

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
OFFICE OF QUALITY ASSURANCE**

**SUPPLIER AUDIT REPORT**

**OF**

**WESTINGHOUSE ELECTRIC CORPORATION**

**CYPRESS, CALIFORNIA**

**REPORT NUMBER OQA-SA-96-005  
OCTOBER 06 THROUGH 07, 1995**

Prepared by: *Richard L. Maudlin* Date: 11/13/95

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Approved by: *D. G. Horton* Date: 11/16/95

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## 1.0 EXECUTIVE SUMMARY

The results of the supplier audit of Westinghouse Electric Corporation, referred to in the report as Westinghouse Engineering Services, revealed unsatisfactory conditions resulting in the issuance of one Deficiency Report and four Performance Reports to Westinghouse Engineering Services for action which relate to the Quality Assurance (QA) program for the Office of Civilian Radioactive Waste Management (OCRWM) activities. The deficiency report related to a lack of documentation of training to procedures for performing calibrations. The performance reports related to problems with procedures not addressing activities affecting quality and a lack of implementation of requirements. The majority of calibrations performed by Westinghouse Engineering Services are accomplished using manufacturer or military accepted standards. The QA Program is implemented through the requirements established in the Quality Control Manual (QCM). This approach is considered to be effective in producing the desired results except in the areas found unsatisfactory. Westinghouse Engineering Services has instituted a computerized "Reverse Re-Call System" which allows the QC Supervisor to track all calibrations performed using a specific standard. If a standard was found out of calibration, the QC Supervisor could pull up a list of all the equipment and customers that were impacted by the standard and notify them of the problem.

The unsatisfactory conditions identified during the audit were discussed with the QC Supervisor of Westinghouse Engineering Services who agreed to resolve the unsatisfactory conditions upon receipt of the reported conditions adverse to quality. None of the conditions found appear to have an adverse impact on the activities associated with Westinghouse Engineering's scope of work.

## 2.0 SCOPE

The supplier audit was conducted to evaluate the adequacy, implementation, and effectiveness of Westinghouse Electric Corporation's quality program. This was accomplished by determining if the Westinghouse Electric Corporation's program satisfies the QA requirements specified in the T&MSS procurement document 39-9600-43-95, Westinghouse Engineering Services Quality Control Manual, Revision 4, dated July 15, 1993, as accepted by the T&MSS, and the OCRWM Quality Assurance and Requirements Description (QARD) for the scope of work. The QA program elements determined to be applicable are: Organization; QA Program; Procurement Document Control; Instruction, Procedures and Plans; Document Control; Control of Purchased Items and Services; Test Control; Measuring and Test Equipment, Corrective Action, and QA Records.

## 3.0 AUDIT TEAM AND OBSERVERS

Richard L. Maudlin, Audit Team Leader, Office of Quality Assurance (OQA), Yucca Mountain Quality Assurance Division (YMQAD)

#### 4.0 PERSONNEL CONTACTED DURING FACILITY AUDIT

G. Parker, Quality Control Supervisor, Westinghouse Electric Corporation  
W. Gruehl, Metrology Supervisor, Westinghouse Electric Corporation

#### 5.0 SUMMARY OF AUDIT RESULTS

Westinghouse Engineering Services Quality Control Manual , dated July 15,1993, addresses the applicable elements of the T&MSS procurement document No. 39-9600-43-95 and the applicable elements of the OCRWM QARD for the intended scope of work. Military and manufacturer's instructions/standards were in place and implementation was considered to effectively produce the desired results except for those areas deemed unsatisfactory and noted in Section 6.0 of this report. Specifics of the unsatisfactory conditions are described in Section 6.0 of this report "Deficiencies/ Recommendations."

The details of the audit, along with the objective evidence reviewed, are contained within the audit checklist which is available from the OQA's supplier evaluation files.

#### 6.0 DEFICIENCIES/RECOMMENDATIONS

The unsatisfactory conditions have been documented on the respective corrective action documents and submitted to Westinghouse Engineering Services for resolution. Recommendations, as applicable, have been provided for Westinghouse Engineering Services's management consideration and action as deemed appropriate. The recommendations are offered as suggestions to improve your processes and are not required to be acknowledged unless otherwise stated.

##### DEFICIENCIES

1. DR No. YMQAD-96-D-013 - The Westinghouse QC Manual, Section 2.0, requires in part that personnel be indoctrinated and trained in the skills necessary for them to carry out their function. This would include training in the appropriate procedures. Contrary to this requirement, no objective evidence could be provided to reflect that Westinghouse employees 13 and 16 had received training in the use of NAVAIR 17-20MQ, Rev. 0 and MFR, Rev 0 prior to performing calibrations to these requirements.

2. PR No. YMQAD-96-P-003 - The Westinghouse QC Manual, Section 8.1 indicates that the QC Supervisor will perform final inspection and stamp QC Approved on the form and sign, and date. Contrary to this requirement, no QC approval stamp, signature and date was found on the final inspection work order form for SAIC P.O. 39-940950-40. It should be noted that the QC Approval stamp is being placed on the Certificate of Calibration.
  
3. PR No. YMQAD-96-P-004 - The Westinghouse QC Manual, Section 8.2 requires the QC Supervisor to perform a triennial audit of calibration sources/services. If discrepancies are found during the audits, the QC Supervisor will confirm that all corrective actions were completed. Also, Section 2.0 of the QC Manual indicates that definitive guidelines are issued as QC Procedures. Contrary to these requirements: (a) There are no procedures in place which describe how supplier audits are performed and documented and requirements for the qualification and certification of Lead Auditors, and (B) The supplier audit of Dick Munns, Audit 940316-1, identified one concern, of which no objective evidence could be provided to indicate completion of corrective action.
  
4. PR No. YMQAD-96-P-005 - The Westinghouse QC Manual, Section 2.0, indicates that definitive guidelines are issued as QC Procedures. The OCRWM QARD Section 12.0, Subsection 12.2.3 requires that out of calibration M&TE shall be controlled and when M&TE is found out of calibration, the validity of results shall be evaluated. Westinghouse Engineering Services has a computerized "Reverse Recall System", however there are no procedures which describe this process.
  
5. PR No. YMQAD-96-P-006 - The Westinghouse QC Manual requires records to be copied and the originals returned to the files. Section 2.0 of the QC Manual indicates that definitive guidelines are issued as QC Procedures. Contrary to these requirements, there are no procedures which describe how QA Records are to be stored to prevent damage from fire, deterioration, etc.

## RECOMMENDATIONS

1. Copies of annual corporate audit reports of activities at the Westinghouse Cypress facility should be provided to the QC Supervisor. Documentation of the corporate evaluation should provide a clarifying statement regarding the effectiveness of implementation of the QA requirements.

2. **Westinghouse purchase orders should reference a description of the Attachments (i.e.; QA Requirements). In some instances, Westinghouse attaches an Appendix A which defines the QA requirements and sometimes it attaches the customers PO which references QA requirements. It is recommended that future purchase orders specifically reference the attachment used to convey the QA Program requirements.**