

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-483/84-44(DRS)

Docket No. 50-483

License No. NFI 25

Licensee: The Union Electric Company
Post Office Box 149
St. Louis, MO 63166

Facility Name: Callaway, Unit 1

Inspection At: Callaway Site, Callaway County, MO

Inspection Conducted: September 25-27 and October 2-3, 1984

Inspectors: *[Signature]* for
R. Westberg

10/12/84
Date

[Signature]
W. Kropp

10/12/84
Date

Approved By: *[Signature]*
F. Hawkins, Chief
Quality Assurance Programs Section

10/12/84
Date

Inspection Summary

Inspection on September 25-27 and October 2-3, 1984 (Report No. 50-483/84-44(DRS))

Areas Inspected: Routine, announced inspection of previous inspection findings and procurement. The inspection involved 31 inspector-hours onsite by two NRC inspectors.

Results: In the area inspected, one item of noncompliance was identified - Criterion V (instructions, procedures and drawings) paragraph 3.b.(2).

DETAILS

1. Persons Contacted

Union Electric Company (UE)

- *S. Hogan, QA Engineer
- +H. Blinn, QA Engineer
- *+D. Ostrander, Supervising Engineer - Materials
- +J. Laux, Supervising Engineer - QA Technical Support
- *+W. Norton, QA Engineer
- +J. Davis, Superintendent - Compliance
- +W. Powell, Assistant Manager - Materials
- +S. Mitenberger, Manager - Callaway Plant
- *+H. Albertson, Engineer - Materials
- *R. Wink, Compliance
- *L. Zahone, Assistant Supervisor QC
- *J. Veatch, Supervising Engineer

U.S. Nuclear Regulatory Commission

- +B. Little, Senior Resident Inspector - Operations

+Denotes those attending the exit interview on September 27, 1984.

*Denotes those attending the exit interview on October 3, 1984.

2. Action on Previous Inspection Items

(Open) Open Item (483/84-11-23): The vendor history file was not controlled by a formal procedure covering content and use. This action is pending.

3. Procurement Program

The implementation of the written procurement program was inspected to verify compliance with regulatory requirements, the operational QA program (FSAR Section 17.2) and applicable American National Standards. In addition, special attention was given to the procurement of commercial grade items.

a. Documents Reviewed

- (1) APA-ZZ-00400, "Procurement of Parts, Suppliers, Materials and Services", Revision 1
- (2) WEP-ZZ-00001, "Procurement Level V List Development, Control and Revision", Revision 1
- (3) WEP-ZZ-00002, "Safety Classifications", Revision 0

- (4) WEP-ZZ-00003, "Procurement Code Manual" (PCM-1)", Revision 0
- (5) "Union Electric Company Procurement Code Manual PCM-1", Revision 25
- (6) Spec. NUC-001(Q), "General Requirements for Supplier Quality Assurance Programs for the Callaway Plant", Revision 3
- (7) Safety Related Purchase Orders
 - (a) No. 91771, Eagle Picher Industries
 - (b) No. 91853, Rosemount Inc.
 - (c) No. 91919, Furmanite Corp.
 - (d) No. 91720, Wolcott Water Systems
 - (e) No. 91641, McDonnell Douglas
 - (f) No. 91792, Rodswell International
- (8) Level V Purchase Orders
 - (a) No. 91889, Seal Tite Corp.
 - (b) No. 91925, House of Tools & Engineers
 - (c) No. 91667, WESCO
 - (d) No. 91850, McMaster-Carr
 - (e) No. 91867, Bruening Bearings
- (9) Vendor Audits/Evaluations
 - (a) Furmanite America Inc.
 - (b) Reliance Electric
 - (c) Controls for Environmental Pollution
 - (d) Team Inc. Subsidiaries Team/Teco
 - (e) Conax Corp.
- (10) Union Electric Quality Suppliers List
- (11) Level V Commodity Evaluations
 - (a) Galvanized Steel Sheet
 - (b) Isopropyl Alcohol
 - (c) Drive Belt
 - (d) Vegetable Fiber Gasket Sheet
 - (e) Terminal Lug
 - (f) Heat Conducting Compound
 - (g) Gasket, Type PE-800
 - (h) Gasket, Felxitallic
 - (i) Ball Bearing
 - (j) Lubricant

b. Results of Inspection

- (1) The inspector selected six safety-related purchase orders at random to verify that purchase documents were prepared in accordance with procedural requirements, that the items were

purchased from qualified vendors, and that the purchase documents specified adequate quality and technical requirements. In addition, five vendor audits were reviewed to verify conformance to procurement procedures.

- (2) The inspector reviewed five Level V (commercial grade) commodity procurements and receipt inspection packages selected at random from the Level V Commodity List. This review consisted of the following: conformance with 10 CFR 21 requirements, procedure conformance, conformance with ANSI N45.2.13-1976, adequacy of the evaluations, and adequacy of receipt inspection.

- (a) The procedure (WEP-ZZ-00001) for the evaluation of items to be placed on the Level V Commodity List was reviewed. The implementation of the procedure was also reviewed. In general, UE was in conformance with the procedure; however, the procedure itself was not adequate, in that it failed to provide complete guidance for the justification of commodities to be procured Level V.

Specifically, the review of the evaluations for placing items on the level V commodity list revealed the following:

- 1 The critical characteristics for certain level V commodities were not always determined.
 - 2 Nationally recognized manufacturing standards were not always referenced when applicable.
 - 3 Justifications for level V purchases were not always documented (i.e., generic manufacturing process, degree of standardization, quality history, or complexity of the item).
- (b) Procurement procedure APA-ZZ-00400 specified that the method of product acceptance for level V commodities was through receipt inspection. The request for receipt inspection (Form No. CA-97) and the Receipt Inspection Reports which were reviewed did not address verification of all quality characteristics after delivery as required by ANSI N45.2.13-1976, Paragraph 10.3.2. Two notable omissions were dimensions and material composition. Procedure APA-ZZ-00400 was not adequate, in that it did not provide adequate guidance to ensure that the appropriate characteristics were verified upon receipt of an item.

These failures to include appropriate quantitative or qualitative acceptance criteria for procurement of level V commodities in the applicable procedures is considered to be an item of noncompliance with 10 CFR 50, Appendix B, Criterion V. (483/84-44-01)

4. NRC Follow-Up Inspection

On October 2-3, 1984, a follow-up inspection was conducted to evaluate the licensee's progress on the remedial corrective action pertaining to the item of noncompliance identified in this inspection report [paragraph 3.b.(2)]. The licensee's remedial corrective action consisted of reviewing all level V purchase orders closed after January 1, 1984, to determine if unacceptable material had been installed in plant systems. The licensee identified 72 level V purchase orders which had been closed after January 1, 1984. The majority of the 72 purchase orders consisted of commodities which were simple in design, manufactured with proven processes or would be subjected to testing for acceptability after installation. Examples of the commodities on the list of 72 purchase orders included machine screws, lens caps, diodes, cable ties, transistors, indicator lamps, washers and lubricant. At the time of this inspection, the review was approximately 20% complete.

The inspector selected from the list of 72 purchase orders, six commodities which had the greatest potential of requiring special qualification requirements. The items selected were as follows:

- a. Purchase Order 91578 - Relay
- b. Purchase Order 91638 - Limit Switch
- c. Purchase Order 91580 - Gaskets
- d. Purchase Order 91871 - O-Ring
- e. Purchase Order 91686 - O-Ring
- f. Purchase Order 91695 - O-Ring

A review of these purchase orders revealed that three were not safety-related items (Purchase Orders 91578, 91638 and 91686). The nonsafety-related classification was determined by the inspector through review of applicable design documents. The remaining purchase orders which were reviewed did not require any special nuclear qualification requirements to be identified in the purchase order. Therefore, their classification as level V procurements was justified.

The inspector also reviewed approximately 70 purchase orders closed prior to January 1, 1984, and noted that the items were similar to the type of items identified on the list of 72 purchase orders presently being evaluated by the licensee. The inspector concluded that the sample of 72 purchase orders selected by the licensee was representative of the types of items procured as level V commodities. Based on the inspector's observations and the six purchase orders sampled, the remedial corrective action being taken by the licensee to determine the acceptability of installed level V commodities is progressing satisfactorily and there appears to be no potential hardware problems.

5. Exit Interview

The NRC inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on September 27 and October 3, 1984. The NRC inspectors summarized the purpose, scope, and findings of the inspection.