denoted in paragraph 1. At this meeting, the scope and findings of the inspection were summarized. Additional reviews were conducted in Region IV offices the week of September 19, 1988. Results of these reviews were communicated to licensee personnel by a conference call on September 26, 1988.