

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-317/91-22
50-318/91-22

Docket Nos. 50-317
50-318

License Nos. DPR-53
DPR-69

Licensee: Baltimore Gas and Electric Company
MD Routes 2 and 4, P. O. Box 1535
Lusby, Maryland 20657

Facility Name: Calvert Cliffs Nuclear Power Plant, Units 1 and 2

Inspection At: Lusby, Maryland

Inspection Conducted: September 23 - 27, 1991

Inspectors: A. Finkel Nov. 13, 1991
A. Finkel, Senior Reactor Engineer date

F. Bower Nov 13, 1991
F. Bower, Reactor Engineer date

D. Taylor Nov. 13, 1991
D. Taylor, Reactor Engineer date

Approved by: N. Blumberg 11/13/91
N. Blumberg, Chief, Performance Programs date
Section, Operations Branch, Division of
Reactor Safety

Inspection Summary: Inspection on September 23 - 27, 1991 (Inspection Nos. 50-317/91-22 and 50-318/91-22)

Areas Inspected: An announced safety inspection by three region-based inspectors to review and evaluate the status of items procured during the 1989/1990 timeframe, and the present parts and material procurement program. Also, an evaluation of the receipt, storage, and handling program was performed.

Results: No violation or deviation was identified. The inspectors identified concerns about: 1) the need to update procedures used in the receipt, handling and storage of safety-related materials, 2) the need to improve training for warehouse personnel, and 3) the need to verify implementation of QA policy commitments in the materials management and procurement areas. The Warehouse Upgrade Plan (WUP) is expected to resolve these concerns and provide additional assurance that Part 21 type concerns will be traceable by the licensee. The WUP, which will be completed by the last quarter of 1992, has in place an interim program that will end upon completion of the WUP. The inspectors also reviewed the methods used to control commercially procured commodity type items used in safety-related applications during the 1989/1990 time frame and the subsequent licensee followup and no safety concerns were identified.

DETAILS

1.0 PERSONS CONTACTED

Attachment 1 provides a listing of persons contacted during the inspection.

2.0 INSPECTION SCOPE

The scope of this inspection was to evaluate the present procurement program including the methods and procedures used in the receipt, storage, and handling of safety-related parts and materials at the Calvert Cliffs Nuclear Power Plants, Units 1 and 2. The inspectors also reviewed the methods and controls used to evaluate the status of commercial grade parts and materials used in safety-related applications that were purchased prior to 1990.

3.0 PROCUREMENT PROGRAM (38701)

Scope

The inspectors reviewed the documents listed in Attachment 2 to verify that the licensee is implementing a procurement program for safety-related items which is in with regulatory requirements, licensee commitments, and industry guides and standards.

Findings

The procurement program for Calvert Cliffs Nuclear Power Plant, Units 1 and 2, is described in Quality Assurance Procedure (QAP)-2. The Manager - Nuclear Support Services Department (MNSSD) has the onsite responsibility for the procurement coordination, procurement engineering, and the procedure upgrade program. Procurement and control of items and services is delineated in Calvert Cliffs Instructions (CCI's). Calvert Cliffs Instructions CCI-162, "Procurement and Control of Items and Services for Calvert Cliffs," describes the methods to be followed when purchasing safety and nonsafety items. It also describes the requirements for procuring services at the plant. The licensee completely revised this procedure in January 1991 as part of their ongoing efforts to improve their procurement program.

The implementation of the procurement policy statements described in CCI-162 are described in lower tier documents such as Receipt Inspection Unit Procedures (RIUP's), Vendor Audit Unit Procedures (VAUP's), Procurement Engineering Procedures (PEP's), and Contract Administrative Procedures (CAUP's).

A number of issues affecting receipt and storage and handling of safety-related items were identified by the inspectors or previously

identified by licensee corrective action systems. These are discussed in the sections which follow. Similarly, issues involving commodity parts such as O-rings, pipe elbows, and cotter pins and their control are discussed in detail in Section 4.0 of this report. A Warehouse Upgrade Plan has been developed to deal with receipt, storage and handling issues; this plan and the commitments regarding it are summarized in Section 5.0.

Conclusion

The inspectors determined that the method of identifying safety-related items during the receiving inspection cycle as described in QAP-2 and the issuance of these items from stock did maintain the traceability of the item when installed in the plant. Based on this observation, there was no safety concern of the inspectors in the release of existing stored items.

3.1 Vendor/Supplier Program (38701)

Scope

The documents and activities describing the vendor/supplier certification program were reviewed by the inspectors.

Findings

The inspection and certification of vendors and/or suppliers for safety-related items are described in the following documents:

- Quality Assurance Policy for The Calvert Cliffs Nuclear Power Plant, Revision 27
- Quality Assurance Procedure QAP-2, "Procurement and Control of Items and Services," Revision 50
- Calvert Cliffs Instructions CCI-162, "Procurement and Control of Items and Services For Calvert Cliffs", Revision A
- Vendor Audit Unit Procedure, VAUP-2, "Vendor Evaluations"
- Vendor Audit Unit Procedure, VAUP-4, "Vendor Surveillance"
- Vendor Audit Unit Procedure, VAUP-6, "Source Evaluation"

The vendor program that is described in the above documents is based on an annual evaluation with a re-audit or survey on a triennial basis. The depth of the vendor evaluation is based on factors such as the complexity of the item, its availability to general industry and system application. The inspectors' evaluation of current vendor audits verified that the depth and complexity of these audits were based on the complexity of the item and its system application. The inspectors also verified that an approved vendors list is issued and maintained.

The trending of received items is maintained and documented by the quality receiving inspection organization. The semi-annual trend report reflects analysis of nonconformances and/or deficiencies identified during safety-related receipt inspections. The percentage of vendor responsible rejection rates are supplied to the vendor/supplier audit organization for use in evaluating their approved vendor lists.

The inspectors verified that there are audit reports to support the vendors/suppliers on the approved vendors list. The inspectors also verified that the present vendor audits schedule complies with the program triennial schedule.

The vendor/supplier program is staffed with personnel certified to ANSI N45.2.23-1978, with the exceptions noted in their Final Safety Analysis Report (FSAR).

Conclusion

The inspectors concluded that the inspection and certification of vendors is completed in accordance with adequate policies and procedures.

3.2 Receipt, Storage, and Handling of Equipment and Materials Program (38702)

3.2.1 Receipt Inspection, Material Controls, and Traceability

Scope

The inspectors reviewed the licensee procedures to verify that the administrative controls in place were sufficient to ensure that the licensee's program for receipt inspection and material traceability of safety-related (SR) items were in conformance with their Quality Assurance Program and FSAR commitments. The inspectors reviewed these administrative controls to verify that there were written requirements for conducting and documenting receipt inspections of items for damage during shipping, conformance to procurement document requirements, and that items are supplied by currently approved vendors. The inspectors also reviewed the procedures for marking and maintaining traceability of SR items, controlling nonconforming items, and controlling the conditional release of items. The implementation of these administrative controls was also reviewed through interviews and direct inspections of work in progress.

Findings

Receipt Inspection Unit Procedures (RIUPs) were developed to assign responsibility and provide the methods for implementing higher tiered documents (such as QAPs and CCIs) instructions for receipt inspection, nonconformance control, and conditional release of SR items. The inspectors found the scope and detail contained in these procedures to be adequate to implement higher tiered instructions; however, it was noted that some of these documents had not been updated to incorporate the latest upper tier

procedure revisions. One example of this concern was that the CCI-174 requirements concerning conditional releases had not been incorporated into RIUP-1. The licensee's plan and schedule for completing a review and update of implementing procedures has been addressed in the Warehouse Upgrade Program (WUP) described in paragraph 5.0.

The inspectors verified the implementation of these procedures by performing a sampling review of receipt inspection packages and associated Conditional Release Requests (CCR) and Receipt Hold Orders (RHO). The inspectors found the receipt inspections to be well documented. Continual refinements and changes to the receipt inspection processes were evident, but these changes appeared to result in administrative improvements with no degradation in the quality of the receipt inspections. Checklists were used to document completion of individual inspection attributes such as visual inspection, receipt of vendor documentation, special testing, etc. Status sheets were used to maintain good coordination between inspectors during the various inspection phases. After successful completion of the receipt inspection, receipt inspectors assigned Safety-Related Item (SRI) traceability tags to the items and forwarded the items to the warehouse for packaging and storage. A sampling review verified that SR items were traceable from the purchase requisition stage through the purchase order, receipt inspection, and warehouse storage stages.

Receipt inspection discrepancies were well documented and dispositioned through the use of RHOs. The inspectors verified that discrepant items were properly tagged and segregated while the discrepancy was being dispositioned. The inspectors also reviewed the conditional release of discrepant items. The inspectors found that the technical justification and level of authority for approving these conditional releases were documented on CCRs and were appropriate to the situations.

The inspectors also reviewed the program and procedures for training and certifying receipt inspectors. These procedures had also undergone recent administrative refinements. The program for certifying receipt inspectors was appropriate and documented.

Conclusion

The inspectors concluded that the licensee had good processes in place to control receipt inspections and no significant safety concerns were identified. However, the inspectors did note that some procedures were not revised to reflect the latest changes to higher tiered documents.

3.2.2 Storage and Handling

Scope

The inspectors reviewed the licensee procedures to verify that the administrative controls in place were sufficient to ensure that the licensee's program for packaging, storage, and handling of Safety-Related

(SR) items were in conformance with their Quality Assurance Program and FSAR commitments. The inspectors reviewed these administrative controls to verify that there were written requirements for packaging items, providing proper environmental conditions and storage levels, providing storage controls including periodic inspections and access controls, and providing maintenance and shelf life specifications. The inspectors also reviewed the procedures for marking and maintaining traceability of stored SR items. The implementation of these administrative controls was reviewed through interviews and direct inspections of the warehouses and work in progress.

Findings

The Procurement and Purchasing Management Department (P&MMD) has two levels of procedures, Procurement and Purchasing Management Procedures (P&MMPs) and Calvert Cliffs Stores Procedures (CCSPs), which were developed to assign responsibilities and provide the methods for implementing higher tiered documents (such as QAPs and CCIs) and related procedures (RIUPs) instructions for receiving, packaging, preventive maintenance, and storage of procured SR items. The inspectors found that the CCSPs and P&MMDs had not been updated to reflect the significant changes which have been made to the procurement program and material handling procedures, i.e., CCIs and RIUPs. The inspectors also found that many of these procedures were in various stages of review and revision. One example is CCSP-113 which has not been updated since 1986 and which does not implement the current requirements provided by upper tiered documents. Additionally, the inspectors reviewed the P&MMPs and the CCSPs to determine if the scope and level of detail contained in the procedures was appropriate. The scope and level of detail in P&MMP-2 was found to be adequate for a department level procedure; however, the inspectors found that the CCSPs provided less than adequate detail for working level procedure and training guide. The inspectors noted that the current warehouse supervisor, who was new to the position, had initiated a program to start revising these procedures. This concern has been further addressed by the licensee's commitment to review implementing procedures. The schedule for completing this WUP commitment is addressed in paragraph 5.0.

The inspectors reviewed the warehouse training program and found that it needed improvement. The P&MMD Nuclear Training Manual has not been reviewed and updated since 1988 and does not contain a matrix of required training for each job function. The current training program relied on the outdated CCSPs to be used as training guides. A review of training records revealed that material handling personnel had not received all the training mandated by the P&MMD Training Manual. Refresher training and training on procedure changes was either not conducted or not documented. The inspectors noted that the training program and the system to document completed training were being updated. The licensee has included this program update in their Warehouse Upgrade Plan which is described in paragraph 5.0.

The inspectors toured the onsite warehouse facilities for all SR items. The licensee stated that all SR items were stored onsite. A sampling

inspection of items stored identified no significant concerns about the tagging and traceability of SR items in storage. A sampling review verified that SR items were traceable from receipt inspection through the warehouse storage and issue stages. The inspectors identified no safety concerns with the warehouse facilities and access controls. Safety-Related items appeared to be stored under proper environmental conditions and at the proper storage levels. The licensee stated that initiatives were planned to renovate Warehouse 3 to improve material flow from receipt through receipt inspection to storage. An initiative is also planned to upgrade the Level "A" storage facilities. The inspectors viewed these initiatives positively and the commitment dates for completing these initiatives is included in their Warehouse Upgrade Plan which is described in paragraph 5.0.

The inspectors reviewed the licensee's packaging of SR items for storage. The licensee's quality assurance program policy, which is contained in the FSAR, was developed to meet Regulatory Guide 1.38 and ANSI N45.2.2-1972, with exceptions stated in the quality assurance policy. Although the licensee had taken some exceptions to the packaging requirements of ANSI N45.2.2 - 1972, the implementing procedures reviewed, such as CCI-162 and P&MMP-2, required packaging to be in accordance with this standard. Discussions with Procurement Engineering (PE) personnel revealed that routine packaging should be performed in accordance with P&MMD procedures and any special packaging instructions are entered into the stock description which is maintained in a computer database. The inspectors expressed concern about a number of examples where the licensee is not packaging items in accordance with the ANSI standard. The inspectors also identified numerous examples of inconsistent packaging of the same stock numbered items. When questioned, the materials handling personnel indicated that specific packaging instructions are not readily available and items are generally packaged based on experience, common sense, and example. The inspectors also questioned how special packaging and special packaging instructions provided by vendors are treated. Material Handling and Receipt Inspection personnel stated that when possible items are kept in the vendor supplied packaging which the inspectors viewed as positive. However, no method currently exists for these personnel to provide PE with feedback information on special packaging and handling requirements for inclusion in the computer data based stock description. Discussions with the licensee indicated that these types of concerns would be resolved upon completion of the WUP described in paragraph 5.0.

The inspectors reviewed the implementation of the licensee's program for shelf life and preventive maintenance of SR items in storage. The P&MMD had implemented shelf life and preventive maintenance program for items which were clearly identified as requiring these controls. Items which were clearly marked or had vendor instructions provided to indicate that shelf life or preventive maintenance controls were required were entered into a computer database for tracking by material handling personnel. Based on experience, these personnel also added additional items to this program. The inspectors performed a sampling review of preventive

maintenance records and shelf life items in storage and identified no concerns with items tracked by this program. However, because shelf life information provided by PE in the stock description database is not readily available to the material handlers, the inspectors questioned whether all special handling items are being tracked and controlled. Discussion with the licensee indicated that this question would be addressed by the implementing procedure review portion of the WUP discussed in Paragraph 5.0.

Conclusion

The inspectors concluded that their concerns would be addressed by the licensee's WUP for improving the control of warehouse activities and training, and the updating of procedures for packaging, storage, and handling of safety-related (SR) items. The marking and traceability of items in storage appeared to be adequately controlled. Storage levels and environmental controls appeared to be appropriate. The licensee's activities related to packaging items for storage were not well defined and were not consistent. However, no safety significant concerns were identified.

3.2.3 Material Issue, Staging, and End Use

The inspectors reviewed the licensee procedures to verify that sufficient administrative controls were in place to ensure that the licensee's program for control and traceability of SR items during material issue, credit to stock, staging and end use were in conformance with Quality Assurance Program and FSAR commitments.

The inspectors' review of SR material issue revealed that these processes are controlled by the same P&MMD Nuclear Training Program and procedures, P&MMPs and CCSPs, that are described in paragraph 3.3.1 above. The types of discrepancies found have also been previously described in paragraph 3.3.1. However, no significant safety concerns were identified. Based on a sampling review by the inspectors, material issue activities appear to ensure that SR material is not issued for use unless it is properly tagged for traceability.

The inspectors reviewed the processes for returning SR items to stock. This process is adequately documented in RIUPs; in contrast, documentation of this process in the CCSPs could be improved. Material handling personnel have been trained and certified as Level 1 inspectors to receipt inspect SR items returned to the warehouse for credit. This certification process has been documented by the RIU. These certified material handling personnel accept items for credit which meet a number of inspection criteria. Items which do not meet the criteria are returned to the RIU for inspection, the RIU for inspection.

The inspectors reviewed the process for "staging" items for end use. This process is controlled by CCI-207 which is under the cognizance of the

Maintenance Section. The inspectors found that the requirements of interfacing procedures had not been adequately incorporated into this procedure. For example, new requirements from the latest revision of CCI-162 and CCI-174 have not been incorporated into CCI-207. Additionally, the Quality Assurance Policy requirement to have Nuclear Quality Assurance Department (NQAD) personnel ensure material traceability information is correctly transferred when an item is subdivided has not been transcribed into CCI-207. Discussions with licensee personnel indicated that this procedure was under biennial review/revision.

After reviewing CCI-207, the inspectors examined several "staging" areas. The inspectors found that these areas are being used for the long term storage of contingency materials and partially used materials as well as the staging of items for immediate issue. Therefore, the inspectors questioned whether controls for packaging, shelf life, storage level, and environmental conditions should be proceduralized to the same level of detail as those imposed on the warehouse. The inspectors found where a group of the same stock numbered items, which had been stored in a refrigerator in the warehouse, were on the shelf in the Electrical and Control storage vault (E&C Vault) and the shelf life of these items had expired in April 1991. Although no instances were found where expired material was used in plant systems, the inspectors noted this as an example where storage controls imposed for the "staging" areas are in need of improvement. Two other items noted by the inspectors were: 1) not all the staging areas had been receiving the required annual inspection and 2) the temperature and humidity monitor was not installed in the E&C Vault. After these items were identified by the inspectors, prompt action was taken to enter the missed inspections into the discrepancy tracking system for evaluation. Discussions with the licensee indicated that the monitoring equipment would be reinstalled in the E&C Vault.

The inspectors also reviewed the end use and traceability of SR items by performing a sampling review of Maintenance Orders (MOs). The inspectors found that traceability information was properly recorded on the MOs as required by procedure. The inspectors were also able to trace material used for MOs back to receipt inspection packages and purchase orders.

Conclusion

The inspectors concluded that the procedures and controls for storing items in "staging" areas were not following the requirements of QAP-2 and CCI 162. However, no significant safety concerns were identified in that SR items were found to be traceable. It is expected that the WUP task to review implementing procedures will address the inspectors' concerns.

4.0 COMMODITY UPGRADE PROJECT (92701)

Scope

The inspectors performed a review to evaluate the procurement practices that were in place prior to 1989 for commodity materials and to determine if any safety concerns existed because of these practices. Commodity materials consisted of such items as pipe clamps, pipe elbows, cotter pins, nuts, snap rings, flat washers, and O-rings.

72/78 Program

During the inspectors' review of several licensee initiated audits, references were made to the upgrade of 72/78 series stock parts for safety-related use. The inspectors found that the term "72/78 Series" referred to material with a stock mechanization number beginning with a 72 or a 78. Further inspection identified that commodity type material with a stock mechanization number beginning with a 72 or 78 and procured before 1988 were procured commercially, were not traceable, and were not dedicated. Material with the 72/78 mechanization number were used in both safety-related and nonsafety-related applications. The material, commonly known as "free stock," was issued from the warehouse without a safety-related item (SRI) tag attached. At the time, it was acceptable to install 72/78 items into safety-related systems without a SRI tag. There were approximately 1700 items with the 72/78 series number. Materials identified with this unique number were commodity types material such as pipe clamps, pipe elbows, cotter pins, nuts, snap rings and flat washers. The problem with traceability and dedication was documented by the licensee in a Quality Assurance (QA) surveillance report dated October 21, 1988. Specifically, the findings of the report identified that:

- Identification and control of 72/78 series materials was not maintained beyond issue from the storeroom.
- Receipt inspection status was not maintained beyond issue from the storeroom.
- 72/78 series equipment and some other equipment processed by the commercial quality method had not been inspected for safety-related (basic component) dedication.
- Records are not sufficient to show inspection status or installation location of 72/78 series equipment.

Further discussion with licensee personnel indicated that, when initially identified, management did not see the 72/78 lack of traceability and dedication as a problem. It was not until March of 1989, after licensee management changes, that the issue finally was addressed. At that time, the QA group issued a memorandum which required all material used in safety-related applications to have a SRI tag associated with it. To

accomplish this, the licensee inspected all warehouse material with the 72/78 designation and, if undamaged, installed an SRI tag with the designation MC-8901. The licensee considered this action appropriate because 72/78 series material was originally purchased for safety-related use and was controlled in the warehouse. The material was still not traceable back to a specific purchase order and dedication was not considered. In January of 1990, the licensee decided, in part, because of recent industry guidelines pertaining to commercial grade dedication, that the MC-8901 tags were not sufficient. Administrative controls were established to ensure all material with an MC-8901 SRI tag could not be issued for safety-related use. MC-8901 material was downgraded for nonsafety-related use only. An action plan was implemented to address the 72/78 series items. The plan included either dedicating the material for safety-related use, scrapping, or using the material for nonsafety-related use.

The licensee hired a contractor to evaluate and provide upgrade packages for designated 72/78 series equipment which had the MC-8901 SRI tag. Other 72/78 materials were not upgraded since it would be more cost effective to scrap the items and order new ones. New materials received in the warehouse received a commercial grade dedication and were assigned a SRI tag number which corresponded to its purchase order number. The inspectors discussed the upgrade process with the licensee. A contractor prepared upgrade packages for each item identified as requiring an upgrade. The package included identifying the material and any critical characteristics of the material such as part number; material of construction; dimensions and physical configuration or shape; and chemical composition. The inspectors did not evaluate the dedication process, but rather, the methodology used for preparing and approving the upgrades. After the packages were prepared, they went through a review and approval process which included procurement, design engineering, and quality assurance. Once approved, the packages were sent to receipt inspection.

The inspectors reviewed several of the packages that had gone through the upgrade process and noted that nonconformance reports (NCRs) were associated with a number of them. The inspectors questioned whether the NCRs generated represented a safety concern with regards to material already installed in the plant, especially since traceability was known to have been lost. A close examination of five NCRs indicated that, for these five, no safety concerns existed. Further, licensee management stated that of all the NCRs generated to date as a result of the 72/78 process, none represented a safety concern. However, a quality assurance audit (90-24-R01), recommended a reevaluation of each 72/78 series related NCR. Further, the recommendation provided a justification for concluding that lack of traceability of installed 72/78 series items does not create any real safety concern. At the time of the inspection, these reevaluations were not completed, but the ongoing process was being tracked by the licensee and will be verified as completed prior to the closeout of audit recommendation 90-24-R01.

In addition to the 72/78 mechanization series upgrade, the licensee had a contractor provide an assessment of procurement activities both past and present and an overview of the 72/78 series upgrade project. The assessment concluded that no safety concerns existed as a result of procurement practices. Although not in writing, licensee management agreed with this assessment. Prior to the inspectors' leaving the site, the QA manager issued a memorandum to the Vice President Nuclear Energy, stating that, through the consultants analysis and their own analysis of the level of controls over 72/78 series materials, no nuclear safety issue exists. Further, the memorandum stated that "upon completion of the review of the NCRs generated during the various analysis of this problem by appropriate engineering groups (as described in audit recommendation 90-24-R01), I consider this issue closed." At the time of the inspection, all of the upgrade packages were completed, and all but about 38 had gone through receipt inspection and were labeled with tags for the sample items reviewed by the identifying inspectors. No safety concerns were identified.

Conclusion:

The licensee currently has in place adequate controls to ensure commercially procured commodity material used in safety-related applications receives a dedication and is traceable. However, this was not the case for past commercial grade procurement practices. Although poor procurement practices were identified by the licensee in 1988, corrective action and evaluation for safety significance of these practices were not timely. Of the items reviewed by the inspectors, no safety concerns were identified.

5.0 WAREHOUSE UPGRADE PROGRAM

As discussed in the sections which precede this one, during the inspection of the receiving and storage areas and a review of implementing procedures, the inspectors established that many of these documents were in conflict with the Final Safety Analysis Report (FSAR) commitment, with exceptions, to ANSI N45.2-1972, "Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants" and with Calvert Cliffs Instruction CCI-162, "Procurement and Control of Items and Services for Calvert Cliffs." It was noted that CCI-162 was also in conflict with the FSAR commitments.

To resolve part of the documentation problem, CCI 100 has been changed to require the sponsor engineer for an upper tiered document (CCI) to verify the technical quality of documents that his CCI affects and to verify that the lower tier documents are being implemented. The quality assurance organization is also charged to evaluate and audit this specific task.

Specific concerns identified in the procurement and receiving and storage areas were addressed earlier in Paragraph 3.0, 3.1, and 3.2. To resolve

the concerns identified in this inspection report and described below, the licensee committed to the following Warehouse Upgrade Plan (WUP) tasks and schedules:

- (1) Implement an interim program to control the safety-related items in the receiving and storage areas immediately. This includes training of personnel for the functions they perform in these areas
- (2) Identify Requirements/Standards--1st quarter of 1992
- (3) Identify Job Function/Job Task Analysis--1st quarter of 1992
- (4) Upgrade Procedures to Reflect Job Functions/Standards/Requirements--2nd quarter of 1992
- (5) Develop Training/Qualification Program--3rd quarter of 1992
- (6) Implement Training/Qualification Program--4th quarter of 1992
- (7) Procurement Engineering Review Implementation Procedures--2nd quarter of 1992
- (8) Perform Implementation Assessment of the above items--1st quarter of 1993
- (9) Complete Warehouse Renovation--2nd quarter of 1992
- (10) Upgrade Level "A" Storage Area--3rd quarter of 1992

The above items are to be documented and tracked in the Calvert Cliffs "Tracking System". The concerns identified by the inspectors are adequately addressed as elements of this upgrade plan.

6.0 EXIT MEETING

Licensee management was informed of the scope and purpose of the inspection at an entrance meeting conducted on September 23, 1991.

The findings of the inspection were discussed periodically with licensee representatives during the course of the inspection. An exit meeting was conducted on September 27, 1991, at which time the licensee committed to implementing the subject tasks and dates referenced in the "Warehouse Upgrade Plan" (WUP) discussed in paragraph 5.0 of this report. The licensee also committed to track the WUP in their Calvert Cliffs Tracking System.

Attachments:

1. Persons Contacted
2. QA Documentation

Attachment 1Persons ContactedBaltimore Gas and Electric Company

- *A. Anuje, Supervisor - Quality Assurance
- *K. Collars, Assistant General Supervisor - Procurement Services
- *R. DeAtley, Senior Engineer - Quality Audit
- *D. Geneva, Supervisor - Vendor Audits Unit
- *R. Heibel, Manager - Nuclear Quality Assurance Department
- *D. Helgason, General Supervisor - Material Distribution
- *J. Lemons, Manager - Nuclear Support Services Department
- *E. Matthias, Supervisor Receipt Inspection Unit
- *D. Pietruszka, Assistant General Supervisor -
Purchasing and Materials Department
- *J. Spina, Supervisor Procurement Engineering
- *R. Simmons, Eng-Procurement Services
- *K. Vrooman, Manager - Purchasing and Materials Management Department
- *E. Wason, General Supervisor - Procurement Quality
- *L. Weckbaugh, General Supervisor - Electrical Controls
- *E. Wilson, Compliance Engineer
- *J. Yoe, Supervisor - Contracts Administration

United States Nuclear Regulatory Commission

- *L. Nicholson, Senior Resident Inspector

*Denotes those at the exit meeting held on September 27, 1991

During the course of this inspection the inspectors contacted other members of the licensee's Technical, Quality Services, and Procurement staffs.

Attachment 2Quality Assurance Documentation

Quality Assurance Policy, Revision 27, August 5, 1991
 QAP-2, "Procurement and Control of Items and Services," Revision 50
 QAP-16, "Surveillance Testing," Revision 22
 QAP-21, "Review and Audit of the Quality Assurance Program," Revision 28
 VAUP-2, "Vendor Evaluation"
 VAUP-4, "Vendor Surveillance"
 VAUP-6, "Source Evaluation"
 QAP-26, "Corrective Action Program," Revision 43
 QAP-28, "Control of Items Covered by the Quality Assurance Program," Revision 28

Procurement and Receiving Inspection - Documentation

CCI-100, "Calvert Cliffs Instruction"
 CCI-162, "Procurement and Control of Items and Services for Calvert Cliffs,"
 Revision A
 CCI-207E, "Control of Safety-Related Spare Parts"
 CCI-174, "Processing and Control of Procurements Identified Deficiencies,
 Initial Issue Change"

Purchasing and Materials Management Department (PMMP) Procedures

PMMP-1, "Purchase of Safety Related and Designated Non-Safety-Related Items"
 PMMP-2, "Receiving, Storage and Issue of Safety-Related Items"

Audit and Surveillance Reports

QAG 60A - January 1991 - July 1991, "QA Program Audits and Commercial Grade Surveys"

QAG 60-CEF91- July 22-26, 1991, "Quality Assurance Audit of ABB/Combustion Engineering, Nuclear Fuel Manufacturing, Reload Fuel Engineering"

QAG 29 - December 27 and 28, 1989, "Warehouse Surveillance Conducted at Calvert Cliffs"

QAG 29 - April 10, 1987, "Surveillance of Calvert Cliffs Warehouse"

QAG 29 - May 30 and 31, 1989, "Warehouse Surveillance Conducted at Calvert Cliffs Nuclear Power Plant"

RIV91-065 "Storage Facility Surveillance - 1st quarter 1991"

Calvert Cliffs Stores (CCSP) Procedures

CCSP 100C "Control Procedure," Revision 0
 CCSP 101B "Storage Integrity Procedure," Revision 0

CCSP 102B "Warehouse Notice Procedure," Revision 0
 CCSP 107A "Rigging Procedure," Revision 0
 CCSP 108 "General Warehouse Receiving Procedure," Revision 4
 CCSP 109A "Shipping Procedure," Revision 1
 CCSP 113A "General Warehouse Storage Procedure," Revision 0

Documentation Supporting 1989/1990 Bulk Material Control Task

Memorandum dated June 22, 1988, "Evaluation of 72/78 Mech Number Equipment for Safety Related Use"

Memorandum dated June 28, 1988, "Evaluation of Mech 72/78 Items for Safety Related Use"

Memorandum dated July 11, 1988, "Evaluation of Mech 72/78 Items"

Meeting minutes for July 7, 1988, "Evaluation of Mech 72/78"

QA Surveillance QAG 72.2-5-88 "72/78 Series Parts Traceability"

Memorandum dated March 23, 1989, "Issuance of Tags of 72/78 Series"

Memorandum dated March 24, 1989, "Mech number 72/78 Series Material"

Memorandum dated January 9, 1990, "72/78 Mech Series"

Memorandum dated January 12, 1990, "Issuing 72/78 Items under ML-89-01"

Memorandum dated January 15, 1990, "Mech Number 72/78 Series"

Memorandum dated January 16, 1990, "Mech 72/78 Material Tugged ML-89-01"

Summary Report of the Independent Engineering Assessment of the Current and Past Procurement Practices at the Calvert Cliffs Nuclear Power Plant. Dated January 31, 1990.

Calvert Cliffs Nuclear Power Plant Procurement Assessment Dated March 22, 1991.

Memorandum dated September 27, 1991, "72/78 Mech Series"