U.S. NUCLEAR REGULATORY COMMISSION REGION I

DOCKET/REPORT NO: 50-244/94-17

LICENSEE:

FACILITY:

DATES:

Rochester Gas and Electric Corporation Rochester, New York 14649

R.E. Ginna Nuclear Power Plant

June 27 through July 1, 1994

INSPECTOR:

Alan Finkel, Senior Reactor Engineer Systems Section Division of Reactor Safety

APPROVED BY:

7407260135

Eugene Kelly, Chief Systems Section Division of Reactor Safety

SUMMARY: The inspector reviewed the procurement program plan including audit reports, training, procurement engineering, and warehouse storage and stock control.

One violation and two unresolved items were identified. Inventory control personnel in the plant Level B storage areas were not protecting, cleaning, or reporting nonconforming equipment conditions as required by the Quality Assurance Manual and related procedures (94-17-01). Procedures do not define an appropriate storage level of safety-related items which are withdrawn from B Level control but not yet installed (94-17-02). Quality Assurance Audit No. 93-33, performed in December 1993, did not evaluate the control or protection of stored safety-related parts and materials. Also, the audit inspection did not evaluate the effectiveness of the documents in the inventory control program (94-17-03).

A procurement program has been implemented as described in Site Procedure A- 405, "Evaluation of Commercial Grade Items for Safety-Related Applications." The procurement engineering staff has been trained on program requirements, with additional training in the areas of parts/materials procurement, root-cause analysis, and parts dedication. An approved vendor supplier list is issued and maintained current. Warehouse personnel have received basic training courses for their task assignments, which has generally improved the storage and cleanliness of items in the warehouse areas. A quality assurance audit of the site procurement program did not identify the weaknesses regarding warehouse storage. Audit findings are tracked in a system that is monitored by management. The inspector's review of procurement open audit findings indicated that they were resolved in a timely manner.

1.0 INSPECTION SCOPE $(38701)^1$

The inspector evaluated the performance of the procurement program for the Ginna site, using the documentation listed in Attachment 2 of this report. In addition, the inspector reviewed the site procurement program for compliance with the quality assurance program; ANSI N45.2.2-1972 and 1978 additions of, "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants;" ANSI N45.2.3-1976, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants;" ANSI N45.2.13-1978, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants;" and 10 CFR 21, "Reporting of Defects and Noncompliance."

2.0 PROCUREMENT PROGRAM

The licensee's site procurement program is described in Procedure A-401, "Control of Procurement Documents Prepared for Ginna Station." This procedure provides the licensee's instruction for preparation, review, and approval of procurement and upgrade documents for safety-related (SR), safety-related environmentally qualified (SREQ), and safe significant (SS) materials, parts, components, and services processed at the Ginna site. This procedure is in accordance with the Rochester Gas and Electric Station Quality Assurance Manual, encompassing the following aspects:

- Procurement Engineering
- Warehouse Storage and Stock Control
- Training
- Supplier Audit Program
- Quality Assurance Audit
- Nuclear Records Retention

3.0 PROCUREMENT ENGINEERING

The procurement engineering (PE) organization is responsible for ensuring that replacement parts and materials are evaluated so that the use of these replacement items does not degrade the operation or function of the original design safety systems or equipment. The PE requirements for using commercial grade items are described as, "when a replacement part or material can no longer be purchased from a supplier qualified to the requirements of 10 CFR 50, Appendix B." The licensee's site program for parts and material dedication is described in Procedure A-405, "Evaluation of Commercial Grade Items for Safety-Related Applications." To determine the acceptability of a commercial grade item, the PE completes

¹The parenthetical notation following the paragraph title denotes the NRC inspection procedure that was used by the inspector in conducting this inspection. The procedure title is "Procurement Program."



an engineering evaluation form that considers such areas as traceability, shelf life application, safety function, equipment qualification (EQ), seismic requirements, and materials. To determine if the procurement engineers were performing evaluations on the items approved for dedication, the inspector selected the following approved commercial grade dedication packages for review:

Technical Evaluation No. 94-529, "Valcor Solenoid Valve O-Ring Replacement"

• Technical Evaluation No. 90-046, "E-7000 Agastate Timer Relay Series"

Technical Evaluation No. 94-528, "Crane Model 47-1/2 N Gate Valve"

The inspector verified that the above commercial grade dedication packages had supporting documentation and was complete and adequate to justify the use of the specific item evaluated. The inspector also verified that the engineering evaluations considered system requirements as part of their evaluation program. The inspector only reviewed the procurement dedication process associated with the above three selected components, and did not evaluate the licensee's entire dedication program.

The licensee requires their suppliers to comply to ANSI N45.2.2-1978, "Packaging, Shipping, Receiving, Storage, and Handling of Items For Nuclear Power Plants," however, the site program endorses the addition of ANSI N45.2.2-1972. Section 6, "Storage" of both the 1972 and the 1978 issue of ANSI N45.2.2, appears to require the same level of protection, therefore, there does not appear to be any conflicts in this area of the documents.

4.0 WAREHOUSE STORAGE AND STOCK CONTROL

During a tour of the warehouse and receiving areas, the inspector noted that: (1) the area was clean; (2) parts and materials were protected; (3) shelf life requirements were identified on the purchase orders; and (4) cabinets for storing hazardous materials were located throughout the areas. However, the inspector identified several stored parts missing port and connector plugs. Also, the inspector identified instruments that were returned to B Level storage without cleaning dust that had accumulated around the electrical terminations. An inspection of various B Level storage areas by the inspector indicated that missing connector and port protection was noted throughout the storage facility. The inspector also identified seven Limitorque SMB-000 geared limit switches, in Level B storage that were leaking oil/grease while in their protective packaging material. No nonconformance report (NCR) was written on the leaking switches, as required by licensee's Procedure A-1502, "Nonconformance Reports," Section 3.1.1. Discussions with the inventory control personnel indicated that they were aware of the leaking Limitorque switches, however, an NCR was written on the condition. Verbal communication between the inventory control supervisor and the procurement engineer on the condition of the Limitorque switches were held. During a licensee's surveillance inspection of the Level B storeroom (Report No. 90-049, August 21, 1990) the surveillance inspector identified that three Limitorque spare limit switches were leaking grease. The surveillance report stated that whenever the ambient temperature rises above 90 degrees F, these items leaked. However, no NCR was written,



and no root cause analysis had been performed to identify the cause of the leaking grease. Failure to provide adequate protection for safety-related equipment in B Level storage and failure to issue nonconformance Reports (NCRs) on identified deficient materials in B Level storage is considered a violation (50-244/94-17-01).

5.0 MAINTENANCE CONTROL OF SAFETY-RELATED PARTS

Maintenance personnel withdraw materials and equipment for storeroom areas which are controlled by the inventory control personnel. The control and handling of safety-related items are maintained and controlled by maintenance personnel, as described in Procedure A-801, "Control of Accepted Material, Parts, and Components," however, this procedure does not provide accountability and storage direction for safety-related items that are delayed in installing them into their assigned location. The licensee stated that the procedure will be corrected to concur with the requirements of the Ginna Quality Assurance Manual, Section 13, "Handling, Storage, and Shipping." This is considered an unresolved item and the program and procedure changes will be reviewed by the NRC (50-244/94-17-02).

6.0 TRAINING

Warehouse personnel have had training for handling chemical-based materials, and they also understood the storage requirements for these materials. The inspector reviewed the training program, history and records for the procurement engineering, and inventory control personnel. The procurement engineering staff has completed a basic procurement training program and is receiving special training in the areas of parts and material dedication. The inventory control personnel have completed their basic training program. An updated training program has been approved, but has not been scheduled as yet. The present training the inventory control personnel have received should not prevent them from complying with their present site documentation requirements.

7.0 QUALITY ASSURANCE AUDIT

A quality assurance audit of the Ginna Material, Procurement, and Budget Program, Audit No. 93-33:HMG, was issued on December 20, 1993. The audit of the procurement program concentrated primarily on the portion of the cycle that begins with receiving items through issuing the items for use and/or installation. The audit, performed between October 18, 1993, and November 8, 1993, did not identify part storage problems, not preparing NCRs on nonconforming items in storage, nor identify that safety-related items not installed are not protected in B Level areas until installed in their assigned location. The inspector's evaluation of Audit 93-33:HMG indicated that the audit team did not perform a performance-based evaluation of the procurement program but rather a compliance-type of evaluation of the program. The audit report did identify that a safety-related valve actuator was stored in the Butler Building, which did not meet Level B criteria. However, no investigation was initiated as to why the valve actuator was placed in the Butler Building, which was not an approved Level B storage area at that time. The inspector's evaluation of

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the audit inspection attribute that sheets indicated that the audit was weak in the area of parts and materials storage requirements verification. The licensee stated that they were developing an audit checklist with more performance-based inspection criteria. This area is considered an unresolved item pending NRC review of the licensee's revised performance-based inspection program. (50-244/94-17-03)

8.0 SUPPLIER AUDIT PROGRAM

The Ginna site supplier audit program is described in Procedure QA-702, "Supplier Surveillance," OA-705, "Procurement Evaluation Requests," and A-401, "Control of Procurement Documents Prepared for Ginna Station." These procedures describe the requirements for planning and conducting supplier audits, establish the approved supplier list, and initiate and follow-up issued corrective action findings identified during a supplier audit. The quality assurance procurement organization is responsible for establishing, implementing, and maintaining the site supplier audit program. This audit program consists of a combination of licensee's scheduled supplier audits, and audits that are received as part of the licensee's participation in the industry-wide utility program called NUPIC. The inspector verified that the approved supplier listing, which is maintained as a computer-based program, is updated on a regularly scheduled time frame, and that updated information is added on a daily basis, if required. The licensee performs both an annual and a triennial inspection of their suppliers based on site procedure requirements. The QA audit personnel are certified in accordance with the requirements of Regulatory Guide 1.146, "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants," which endorses ANSI N45.2.23.

The inspector reviewed the following vendor audits: 93-18:ARP, GTS Duratekis; 94-089:JB, ITT Engineering Valves; and, 94-01:GRA, Tioga Pipe. Each audit had a defined scope audit checklist and inspection finding associated with each checklist. The checklists were tailored to inspect areas that were applicable for the product produced by the vendor. A review of each audit checklist indicated that the audit inspections complied with the scope of the audit. The inspector concurred with the audit team certifications assigned to these vendors based on the results of the audit documents reviewed. The inspector verified that the three safety-related vendor audits were listed on the licensee's current approved vendor supplier listing and that this listing was updated by QA personnel during the month of June 1994.

9.0 NUCLEAR RECORDS RETENTION

Nuclear records are maintained in accordance with the requirements described in Procedure A-1701, Ginna Records. The inspector reviewed the procurement records of the packages described in Paragraph 1.3. The data within the packages were signed, legible, and complied with the program requirement for record documentation retention.





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10.0 EFFECTIVENESS OF LICENSEE CONTROLS

The licensee has supported training in the areas of corrective action systems and root cause analysis. However, not issuing nonconformance reports on items in B Level storage indicates that there may be a lack of understanding of their basic nonconforming program described in Procedure A-1502, "Nonconformance Reports." The lack of adequate air conditioning design in one B Level storeroom was identified in Surveillance Report 90-049:LED, August 21, 1990, as a possible reason for the leaking of grease in three Limitorque spare limit switches. However, as of July 1, 1994, the Level B storeroom temperature control is still a problem. The storage procedure requirement of 120 degrees F for a maximum storage temperature is within the requirement of ANSI N45.2.2-1972, Paragraph 6.1.2 (2), however, the Level B storage temperature is required to be controlled for the requirements of the stored equipment. Temperature/humidity control of Level B storage areas is subject to be evaluated by the licensee in relationship to stored equipment and material requirements. The generic temperature range of their procedure of 40 to 120 degrees F may not be adequate for all safety-related Level B stored items.

11.0 CONCLUSION

The inspector determined that the engineering procurement program is defined and implemented as described in Procedure A-401, "Control of Procurement Documents Prepared for Ginna Station." The vendor supplier program approved list is maintained in an updated configuration with vendor audits performed on a scheduled bases. A quality audit of the site procurement function was weak in the areas of storage and protection of safety-related materials and equipment in the B Level storage areas. Also, the audit inspection attribute list was weak in performance-based type of inspection criteria. The licensee 's present procedures do not define their B Level method for handling issued safety-related material and equipment that is not installed as planned by the maintenance organization. The inventory control personnel have been trained in their inspection, storage, and handling procedures, however, the use of NCRs to identify storage nonconformances is a weakness.

12.0 MANAGEMENT MEETINGS

Licensee representative were informed of the scope and purpose of the inspection at an entrance meeting conducted on June 28, 1994. Findings were periodically discussed with licensee personnel during the course of this inspection. The inspector met with the individuals noted below at the conclusion of the inspection on July 1, 1994, and summarized the preliminary findings.

- M. Burchell, Mechanical Procurement Engineer
- C. Edgar, Manager, Electrical and I and C
- R. Graham, Jr., Supervisor, Inventory Control
- A. Harhay, Manager RP and Chemistry



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R. Jaquin, Lead Nuclear Safety and Licensing Engineer
T. Kirpatrick, Quality Procurement Coordinator
R. Marchionda, Superintendent, Ginna Production
M. Shaw, Manager Materials and Procurement

T. Moslak, NRC Senior Resident Inspector

The licensee acknowledged the findings and conclusions, with no exceptions taken. Further, the bases for the preliminary conclusions did not involve proprietary information, nor was any such information discussed or expected to be included as part of the written inspection report.

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