

U.S. NUCLEAR REGULATORY COMMISSION  
OBSERVATION AUDIT REPORT NO. 92-03  
FOR THE OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
AUDIT NO. YMP-92-04 OF  
REYNOLDS ELECTRIC & ENGINEERING CO., INC.

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## 1.0 INTRODUCTION

From November 18-20, 1991, a U.S. Nuclear Regulatory Commission (NRC) staff member participated as an observer on the U.S. Department of Energy (DOE), Office of Civilian Radioactive Waste Management (OCRWM), Yucca Mountain Quality Assurance Division (YMQAD) Quality Assurance (QA) Audit No. YMP-92-04 of the Reynolds Electrical & Engineering Co., Inc. (REECO) QA program in the area of Quality Assurance Records.

This report addresses the effectiveness of the audit and, to a lesser extent, the adequacy of the REECO QA program.

## 2.0 OBJECTIVES

The object of the YMQAD audit was to evaluate the implementation and effectiveness of the REECO QA program in meeting the requirements of REECO's Quality Assurance Program Plan (QAPP) 568-Doc-115, Revision 8, Section XVII, "Quality Assurance Records." The NRC staff's objective was to gain confidence that OCRWM and REECO are properly implementing the requirements of their QA programs in accordance with Title 10 Code of Federal Regulations (10 CFR), Part 50, Appendix B.

## 3.0 SUMMARY AND CONCLUSIONS

The NRC staff based its evaluation of the YMQAD audit process and the REECO QA program on direct observations of the auditors, discussions with the audit team and REECO personnel, and reviews of the pertinent audit information (e.g., audit plan, checklists and REECO documents). The audit was conducted in a professional manner. The audit team was well qualified in the QA discipline, and their assignments and checklist items were acceptably described in the audit plan.

The NRC staff agrees with the preliminary audit team findings that REECO has adequate procedural controls in place, and program implementation is adequate, in the area of Quality Assurance Records.

## 4.0 AUDIT PARTICIPANTS

### 4.1 NRC

John W. Gilray                      Observer

### 4.2 YMQAD

Robert H. Klemens	Audit Team Leader	Science Applications International Corporation (SAIC)
Amelia I. Arceo		SAIC
Frank Kratzinger	Auditor	SAIC

## 5.0 REVIEW OF THE AUDITED ORGANIZATION

This audit was conducted in accordance with OCRWM Quality Assurance Administrative Procedure (QAAP) 18.2, "Audit Program," Revision 3 and QAAP 16.1, "Corrective Action Requests," Revision 3.

The NRC staff observation of this YMQAD audit of REECo was based on the NRC procedure, "Conduct of Audits," issued October 6, 1989.

### 5.1 Purpose/Scope of Audit

The purpose of the YMQAD audit was to evaluate the implementation and effectiveness of the QA controls applied to REECo's activities in the area of QA records.

#### (a) Programmatic Elements

The auditors used checklists based on the requirements in the REECo QAPP and other applicable documents pertaining to QA program controls for quality assurance records (Section XVII (17) of QAPP and Criterion XVII (17) of 10 CFR 50 Appendix B). Criterion 1-16 and 18-20 were not included in the scope of the audit

#### (b) Technical Areas

This audit did not involve technical areas.

### 5.2 Timing of the Audit

The NRC staff believes the timing of the YMQAD audit was appropriate. REECo was last audited February 25-28, 1991, and even though implementation was limited, the audit was useful to determine the adequacy of the REECo's QA program regarding control of records.

### 5.3 Examination of Programmatic Elements

The auditors only interviewed the REECo staff and verified through documented evidence that proper procedural controls and provisions were established and implemented to control QA records (Programmatic Element 17.0/Quality Assurance Records).

Records generated by REECo are controlled in accordance with REECo Quality Assurance Procedure QP-17.0, Revision 4, "Quality Assurance Records". All REECo records are microfilmed by Ratheon Services Nevada and copies of the microfilms are maintained in a secured and controlled manner at the REECo records center and at the Yucca Mountain Site Characterization Project Central Records Facility. In addition, REECo maintains a controlled file of the hard copies of records.

The audit team examined a sample lot of 35 record packages out of 900 record packages accumulated over the past three months to determine compliance with QP-17.0. These records included audit records, calibration

records and training and qualification records. In addition, the audit team reviewed the training and qualification records of personnel responsible for the control of REECO records.

The audit team determined that the control of records was acceptable and in compliance with QP-17.0. The REECO staff demonstrated a sound and thorough knowledge of the REECO procedural requirements and the implementation of these requirements.

#### 5.4 Conduct of Audit

This audit was productive and performed in a professional manner. The audit team was well prepared and demonstrated a sound knowledge of REECO's QA program regarding QA records. The audit checklists included the important controls addressed in REECO's QAPP Section XVII, "Quality Assurance Records," and in QP-17.0, Revision 4, "Quality Assurance Records." The audit team used the checklist effectively during the interviews with personnel and review of documents. The audit team was persistent in their interviews, challenging responses when necessary. The observer was kept well informed during the entire audit.

#### 5.5 Qualification of Auditors

The qualification and training records of the QA auditors on the audit team were reviewed by the NRC observer and were found to be acceptable, meeting the requirements of QMP-02-02, "Qualification of Auditors".

#### 5.6 Audit Team Preparation

The auditors were prepared in the areas they were assigned to audit and knowledgeable in the REECO QA procedures. Overall, Audit Plan YMP-92-04 was complete and included: (1) the audit scope; (2) a list of audit team personnel; (3) a list of the audit activities; (4) the audit notification letter (5) the appropriate REECO QA procedures; (6) the QA checklist; and (7) the past audit report.

#### 5.7 Audit Team Independence

The audit team members did not have prior responsibility for performing the activities they investigated. The audit team members had sufficient independence to carry out their assigned functions in a correct manner without adverse pressure or influence.

#### 5.8 Review of Previous Audit Findings

This audit adequately evaluated REECO's corrective actions to resolve and close out Corrective Action Request (CAR) No. 91-026 pertaining to the training and qualification records of REECO personnel. The audit team determined this CAR was satisfactorily resolved and closed out. This was the only unclosed finding from previous audits.

**5.9 Summary of NRC Staff Findings**

The NRC staff did not identify any Observations relating to deficiencies in either the audit process or REECo QA program implementation.

The auditors were well prepared, thorough, and displayed acceptable knowledge of the procedures applicable to the receipt and storage of QA records. The NRC staff agrees with the audit team's preliminary conclusion that REECo's implementation of the procedures under Criterion XVII is adequate. Further, the NRC staff believes that the audit of this criterion was effective.

**5.10 Summary - YMQAD Audit Team Findings**

The audit team did not identify any potential CARs against REECo's QA program regarding the control of records. The team did find a significant improvement in the control of processing and storing of records including those training and qualification records of REECo personnel.