

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
DIVISION OF TECHNICAL SUPPORT

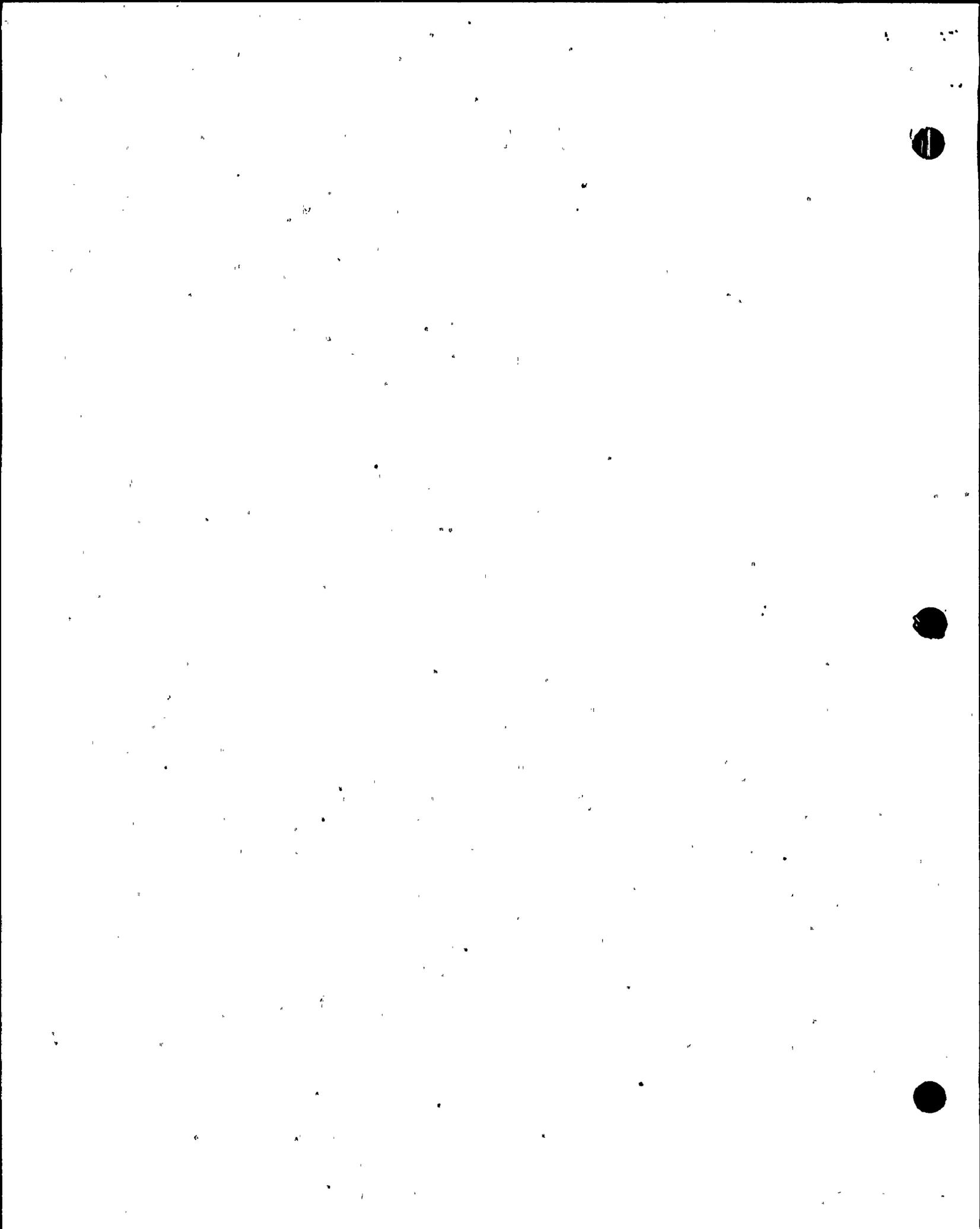
REPORT NO.: 50-244/96-201
ORGANIZATION: Rochester Gas & Electric Corporation (RG&E)
89 East Avenue
Rochester, NY 14649
ORGANIZATIONAL CONTACT: Dr. Robert C. Mecredy
Vice President - Nuclear Operations
INSPECTION DATES: January 22 through 26, 1996

LEAD INSPECTOR:  2/27/96
Anil S. Gautam
Vendor Inspection Section
Special Inspection Branch
Division of Inspection and Support Programs
Office of Nuclear Reactor Regulation (NRR)
Date

OTHER INSPECTORS: Joseph J. Petrosino, NRR

REVIEWED BY:  2/29/96
Gregory C. Cwalina, Section Chief
Vendor Inspection Section
Special Inspection Branch
Division of Inspection and Support Programs
Office of Nuclear Reactor Regulation
Date

APPROVED BY:  3/1/96
Michael R. Johnson, Acting Chief
Special Inspection Branch
Division of Inspection and Support Programs
Office of Nuclear Reactor Regulation
Date



1.0 INTRODUCTION

A vendor oversight program is a licensee's process for monitoring the vendors' quality control, consistent with the importance, complexity, and quantity of the purchased products or services. Evaluation of the process falls, in part, under 10 CFR Part 50, Appendix B, Criterion VII, "Control of Purchased Material, Equipment, and Services," which requires licensees to establish specific measures to assure that purchased material equipment and services conform to the procurement documents; and under Regulatory Guide 1.144, "Auditing of Quality Assurance Programs for Nuclear Power Plants," which sets forth NRC requirements for auditing quality assurance programs.

A special inspection to assess the adequacy and effectiveness of RG&E's vendor oversight program for monitoring the vendors' quality control for safety-related equipment was conducted by staff from the Special Inspection Branch of the Office of Nuclear Reactor Regulation, from January 22 through 26, 1996.

Details of the licensee's vendor oversight program are provided in Section 2.0. The personnel attending the entrance and exit meetings are listed in Appendix A.

2.0 MONITORING OF VENDORS

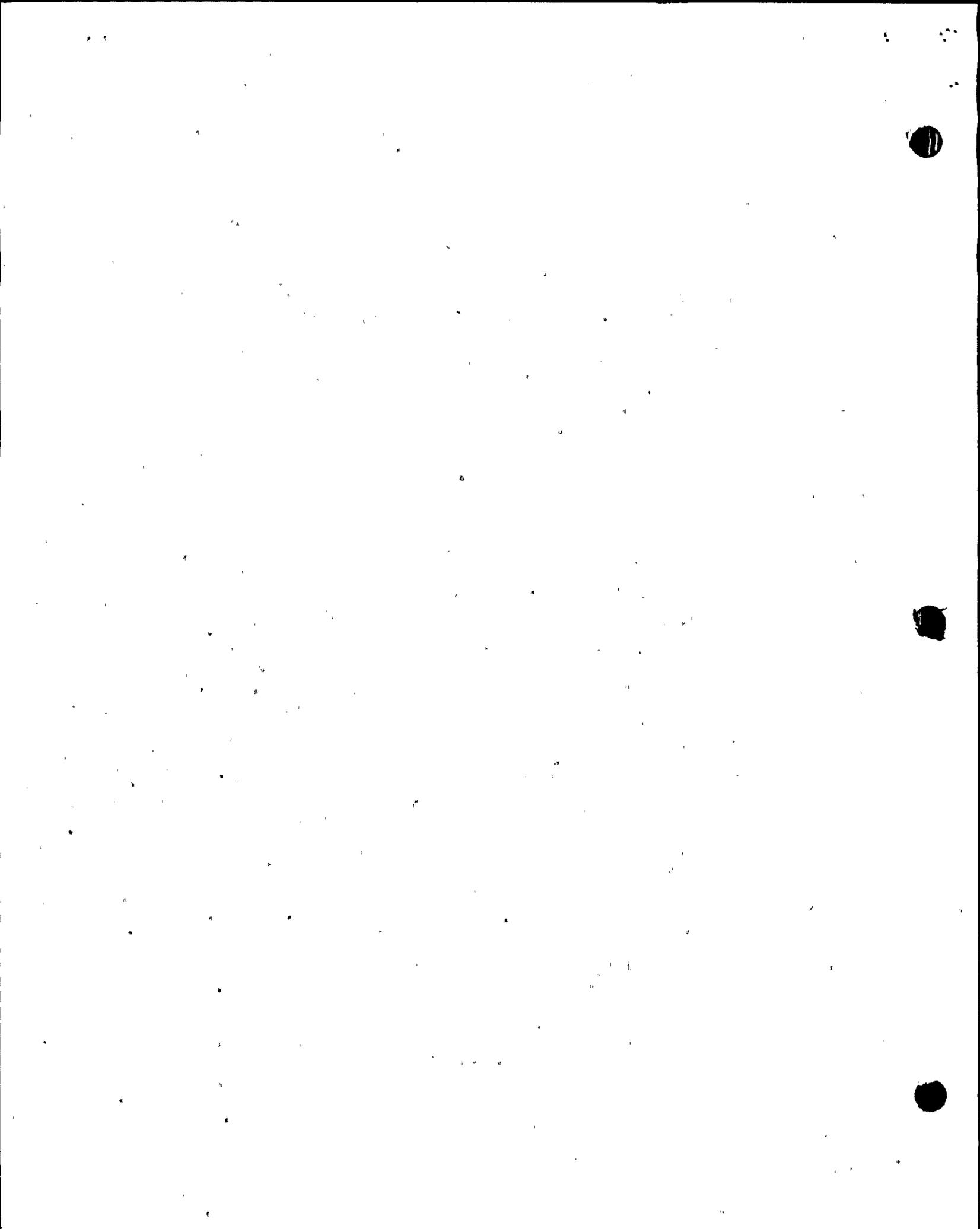
In general, RG&E had implemented an effective vendor oversight program to monitor vendor's quality control for safety-related products. The inspection focused on assessing RG&E's monitoring of nine vendors supplying safety-related products to Ginna.

Vendor oversight program attributes examined included QA organization for monitoring vendors; qualification, audits and surveillance (hereafter referred to as audits) of Appendix B vendors; evaluation of audit findings and feedback of corrective actions to appropriate staff; maintenance of a qualified suppliers list; and qualification and training of appropriate staff. QA documents and procedures were reviewed in the following areas: control of purchased material, equipment and services; quality review of procurement documents; evaluation and control of vendor performance; reporting and followup of audits results; tracking of abnormal conditions during procurement; and qualification and certification of personnel performing audits.

2.1 Vendor Oversight Program

In general, an effective vendor oversight program was implemented. The inspectors assessed the attributes and implementation of the vendor oversight program run by a QA manager and 10 procurement QA representatives. The manager reported to the department manager of Nuclear Assessment, who reported to the Vice President of Nuclear Operations. The QA manager had the authority to conduct appropriate vendor audits.

QA evaluated vendors in accordance with RG&E procedures, industry information and audits pertinent to the vendor. Vendors' use of outside organizations was typically identified in the vendor's proposal or bid and assessed by RG&E as



part of the vendors' control of procurement activities. RG&E's quality control (QC) procedures provided guidance on detecting fraudulent material during receipt inspection and testing.

RG&E Nuclear Assurance issued purchase orders (POs) to vendors from the Ginna site. The Quality Procurement Coordinator performed the quality function for safety related POs. Procurement documents included, as applicable, the scope of work or material description, technical and quality requirements, QA program requirements, right of access to vendor and subtier vendor facilities, and requirements for documenting, reporting, and dispositioning nonconforming conditions and 10 CFR Part 21 deviations. The licensee stated that QA engineers typically did not review POs but received and reviewed copies of those POs which imposed source audits on the vendor (e.g., if a restriction was placed on a vendor).

QA staff ensured that qualification and annual, triennial, and other interim audits, were performed by RG&E or outside organizations to monitor vendors supplying Appendix B products and services. QA audits were performed in accordance with written procedures and checklists. Audits included monitoring, witnessing and observing activities, such as inspections, examinations, and performance tests.

The licensee stated that procedure A-1404, Section 3.5.1 addressed distribution of industry events reports on an information-only basis by the Operating Experience department (Nuclear Operations) to affected departments. NUREG-0040, "Licensee Contractor and Vendor Inspection Status Report," was routed through the procurement QA group. The inspectors questioned why NRC Information Notice 88-81, "Failure of Amp Window Indent Kynar Splices and Thomas and Betts Nylon Wire Caps during Environmental Qualification Testing," was not reviewed by QA procurement engineers when qualifying Amp (Appendix B vendor). The licensee stated that the notice was reviewed by its electrical engineering staff in 1988 but not forwarded to QA because no changes to the design basis for 10 CFR 50.49 environmentally qualified electrical equipment were applicable. The licensee determined that NRC information notices and bulletins pertinent to QA evaluations of vendors were currently received by procurement QA engineers and agreed to review this area to determine if enhancements were needed.

QA tracked defects in materials identified at the vendor facility through the vendor's corrective action process. For significant programmatic deficiencies, restrictions were imposed on the vendor or stop-work orders issued. Restrictions on a vendor were noted by QA on the qualified suppliers list and updated every month or as changes occurred. Nonconformances for which the vendor had recommended a disposition of "use-as-is" or "repair" at the vendor's facility were normally reviewed and dispositioned by the RG&E procuring organization. The inspectors had no concerns in this area.

2.2 Evaluation of Appendix B Vendors

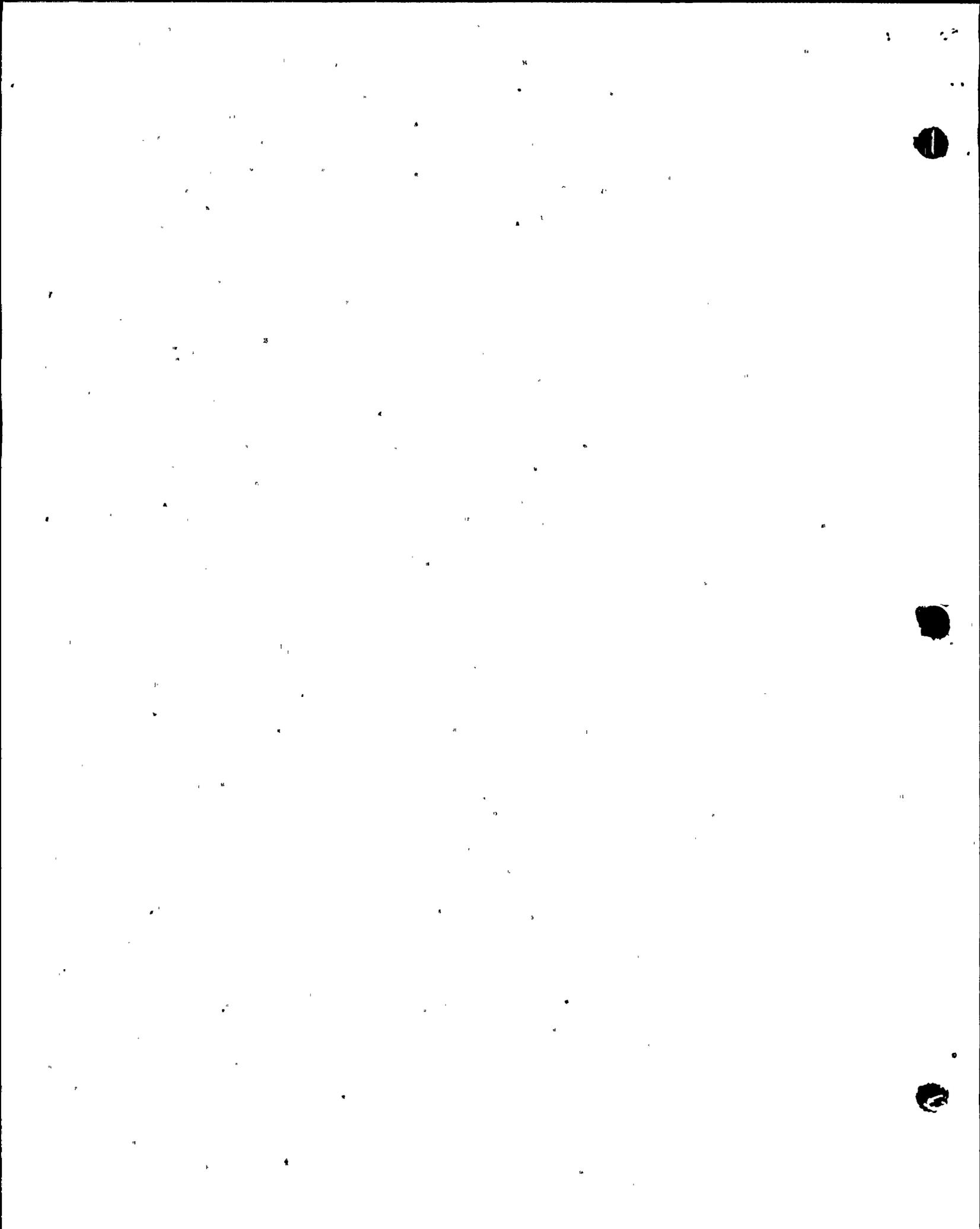
The inspectors assessed RG&E's qualification and monitoring of nine vendors supplying safety-related products to Ginna. The vendors included Modumend (refurbished power supplies), Amp Products Inc. (terminals and splices),

Fisher Service Company (valve parts), Amerace Electronic Components (Agastat relays), Reliance (electric motors), Rosemount Nuclear Instruments (pressure and temperature devices), Babcock & Wilcox Canada (steam generators), Automatic Switch Company (solenoid operated valves), and Limitorque Corporation (valve operators). The vendors were selected based on the safety significance of their products and the history of product deficiencies or failures. Histories were obtained from electrical and instrumentation corrective maintenance work orders, reports of nuclear assessment activities regarding component failures, vendor restrictions noted in the QSL, licensee action reports of abnormal conditions and events, nuclear plant reliability data system equipment failure reports, 10 CFR Part 21 reports, licensee event reports, and NRC inspection reports and information notices.

The NRC inspectors reviewed documentation on the qualification and evaluation of the nine selected vendors, including RG&E's performance-based annual and triennial quality audits of vendors; RG&E's followup of audit findings and corrective actions; and its feedback of appropriate findings and corrective actions to management and procurement staff. Documents indicated that qualification, annual audits, triennial audits were performed on time; audit findings were evaluated; and feedback provided to appropriate staff, including Nuclear Assurance (site), QC, purchasing, procurement, and engineering document control. RG&E's qualification and performance evaluation of Appendix B vendors considered the vendor's design and manufacturing capabilities; the QA program and its capability to provide the required items or services; audits of the vendor's QA program status and performance history; and maintenance of vendor data on the qualified suppliers list (QSL).

Initial qualification and annual and triennial audits for qualifying and monitoring the nine selected Appendix B vendors were primarily conducted by outside organizations, including the Nuclear Procurement Issues Committee (NUPIC) and utilities. The NUPIC sent questionnaires to pertinent licensees to determine areas the licensees preferred inspected, and communicated its audit results to the licensees. The annual vendor evaluation required vendors to identify any changes to products, services, facilities, personnel or quality involvement which could impact qualifications. POs required vendors to identify and disposition all nonconforming conditions in accordance with the vendor's quality requirements. Nonconformances to the technical and quality requirements of the POs dispositioned as "use as is" or "repair" were required to be submitted to the licensee. QA expected vendors to identify any problems; however, audit evaluation checklists did not require procurement QA engineers to actually question a vendor whether any deficiency or nonconformance had been identified pertinent to products in process at vendor facilities. The licensee agreed to review this area to determine if enhancements were needed.

Use of outside organizations for auditing vendors was based on 10 CFR Part 50, Appendix B, and Regulatory Guide 1.144, which allow use of outside organizations to reduce the number of external audits as an alternative method for qualifying and monitoring vendors as long as all pertinent information is adequately evaluated. For example, the initial and ongoing qualification and performance evaluation of Amp Products, Inc. (Amp), were completely based on audits performed by NUPIC and other organizations, and evaluated by RG&E's QA.

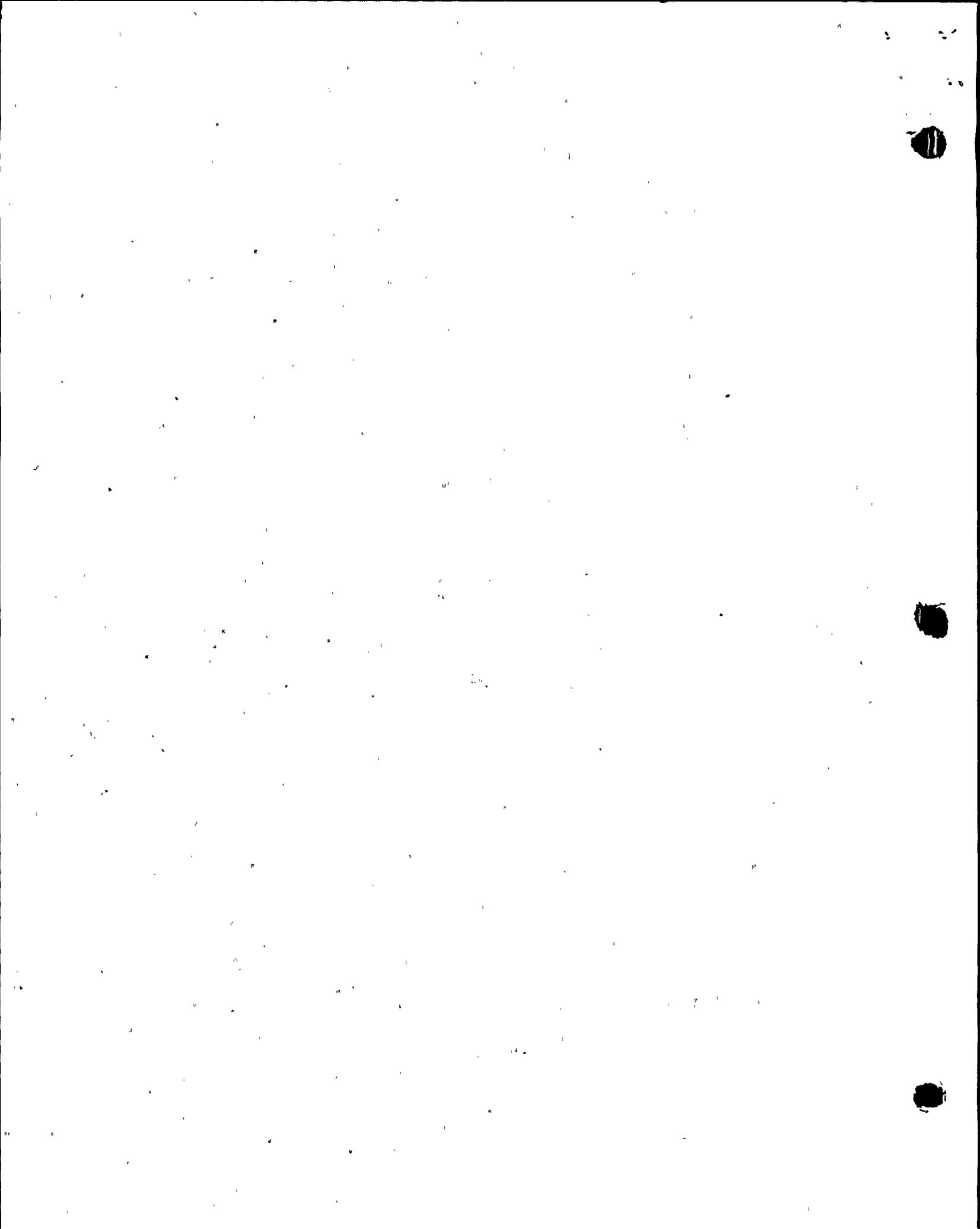


Amp supplied electrical terminals and splices for safety-related applications at the Ginna station and was qualified by QA in 1985 to 10 CFR 50 Appendix B requirements. The last QA annual review was performed on August 10, 1993, and the last performance audit was performed by NUPIC on June 9, 1995. QA's annual review had noted that Amp had made a revision to its QA manual but not provided it to RG&E. QA requested the vendor to provide the manual for review. Pertinent audit results were provided to appropriate staff. The licensee provided evidence that its electrical engineering staff had evaluated Amp splice failures and that no restrictions were placed on the vendor because RG&E decided to install Raychem splices on the Amp nylon splices installed in harsh environments (RG&E EEQ-1 Form Package 39). All purchase orders to Amp were completed and closed.

The basis for qualification of the selected vendors, including those performed by outside organizations, appeared to be adequate and appropriately documented. However, one concern was identified regarding RG&E's assessment of the vendor Modumend. Modumend was audited on November 2, 1993, by RG&E procurement QA to determine if the vendor could be placed on the RG&E QSL. The procurement QA team leader identified one finding, that the vendor had not conducted internal audits (required by Appendix B Criterion XVIII). During this time (1993-1994), the Quality Performance Department Manager (currently reassigned) and QA Manager (retired) encouraged their staff to generate revenue for RG&E. With the QA manager's approval, the QA team leader approached Modumend and suggested RG&E be hired as an independent contractor to perform the internal audit that RG&E had earlier found not to have been done. The vendor agreed but RG&E later decided not to perform the audit. However, with his immediate manager's approval, in June 1994, the QA team leader did the internal audit for the vendor for a fee, independently of RG&E. The QA team leader (with the Modumend vice president as a team member) closed the RG&E's earlier finding and identified no new findings. As a result, RG&E's QA team leader performed Modumend's quality function, instead of assessing Modumend's performance of the function.

The inspectors noted that RG&E's policy statement, "Principles of Business Conduct," dated September 1992, issued by the Chairman, President and Chief Executive Officer of RG&E, stated that without the specific written approval of the Chairman of the Board, no employee should serve as a director, officer, consultant or employee of any business organization which was a competitor or supplier of RG&E where there was the risk or appearance that preferential treatment may be given or received. Encouraging QA engineers to raise revenues from and serve as a consultant of Modumend appears to be in conflict with this policy.

The licensee stated that current management would avoid any perception of a conflict of interest with a vendor and would not suggest to their engineers to perform such an audit. During the NRC inspection, the licensee instructed QA engineers not to perform work for a company that QA was responsible to assess, either as independent consultants or as RG&E employees. The inspectors had no further concerns in this area.



2.3 Qualified Suppliers List

QA maintained the QSL on an electronic database and was responsible for making changes to existing vendor information. The QSL included vendor contact information, details of vendor capability, dates of vendor qualification, and any vendor restrictions (e.g., RG&E quality checks to be performed during manufacture and/or prior to shipment). The inspectors determined that pertinent information for the nine selected vendors was maintained on the QSL.

QA used a password to restrict access to the QSL database and protect it from inappropriate changes or deletions (e.g., removal of vendor restrictions). The accounts payable staff could only access the data base to enter information about new vendors. Other RG&E groups had "read only" access. The inspectors had no concerns in this area.

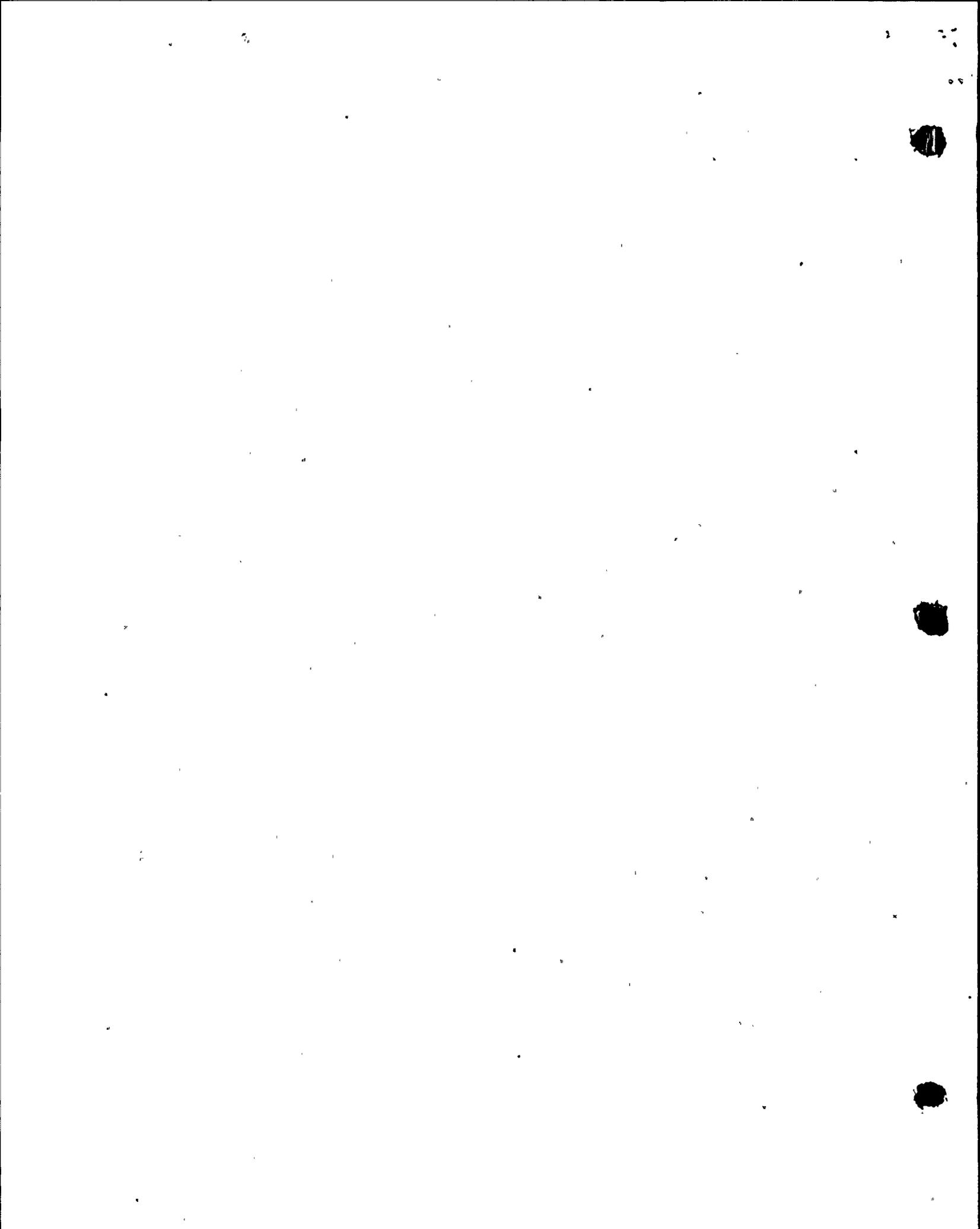
2.4 Training and Self-Assessment

Qualification records indicated that individuals assigned to perform procurement activities were properly trained and qualified. Qualification records documented the knowledge and training of procurement QA engineers, including their performance of quality activities (e.g., assisting in audits) before their qualification as auditors or lead auditors. Records indicated satisfactory completion of an oral examination on the QA program and procedures, NRC regulations, regulatory guides, NUPIC and Electric Power Research Institute (EPRI) guidelines, and industry standards; attendance of appropriate training classes; and completion of required reading on qualifying and auditing vendors. The procurement QA engineers were certified as audit team leaders to American National Standard Institute (ANSI) N45.2.23, and as quality system Lead Assessors to the American Registration Assessment Board of the International Organization for Standardization (ISO) 9000. The inspectors had no concerns in this area.

The last independent assessment of RG&E's QA program, including its vendor oversight program, was performed on December 22, 1994. An October 16, 1995, internal assessment was performed by a technical specialist from EPRI and other RG&E team members. The internal assessment team concluded that RG&E's overall procurement engineering program was technically sound and significantly better than at most nuclear facilities reviewed. However, the assessment noted road blocks in two-way communication between procurement engineering and QA procurement. The assessment recommended refresher training for staff and managers. The licensee stated that actions in response to a self-assessment of the procurement process were planned with a completion date of July 1996, and that QA would assess if any remedial training was necessary to correct the lack of communication identified by the independent audit. The inspectors had no concerns in this area.

3.0 EXIT INTERVIEW

The inspectors conducted an exit meeting on January 26, 1996 at the RG&E corporate office in Rochester, New York, to discuss the major areas reviewed during the inspection. Licensee representatives who attended this meeting are identified with an asterisk in Appendix B of this report. The licensee did not identify any documents or processes as proprietary.



APPENDIX A

Persons Contacted at Entrance and Exit Meetings

Rochester Gas & Electric

*	Richard J. Watts	Manager Nuclear Assessment
*	Michael P. Lilley	Manager Quality Assurance
*	Mark Shaw	Manager Materials and Procurement
*	George Wrobel	Manager NS&L
*	Raymond M. Bozarth	SA Team Leader
*	Paul Hutner	QA Engineer
*	Gregory R. Amsden	QA Engineer
*	Al Pitts	QA Engineer
*	Jon Bergstrom	QA Engineer
*	Michelle L. Preik	QA Engineer
*	Terry Kirkpatrick	Quality Procurement Coordinator

Nuclear Regulatory Commission

*	Anil S. Gautam	Team Leader, NRR
*	Joseph J. Petrosino	Reactor Inspector, NRR
*	Peter D. Drysdale	Senior Resident Inspector, Ginna

* Denotes those attending the exit interview on January 26, 1996, at the conclusion of the inspection

