

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-483/84-40(DRS)

Docket No. 50-483

License No. NPF-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 (September 4-7 and 11-13,  
1984)  
Union Electric Corporate Office, St. Louis, MO (September 14,  
1984)

Inspection Conducted: September 4-7 and 11-14, 1984

*M.C. Choules*  
Inspectors: N. C. Choules

10-3-84  
Date

*MC Choules for*  
J. A. Malloy

10-3-84  
Date

*F. C. Hawkins*  
Approved By: F. C. Hawkins, Chief  
Quality Assurance Programs Section

10/3/84  
Date

Inspection Summary

Inspection on September 4-7 and 11-14, 1984 (Report No. 50-483/84-40(DRS))

Areas Inspected: Routine, announced inspection by two regional inspectors of previous inspection findings, the startup testing audit program, and implementation of the surveillance and calibration program. The inspection involved 90 inspector-hours onsite by two inspectors and three inspector-hours at corporate headquarters by one inspector.

Results: No items of noncompliance or deviations were identified.

## DETAILS

### 1. Persons Contacted

#### Union Electric Company

##### Corporate Office

- \*R. J. Schukai, General Manager, Engineering
- \*D. W. Capone, Manager, Nuclear Engineering
  - R. Wendling, Superintendent, Nuclear Engineering
  - J. T. Stoecklin, Supervising Engineer, Nuclear Engineering
- \*W. S. Strothman, Supervising Engineer, Supplier Qualification

\*Denotes those attending the exit interview on September 14, 1984 at the corporate office.

##### Callaway Plant

- S. E. Miltenberger, Manager, Callaway Plant
- \*\*A. H. Neuhafer, Assistant Manager, Operations and Maintenance
  - R. L. Powers, Assistant Manager, QA
- \*\*W. H. Stahl, Acting Superintendent, Engineering
- \*\*J. C. Gearhart, Supervising Engineer, QA Operations
- \*J. V. Lanx, Supervising Engineer, QA Technical Support
- \*\*W. A. Norton, Engineer, QA
- \*\*R. L. Plantz, Engineer, QA
- \*\*G. J. Czeschin, Superintendent, Planning and Scheduling
- \*\*J. E. McLaughlin, Superintendent, Administration - Records
  - J. E. Davis, Superintendent, Compliance
  - J. L. Jones, Materials Supervisor
  - K. Wickes, Supervisor, Instrument and Control
- \*\*E. H. Bowman, Materials Advisor
- \*\*J. E. Clark, Engineering Activity Coordinator
  - W. Jessop, Senior Training Supervisor

\*\*Denotes those attending the exit interview on September 13, 1984 at the Callaway site.

Other personnel were contacted as a matter of routine during the inspection.

### 2. Action on Previous Inspection Findings

- a. (Open) Open Item (483/84-11-02): Design change procedures did not adequately address requirements at turnover of design changes to operations, contents of modification history packages were not addressed, and acceptability of testing of a completed design changes was not addressed. The licensee had revised Procedure APA-ZZ-00600, ("Design Change Control") to include requirements regarding (1) turnover of design changes to operations and (2) the

acceptability of testing for completed design changes. Applicable training of operators at turnover had not been included. The licensee agreed to revise the procedure to include training. Procedure APA-ZZ-04005 ("Design Change Revision and Development") had been revised to address the documents that should be included in the final modification history package.

The licensee had also revised APA-ZZ-04005 to permit Plant Engineering to develop simple safety-related design changes. Previously, it was intended that Union Electric Nuclear Engineering would develop all safety-rated design changes. Review of the procedure indicated that the design input checklist of ANSI N45.2.11-1974 had been included in the procedure, but the design verification checklist had not. The licensee agreed to revise APA-ZZ-04005 to include the design verification checklist. This item will remain open pending the appropriate revisions of APA-ZZ-04005 and APA-ZZ-00600.

- b. (Closed) Open Item (483/84-11-04): Drawing control concern (three items). Two items were closed out in IE Report No. 483/84-24. Procedure QS 26 ("Drawing Development and Review") had been prepared and approved to address the control of drawings and drawing revisions. This resolves the drawing control concerns.
- c. (Closed) Open Item (483/84-11-05): Miscellaneous plant design change program concerns (three items). The licensee had revised Procedure APA-ZZ-380 ("Temporary System Modification") such that temporary emergency modifications were not addressed by this procedure. Temporary emergency modifications will be handled in accordance with 10 CFR 50.54(x). Accordingly, the licensee had revised the Nuclear Safety Evaluation Checklist, used to document 10 CFR 50.59 reviews, to require the basis for the evaluation to be documented on an attached sheet. Responsibilities for reporting the information required by 10 CFR 50.59 had been established in procedure APA-ZZ-0600 ("Design Change Control") and APA-ZZ-00520 ("Reporting Requirements and Responsibilities").
- d. (Open) Open Item (483/84-11-06): Nuclear Engineering Department design change program concerns (three items). The licensee had revised Procedure QE-325 ("Design Input Control") to include all of the design inputs listed in ANSI N45.2.11-1974. Procedure AE-323 ("Design Change Control") had been revised to require review by a qualified individual to determine the safety classification of a design change. Individual training records for Nuclear Engineering personnel had not been established. The licensee was in the process of establishing new training programs and personnel records will be addressed as part of this action. This item will remain open pending completion of the development of this training program.
- e. (Closed) Open Item (483/84-11-07): Work Request procedure and form concerns. The licensee had revised Procedure APA-ZZ-00320 ("Initiating and Processing Work Requests") and the Work Request (WR) form to address the majority of items listed in the inspection report. The following items not addressed by the procedural revisions were reviewed in more detail during this inspection.

- (1) The procedure did not require the Shift Supervisor to approve in writing all safety-related WRs. The licensee indicated that all WR's that affect operating equipment are approved in writing and others by verbal approval. The licensee indicated that they desired this option because the WR approvals which were obtained verbally did not normally involve work, but were written to obtain information. Verbal approval of these WR's would limit traffic in the control room. Based on the level of work to be performed by verbally approved WR's, the inspectors concluded this was acceptable.
  - (2) The licensee did not include requirements to record on the WR form the tagout number, date and time when the WR was initiated. They did not feel that this data would be useful because tagouts could be tracked by other means. The inspector has no further questions regarding this matter at this time.
- f. (Closed) Open Item (483/84-11-10): The fire watch procedure did not require the fire watch to be capable of communicating with the control room. The licensee had trained the fire watches to be capable of communicating with the control room. Procedure APA-ZZ-00740 ("Requirements for and Duties of Fire Watches") had been revised to require the fire watches to determine the location of the nearest communication system when standing a fire watch.
  - g. (Closed) Open Item (483/84-11-11): The tagout procedure did not reference the out of service procedure and log. Procedure APA-ZZ-00310 ("Workman's Protection Assurance and Caution Tagging") had been revised to reference and follow Procedure ODP-ZZ-0002 ("Equipment Status Control") when equipment is removed from service.
  - h. (Open) Open Item (483/84-11-12): A procedure for the control of test and experiments had not been completed. At the time of this inspection, the licensee had not completed the procedure. It is scheduled to be completed by November 15.
  - i. (Closed) Open Item (483/84-11-13): Management policy statements which addressed and provided (1) instructions for audits, (2) review of proposed audits by the Nuclear Safety Review Board, and (3) an audit to verify classification of parts did not appear adequate. Instructions for audits were contained in Nuclear Function Directive No. NFD-3. The statements also established the organizational independence and authority of auditors, provisions for access of audit personnel to facilities, and personnel necessary in planning and performance of audits. The Nuclear Safety Review Board now reviews audit schedules, quality assurance department audit planning guides, and audit reports. Additionally, the quality assurance department had performed an audit (No. AD5A8406C) which addressed the quality classification of parts, components and systems as specified by Procedure APA-ZZ-00430.

- j. (Closed) Noncompliance (483/84-11-15A): Failure to perform evaluations of measuring and test equipment (M&TE) using calibration standards which were found to be out of calibration. Review of records showed that an evaluation of the suspect instruments had been completed and appropriate corrective action had been taken. The licensee is now using Procedure APA-ZZ-00350 to control M&TE.
- k. (Closed) Noncompliance (483/84-11-15B): Failure to document M&TE usage in accordance with procedures. Review of computer records showed that instruments listed in the noncompliance item were now listed in the CHAMPS computer as stated in the licensee's response. CHAMPS is being utilized to record most M&TE usage in accordance with Procedure APA-ZZ-00350 ("Measuring and Test Equipment Program").
- l. (Closed) Noncompliance Item (483/84-11-15C): Failure to specify and apply calibration stickers in accordance with procedures. The inspector verified that the instruments listed in the noncompliance had been removed from service as stated in the licensee's response. Review of other instruments indicated that calibration stickers with calibration information had been applied.
- m. (Open) Noncompliance Item (483/84-11-15D): Failure to notify the Quality Assurance Department of the incident regarding exhaust gases in the control room. Review of the licensee's reporting and document distribution systems indicated significant events are required to be reported to the proper organizations, including Quality Assurance. The licensee's response indicated that the control room operators would be trained to Procedure APA-ZZ-00500 beginning on June 7, 1984. Due to a misunderstanding between the Operations and Training Departments, the training had not been performed. The licensee initiated the training during this inspection. This item will remain open pending completion of this training.
- n. (Open) Noncompliance Item (483/84-11-15E): A Startup Field Report (SFR) regarding the exhaust gases in the control room incident was not issued in a timely manner. The inspector verified that Procedure APA-ZZ-00500 had been revised to provide a means for documenting such events. Operator training on the incident had been completed. However, as stated above, training on Procedure APA-ZZ-00500 had not been completed. This item will also remain open pending completion of this training.
- o. (Closed) Unresolved Item (483/84-11-18): M&TE instruments were not identified on usage cards, discrepancy reports needed additional evaluation, and permanent process instruments used during preoperational testing were not recorded on usage cards. This item was previously inspected (IE Report No. 483/84-2B) and was left open pending closeout of Corrective Action Request (CAR) -002 by the QA department. The QA department had closed CAR-002 and the inspector has no further concerns.

- p. (Closed) Open Item (483/84-11-19): Procedure QS-23 did not adequately provide for the timeliness of review for corrective action requests. The licensee had revised Quality Assurance Procedure QS-23 ("Requests for Corrective Action"). The inspector reviewed Revision 3 to Procedure QS-23 and verified that the procedure required supervisory review of the requests for corrective action to be performed in a timely manner consistent with their importance to safety.
- q. (Closed) Open item (483/84-11-20): The construction warehouse had not established an operational QA program or a shelf life program. The procedures for control of the construction warehouse had been revised to conform to the operational QA program. Review of file records and selected material stored in the warehouse indicated that a shelf life program had been implemented.
- r. (Closed) Open Item (483/84-11-22): Certain drawings in the Emergency Offsite Facility (EOF) were not the latest revision. Additionally, the document retrieval and distribution (DRD) cards for the J-06 drawings did not have the EOF on distribution. Review of the EOF drawings and the J-06 DRD cards revealed that the deficiencies had been corrected.
- s. (Open) Open Item (483/84-11-23): Two procurement procedures had not been issued and a formal procedure covering control and use of the vendor history file had not been prepared. Procedures WEP-ZZ-0001, ("Procurement Level V List Development, Control and Revision") and WEP-ZZ-002 ("Safety Classifications") had been issued. A procedure for the control and use of vendor history file had not been prepared at the time of this inspection. This item will remain open pending preparation of this procedure.
- t. (Open) Open Item (483/84-11-24): Lack of documented methods to be used by the Nuclear Safety Review Board (NSRB) in performing their function and the use and control of subcommittees. The licensee had issued Procedure NSRBI-0001 ("The Nuclear Safety Review Board"). The procedure outlined methods to be used in performing the committee's function, including the use of subcommittees. The procedure did not mention that there were two permanent subcommittees, the Independent Safety Engineering Group (ISEG) and the Corporate Radiation Protection Committee, nor did it specify how the committee would maintain cognizance over the audit program. The licensee agreed to revise the procedure to address these items. This item will remain open pending revision to the procedure.
- u. (Open) Unresolved Item (483/84-11-25): Lack of a trending program for corrective action. The licensee's Quality Assurance Department had identified the lack of a trending program in Request for Corrective Action (RCA) No. P8403-177. This RCA had not been closed at the time of this inspection. Procedure APA-ZZ-00560 ("Management Information Reporting Program"), which defines the trending program, had been approved. The Materials Engineering Department had initiated a program to trend nonconforming material reports. Additionally, the Quality Assurance Department had initiated a program to trend RCS's,

corrective action reports, and NRC items of noncompliance. The additional action that remains to close this item includes (1) approval of Quality Assurance Procedure QAP-ZZ-00225, (2) completion and approval of the Compliance Department Procedures which address incident report trending, and (3) establishment of requirements for the independent review of trending summaries and analyses as required in FSAR Section 17.2.15 and 17.2.16.

- v. (Open) Open Item (483/84-11-27): Operator training and retraining regarding exhaust gases in the control room had not been performed. The licensee had completed formal classroom training of operators on the exhaust gases in the control room incident and will include it in the required annual retraining. Installation of a carbon monoxide and carbon dioxide monitor had not been completed and alarm procedures had not been prepared. This item will remain open until these procedures have been prepared and the operators have been trained regarding their use.
- w. (Closed) Open Item (483/84-11-28): Closure of a Request for Corrective Action (RCA) which was written against a supplier without verification of the corrective action implementation. The licensee had scheduled verification of the supplier's corrective during the next inspection of the supplier. Procedure QS-23 had also been revised to allow final closeout of RCSs against suppliers only after corrective action implementation had been verified. The inspector has no further questions regarding this item.

### 3. Surveillance Testing and Calibration Control

The inspector reviewed documentation of selected surveillance tests required by Section 4 of the Technical Specifications and calibration documentation of safety-related instruments which were not specified in the Technical Specifications to verify that the test and calibrations were scheduled and completed as required.

#### a. Documents Reviewed

- (1) ISL-BB-0L459, "Loop Calibration," Revision 2, performed 7/3/84
- (2) ISL-AE-0L517, "Loop Calibration," Revision 1, performed 5/30/84
- (3) ISF-FC-00P25, "Functional Test," Revision 0, performed 3/1/84
- (4) ISF-FC-0P125, "Functional Test," Revision 0, performed 3/2/84
- (5) ITG-ZZ-WNLP3, "Generic Procedure 7300 Card," Revision 2, performed 7/3/84
- (6) ITG-ZZ-WNCT1, "Generic Procedure 7300 Card," Revision 1, performed 5/30/84
- (7) ITG-ZZ-ML077, "Calibration of Digital Thermometer," Revision 2, performed 7/11/84
- (8) ITG-ZZ-ML079, "Calibration of Sling Psychrometer," Revision 0, performed 5/29/84
- (9) ITG-ZZ-ML085, "Calibration of Heise Model CM Gauge," Revision 0, performed 9/5/84
- (10) ITG-ZZ-ML123, "Calibration of Meg Checker," Revision 0, performed 7/13/84

b. Results of Inspection

Six completed surveillance tests, required by the Technical Specification, were selected at random and it was verified that they were included and documented in the master schedule. The inspector also verified that the tests were completed in accordance with the corresponding procedures.

Four safety-related plant instruments which were not specifically required to be calibrated by the Technical Specifications were selected at random. The inspector verified that calibrations of these instruments had been performed in accordance with the corresponding calibration procedures.

No items of noncompliance or deviations were identified in this area.

4. Quality Assurance for the Startup Test Program

The inspector reviewed the licensee's operational quality assurance program for startup and power ascension.

a. Documents Reviewed

(1) Quality Assurance Procedures

- (a) QS-3, "Surveillances," Revision 9
- (b) QA-106, "Audits: Scheduling, Planning, Performance, Documentation and Follow-up," Revision 12
- (c) QA-117, "Quality Assurance Indoctrination and Training," Revision 3

(2) Surveillances

- (a) 840607, "Refueling Machine Checkout and Procedures," 6/8/84
- (b) 840610, "QA Surveillance of the Nuclear Instrumentation Systems Used During Initial Core Load," 6/18/84
- (c) 840611, "Component Cooling Water System Alignment," 6/19/84
- (d) 840612, "To Verify that the Initial Fuel Loading is Performed in Accordance with ETT-ZZ-0710 (Initial Core Loading)," 6/27/84
- (e) 840613, "Establishing Neutron Count Reference Values During Core Loading," 6/20/84
- (f) 840616, "Source Range Neutron Flux Monitors," 6/25/84
- (g) 840701, "Selected Technical Specification Required for Mode 5 Operability," 7/2/84
- (h) 84702, "Reactor Vessel Assembly," 7/2/84
- (i) 84703, "Retest of Relief Valve EJ-87088," 7/9/84

b. Results of Inspection

The surveillance program was reviewed to verify that requirements had been developed for the observation of testing, tracking of test deficiencies, review of test documentation and acceptance criteria, and review of the status of measuring and test equipment. Surveillance



checklists and reports were reviewed to verify proper implementation. Additionally, quality assurance personnel were interviewed to verify that they understood their basic responsibilities during the startup testing phase. Surveillance reports and corrective action documents were also reviewed to verify their compliance with procedures and to verify that identified deficiencies had been resolved.

No items of noncompliance or deviations were identified in this area.

5. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on September 13, 1984 at the Callaway Plant and on September 14, 1984 at the Corporate Office to summarize the purpose, scope, and findings of the inspection.