

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-352/84-21

Docket No. 50-352

License No. CPPR-106

Licensee: Philadelphia Electric Company
2301 Market Street
Philadelphia, PA 19101

Facility Name: Limerick Generating Station, Unit 1

Inspection At: Limerick and Philadelphia, PA

Inspection Conducted: April 30 - May 4, 1984

Inspectors: *G. Napuda*
G. Napuda, Lead Reactor Engineer

5/25/84
date

P. Bissett
P. Bissett, Reactor Engineer

5/25/84
date

T. Shaub
T. Shaub, Reactor Engineer

5/25/84
date

Approved by: *A. T. Gody*
A. T. Gody, Chief, MPS, DETP

5/25/84
date

Inspection Summary: Inspection on April 30 - May 4, 1984 (Inspection Report No. 50-352/84-21)

Areas Inspected: Routine, announced inspection by region-based inspectors of the readiness for implementation of the Quality Assurance Program for operations in the areas of audits, QA/QC surveillances (monitoring) and QC inspections; document control; procurement control; QA/QC administration; receipt, storage and handling; plant surveillance testing; and, test and measuring equipment. The inspection involved 96 inspection hours onsite by three inspectors and 18 hours at the corporate offices by one inspector.

Results: In the seven areas inspected there were no violations identified. However, two items were identified that require corrective action to be taken by the licensee before O.L. issuance. Another item requires action prior to commercial operation. These items are identified in paragraphs 4.5, 7.4 and 9.4.

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DETAILS

1. Persons Contacted

- *J. Corcoran, Field QA Branch Head-Engineering and Research Department (E&R)
 - A. Diederich, Supervising Engineer-Nuclear and Environmental Section (N&ES)
- *C. Endriss, Regulatory Engineer-Electric Production Department (EP)
- *K. Folta, Quality Assurance Engineer-E&R
 - A. Giangiulio, Engineer (Auditor)-N&ES
- *R. Hennessey, Quality Control Site Supervisor-EP
 - E. Hilditch, Supervisor, Document Administration Center
 - L. Hopkins, Results Engineer
 - L. Keenan, Lead Quality Engineer-Research and Testing (R&T) Division
- *C. Leitch, Plant Superintendent
- *A. MacAinsh, Quality Assurance Site Supervisor-EP
- *C. Mengers, Quality Assurance General Supervisor-EP
- *R. Moore, Superintendent Quality Assurance Division-EP
 - J. Muntz, Surveillance Test Coordinator
 - J. Phillabaum, Licensing Engineer
 - E. Purdy, Jr., Senior Engineer-N&ES
 - J. Rainey, Instrument & Controls Engineer
 - C. Rapine, Storeroom Supervisor
 - J. Robb, Senior Engineer Licensing
 - R. Scott, Limerick Branch Supervising Engineer-Construction Division
- *D. Stover, Senior Quality Engineer-Gilbert Associates
 - R. Wiegler, Branch Engineer-R&T Division

USNRC

*J. Wiggins, Senior Resident Inspector

*denotes those present at the exit interview on May 4, 1984.

The inspectors also interviewed other licensee and contractor personnel including administrative, engineering, QA/QC, plant and technical employees.

2. Licensee Action on Previous Inspection Findings

(Closed) 81-00-13 Construction Deficiency Report - Installation of one inch containment isolation valves with improper operators into Unit 1 from Unit 2.

The inspector verified that two of the three valves identified have been replaced and that NCR-4994 was closed. The inspector reviewed the revised procedure JR-G-26, "Job Rule for Interchanging Equipment", Revision 8, to

ensure that the procedure adequately defined the approval process for transfer and defined the requirements for an evaluation for replacement "in-kind". Based on the above this item is closed.

3. General

The intent of this inspection was to ascertain the readiness of the applicant's programs for operation of the plant in the specific areas inspected. Procedures were reviewed to verify that they were consistent with commitments and that specific activities were clearly detailed. Employees were interviewed to determine that they were aware of their authorities and responsibilities, and were knowledgeable in applicable procedures. Training and personnel records of selected employees were also reviewed to verify that job incumbents had adequate education/experience or proper supplemental training for their positions. Records of activities that had taken place were reviewed to determine the effectiveness of the established program. When possible, ongoing activities were observed to assure they were accomplished in accordance with established procedures. These areas are discussed in paragraphs 4 thru 9.

Specific items that require resolution and/or correction prior to the issuance of an Operating License (OL) or commercial operation are identified in paragraphs 4.5, 7.4 and 9.4. These resolutions will be verified during a subsequent inspection(s) prior to the issuance of the OL or commercial operation as appropriate.

4. Quality Assurance/Quality Control

4.1 References/Requirements

- Final Safety Analysis Report (FSAR), Sections 13, 14, 16 and 17.2
- Regulatory Guide (RG) 1.33, Rev. 2, Quality Assurance Program Requirements (Operations)
- ANSI N18.7-1976, Administrative Controls and Quality Assurance Program Requirements for the Operational Phase of Nuclear Power Plants
- RG 1.144, Rev. 1, Auditing of Quality Assurance Programs for Nuclear Power Plants
- ANSI N45.2.12-1977, Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants
- RG 1.146, Rev. 0, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants
- ANSI N45.2.23-1978, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants

- RG 1.58, Rev. 0, Qualifications of Nuclear Power Plant Inspection, Examination and Testing Personnel
- ANSI N45.2.6-1973, Qualifications of Inspection, Examination, and Testing Personnel for Nuclear Power Plants
- SNT-TC-1A and Supplements, Recommended Practice for Nondestructive Testing Personnel Qualification and Certification

4.2 Quality Assurance/Quality Control (QA/QC) Program and Administration

4.2.1 Organization and Staffing

Two departments have been delegated the QA/QC overview functions with some specific responsibilities subdivided further. The Electric Production (EP) Department has the ultimate responsibility for plant operation and assuring QA Program implementation by others delegated certain portions of activities, including the Engineering and Research (E&R) Department. Those groups involved in QA/QC overview activities are discussed below.

4.2.1.1 Quality Assurance Division - EP

This group consists of QA Engineering, QA Auditing, and QC sections. Each of these sections maintains staff onsite. There are 35 qualified auditors (14 engineers, 17 auditors and 4 contracted QA specialists) currently in the QA sections. Nineteen (including the four contracted specialists) are certified as Lead Auditors.

The onsite QC group has been recently established and is in a formative stage. The onsite supervisor is a PECO employee and the staff consists of 5 contracted engineers. Three PECO employees are expected to complete preliminary formal training during June of this year and will then report to this group. They will receive on-the-job training from the contracted engineers on a one-to-one basis until they are qualified to the appropriate ANSI N45.2.6 level in the electrical, mechanical or operations discipline. Similarly, contracted engineer is presently working along with the onsite supervisor. The licensee representative stated that the projected staffing for this year is 12 PECO employees. A QC Handbook has been developed for use by newly assigned employees, especially during their indoctrination and qualification period.

The permanent staffing of this group will be reviewed further during a subsequent inspection(s).

4.2.1.2 Quality Assurance Section - E&R

This group is responsible for auditing all activities that have been delegated to the E&R Department. This includes but is not limited to

modification engineering tasks, vendor surveys and surveillance, and construction work. There has been a group onsite during the construction phase, and it will remain for an indeterminate period into the operations phase. Group members are to be assimilated elsewhere when the staff is reduced or withdrawn.

4.2.1.3 Nuclear and Environmental Section

This group's responsibilities include nuclear fuel activities such as vendor surveys and surveillances, auditing, and procedure/program reviews. One of the two contracted auditors is certified as a lead auditor. The two licensee auditors are being qualified to lead auditor status.

4.2.1.4 Research and Testing Division QC Group

This group was formally established in November, 1983 and is presently staffed by a Lead Quality Engineer (the supervisor), two Level III inspectors, one inspector trainee, and two contracted individuals. Four members are assigned onsite, including one certified to Level III. The complement of staff for this group has not been determined, but the licensee representative stated that the group will be expanded if needed. E&R QA, who audits this group, had identified a need for additional new procedures during the conduct of Audit OP-232. Necessary corrective action will be routinely followed up as part of the audit process.

Staffing and program implementation will be reviewed further during a subsequent inspection(s).

4.2.1.5 Construction Division QC

This group will be responsible for inspection of construction work associated with modifications. The licensee representative given the responsibility to establish this group, stated that staffing by contracted Architect-Engineer personnel is targeted for June of this year. PECO employees are being solicited as permanent staff. This is expected to be complete by September of this year. The training, qualification and certification of employees is scheduled to be finished by the end of this year. The licensee representative stated that this group will patterned after a similar one at PECO's other nuclear station.

Permanent staffing and establishment of procedures will be reviewed further during a subsequent inspection(s).

4.3 Program Review

Quality assurance program documents were reviewed to determine whether administrative controls have been established including the following as appropriate.

- independence, qualification, and training of QA/QC personnel
- corrective actions documented and reviewed
- inspection requirements and acceptance criteria
- audit program scope defined
- audit followup/re-audit
- planning and conducting audits
- long range audit scheduling
- audit report distribution and responses required
- periodic review of the audit program

The documents/procedures reviewed included:

- QADP-5, Performance of QA Division Audits, Revision 11
- QADP-6, Quality Assurance Division Audit Plan, Revision 7
- QADP-8, Preparation and Use of Audit Checklists, Revision 5
- QADP-9, Control of Apparent Deficiencies and Auditor Follow-Up Required Items, Revision 10
- QADP-9.1, QC Procedure for Control of Nonconformances, Revision 0
- QADP-11, QA Division Activities Report, Revision 10
- QAI 18-4, Formulation of Audit Plans, Revision 1
- QAI 18-5, QA Supplier Evaluation, Revision 3
- Nuclear Fuel Quality Assurance Plan, Revision 2 (selected portions)

Additional procedures will be reviewed during a subsequent inspection(s).

4.4 Implementation

4.4.1 Quality Assurance Division-EP

An annual audit schedule is issued and updated periodically. The day to day working schedule is displayed on a magnetic board in the QA offices. The approximately 42 audits that address 38 elements of the Quality Assurance Program did not include any operating activities. The PECO representative stated that operating activities would be added to the schedule when and as appropriate. It was noted that the audit schedule for PECO's

other nuclear station included appropriate operating activities such as Limiting Conditions for Operations at Full Power and Plant Startup, and Liquid/Gas Releases. There have been no cancelled or deferred audits this year to date.

An Activities Report has been issued bi-monthly. A summary sheet that lists the total numbers of line items appearing in the report has recently been added and distributed along with the report. The most recent report (No. 8) shows only one reply to a Nonconformance Report overdue and no overdue corrective actions.

The Startup QA/QC Monthly Report for March, 1984, indicated that group had conducted 185 surveillances of preoperational test activities this year to date and has been monitoring (walkthroughs of structures) housekeeping on a three shift a day basis. This latter QA/QC effort has been emphasized at plant management's request to ensure continued improvement in this problem area.

The Superintendent QAD forwards a semi-annual report, summarizing the areas that had been audited, to the Nuclear Review Board (the offsite review committee). The most recent report contained a statement that the Superintendent QAD had reviewed the status of the audit program and found it met PECO commitments and regulatory requirements.

4.4.2.1 Quality Assurance Section-E&R

A matrix has been developed that identifies each group involved in quality affecting activities in or for the E&R Department. The matrix includes those vendors who are considered for auditing during this year. Also listed are those implementing procedures and plans that are part of the QA Program. An annotation(s) is entered onto the matrix to identify which group(s) and procedure(s) were addressed by a given audit. This method can assure that all applicable quality program elements are audited within a given time frame.

The monthly Quality Assurance Major Activities Schedule lists the firm dates for external and internal audits to be conducted. Also included are QA Surveillances to be conducted on pre-selected modification activities for the remainder of the current year. These later overviews will be scheduled as the functional activities occur.

4.4.3 Nuclear and Environmental Section

A schedule had been developed for 1984 that listed audits, evaluations and vendor surveillances. It was noted that the General Electric Fuel Facility at Wilmington, North Carolina was visited monthly since March, 1983 and is scheduled for the remainder of 1984. A design control audit was also recently conducted at the same company's San Jose engineering offices.

4.4.4 Audits

Audits were reviewed to verify that they were conducted in accordance with ANSI N45.2.12 requirements and or licensee commitments including the following:

- in accordance with a written checklist covering the scoped audit area
- by a qualified/trained person independent of the audited area
- identified deficiencies were documented and reviewed
- followup was accomplished/planned and corrective action was adequate and timely
- audit frequencies and general audit conduct was in accordance with the established schedule and procedures

The following audits were reviewed.

- AP83-35 TR, Training/Qualifications of Technicians, Craftsmen and QC Personnel (QAD-EP)
- D-005, Mechanical Engineering Division Nuclear Fuel QA Plan (E&R QA)
- OP-284, Corrective Action NRB Committee (E&R QA)
- PE-83-09, General Electric Company-Wilmington Manufacturing Department (N&E QA)

4.4.5 Quality Trend Analysis

The most recent trend analysis performed by QAD-EP was reviewed. It consisted of graphs and comparisons of audit findings between recent years. Also addressed were NRC findings. A simple weighting factor was used to assign significance. Methodology and plans for the current trending effort were discussed with PECO representatives and additional data/documents were reviewed.

4.5 Findings

The functional areas and activities reviewed were found to comply with the requirements and commitments referenced in paragraph 4.1. However, the following items remain open pending PECO action and further review during a subsequent inspection(s).

No violations were identified.

4.5.1 Technical Specification Audits

QAD-EP lacks an index, matrix or other means for assuring that audits will address all Technical Specification provisions over a finite period of time. This is required before issuance of the O.L. PECO management stated that such a matrix or method would be developed and in place prior to O.L. issuance. PECO action will be verified during a subsequent inspection(s) (352/84-21-01).

4.5.2 Quality Assurance Program

QAD-EP lacks a method to assure that audits will address all the quality program elements in the various functional activities/areas in which they occur. This is required before issuance of the O.L. PECO management stated that such a method will be developed and in place prior to O.L. issuance. PECO action will be verified during a subsequent inspection(s) (352/84-21-02).

4.5.3 Quality Trend Analysis

The current trend analysis method does not address or consider all the existing corrective action systems. Further, there is no method or procedure that addresses the quality trending effort and how the various corrective action systems are to be included in this analysis/evaluation. This is required before commercial operation of the plant is attained. PECO management stated that such a method and an administrative procedure(s) would be developed and in place prior to commercial operation of the plant. PECO action will be verified during a subsequent inspection(s) (352/84-21-03).

5.0 Procurement

5.1 References

- Regulatory Guide 1.123, Rev. 1 and ANSI N45.2.13-1976, QA for Procurement of Items and Services
- FSAR Section 17.2

5.2 Program Review

The procurement control program was reviewed to verify that administrative controls were established for the following.

- the identification of items purchased; identification of tests and/or special instructions, technical requirements and documentation to certify the item; assuring that the contractor/supplier has imple-

mented a QA program consistent with 10 CFR 50, Appendix B, and access to the supplier's plant or records for purposes of audit

- assignment of responsibilities for initiation of procurement documents; review and approval of specifications differing from the original design documents; review and approval of procurements, including changes thereto; and, the designation of quality classification of procured items
- evaluation and approval of bidders/suppliers including assignment of responsibilities for the following functions: review/update of the listing of approved suppliers; providing for rights of access to supplier's facilities and records; and, maintenance of records of suppliers qualifications and audits

The following administrative controls/procedures were reviewed.

- A-27.1, Administrative Procedure for Procurement of Coded Items, Revision 0
- A-27.2, Administrative Procedure for Procurement of Non-Coded Q-Listed Items, Revision 0
- A-27.3, Administrative Procedure for the Procurement of Safety-Related Services, Revision 0
- A-27.6, Administrative Procedure for Establishing Procurement Codes for Q-Listed Items, Revision 0
- ERDP-4.1, Procedure for Procurement of Services and Control of Interface with Contractors/Consultants in Accordance with Existing Contracts, Revision 5
- ERDP-4.2, Procedure for Processing Engineering & Research Department Revisions to the Evaluated Supplier List for Q-Listed Materials Equipment and Services, Revision 3
- ERDP-4.4, Procedure for the Procurement of Specially Engineered Equipment Materials, Services or Combination Thereof with a Specification, Revision 4
- ERDP-4.5, Procedure for Procurement of Nuclear Safety Related Items and Services by the Preliminary Requisition Method, Revision 5
- ERDP-4.6, Procedure for Procurement of Nuclear Safety Related Items Under the Catalog Method, Revision 4

- SDA-9 Stores Division Administrative Procedure for the Procurement of Nuclear Safety-Related Parts, Materials and Services at Storeroom #348, Limerick Generating Station, Revision 0
- SDA-7, Stores Division Administrative Procedure for the Procurement, Storage and Control of Shelf life Items, Revision 1
- QAI 18.5 QA Supplier Evaluation
- Appendix L, Volume I, QA Plan Design and Construction Phase, Procedure for Preparation and Maintenance of the Evaluated Suppliers List of Q-listed Products and Services, July 26, 1982
- Startup Administrative Manual AD 6.5-2, Material/Service Request, September 14, 1983
- AD 6.6-1, Startup Work Requests, June 23, 1983
- Bechtel Job Rule 8310-JR-G-26, Job Rule for Interchanging Equipment

5.3 Implementation

5.3.1

Two safety-related procurements were made to date. These purchase-orders were reviewed to verify the following:

- procurement documents were prepared in accordance with the administrative controls identified in paragraph 5.1.
- the items were purchased from qualified vendors.
- the procurement documents contained requirements for the vendor/supplier to supply appropriate documentation and the documentation was available on site.

5.3.2

A major spare parts procurement program is underway to support Limerick operations. The program consists of an initial review of all original purchase orders to determine the spare parts necessary to support operations and a determination of safety or nonsafety-related at the component level.

The parts at the subcomponent level are then evaluated by an engineering consultant to determine safety or nonsafety related based on function and application. This evaluation is reviewed by another engineering consultant and the maintenance engineers. At this point the evaluation returns

to the original engineering consultant for determination of the quality and technical requirements for the procurement. The procurement is then reviewed by the above groups and the Quality Assurance Department.

This process was discussed in detail with the maintenance engineering staff. The procedures developed by the engineering consultant, were reviewed to ensure adequate controls were established. Additionally, the inspector reviewed several evaluations in various stages of completion to verify implementation of the process in accordance with the established controls.

5.3.3

The Evaluate Supplier List (ESL) is maintained by the Quality Assurance Section of Engineering and Research Department. The process for vendor evaluation was discussed with the QA department to verify that adequate interfaces were established with the engineering disciplines responsible for recommendation of addition and removal of vendors from the ESL based industry information (e.g., NRC bulletins, generic letters etc.). PECO is developing a tracking system to ensure vendor/supplies addressed in this type industry information, are not inadvertently placed on the ESL without a conditional statement to address the particular vendor.

5.4 Findings

No violations were identified.

5.4.1

PECO has written the administrative procedures for the procurement program with the exception of A27.2, Procurement of Commercial Catalog Items. This procedure is in draft form and is scheduled for approval June 29, 1984.

6. Receipt, Handling, and Storage

6.1 References

- Final Safety Analysis Report (FSAR) Sections 17.2.7, 17.2.13 and 17.2.15
- ANSI N45.2-1977, Quality Assurance Program Requirements
- ANSI N45.2.2-1972, Packaging, Shipping, Receiving, Storage and Handling
- ANSI N45.2.13-1976, Quality Assurance for the Procurement of Items and Services

6.2 Program Review

PECo's program for receipt, storage and handling of safety related equipment and materials was reviewed to verify that the program is consistent with the requirements of the references in paragraph 6.1 above and to determine that administrative controls established the following.

- requirements for conducting receipt inspections on all incoming safety related materials and equipment
- requirements that materials and equipment be examined for conformance with requirements specified on original procurement documents
- provisions for identification of those materials and equipment that can be accepted by only a "certification of quality" (C of C)
- controls for acceptance of items including tagging/marketing for storage or immediate use
- controls for nonconforming items which include:
 - marking and segregating nonconforming items
 - disposition of nonconforming items (reevaluate, rework, repaired, or return)
 - prohibiting use of nonconforming items
 - documentation required of the nonconforming items
- methods for conditional release of nonconforming items including justification for use, documentation and authority for conditional release
- requirements for providing proper levels of storage and appropriate environmental conditions
- requirements for specifying storage controls including access, identification, coverings, and preservatives
- requirements for periodic inspections of the storage areas
- requirements for specifying maintenance and care of items in storage including shelf life

The following procedures were reviewed.

- A-27.4, Administrative Procedure for Receipt Inspection of Q-Listed Items, Revision 0

- A-27.5, Administrative Procedure for Preparation and Approval of Receipt Inspection Requirements for Q-listed Items Revision 0
- A-27.8, Administrative Procedure for Receipt Inspection Deficiencies, Revision 0
- A-55, General Qualification Requirements for Procurement and Receipt Inspectors, Revision 0
- SDA-2, Stores Division Administrative Procedure for Supervising Storekeepers' Monthly Inspection, Revision 3
- SDA-5, Stores Division Administrative Procedure for the Storage, Packaging, and Shipping of Material for Nuclear Power Plants, Revision 3

6.3 Implementation

6.3.1 The inspector reviewed the two safety-related procurement received on site to verify the following:

- receipt inspections were conducted in accordance with administrative controls
- disposition of the item was in accordance with administrative controls
- storage of items including packaging, preservative, covering and environmental conditions were in accordance with manufacturers' recommendations
- tagging/marking allowed tracing the item back to procurement documents, receipt documents and "quality certification" documents
- nonconforming items were clearly marked and segregated from other safety related items
- documentation of nonconforming items was transmitted to affected organization for them to determine final item disposition

6.3.2 A tour was conducted of the licensee warehouse onsite to verify the following.

- controlled access to the storage area was maintained
- cleanliness and good housekeeping practices were enforced
- fire protection was commensurate within the type of storage area and materials involved

- food and associated items were not permitted
- the adequacy of material storage, including protective coverings, coatings and preservatives
- hazardous material segregation
- clear identification of shelf life of applicable material

6.3.3 Training for the Store Department personnel onsite was reviewed with the supervisor to verify that their training was adequate to perform their assigned tasks.

6.3.4

The logs maintained to track shelf life of stored materials was reviewed and four items were randomly checked against the log to ensure proper entries were being made. Additionally, the inspector reviewed the Maintenance Engineer's Shelf Life Program to ensure adequate evaluations for shelf-life were made.

6.4 Findings

No violations were identified.

7. Plant Surveillance Testing and Calibration Program

7.1 References

- Technical Specifications (Proposed), Sections 4 and 6
- Regulatory Guide 1.33-1978, Quality Assurance Program Requirements (Operation)
- ANSI N18.7-1976, Administrative Controls and Quality Assurance for ... Nuclear Power Plants
- Final Safety Analysis Report (FSAR), Section 13.5.1.9, "Procedure for Administration of Surveillance Testing Program"
- A-43, Surveillance Testing Program (Draft)
- A-47, Procedure for Preparation and Control of Surveillance Test Procedures
- RT-11-50014 Procedure for Calibration of Plant Instrumentation and Equipment

7.2 Program Review

The inspector reviewed the program for inclusion of surveillance tests, calibrations, calibration checks, and instrument functional tests required by the Technical Specifications; and, calibration of plant installed instrumentation used to verify satisfactory performance of Technical Specification Surveillance Testing and/or Inservice Testing (pumps and valves). Administrative procedures were reviewed and the program was inspected for conformance to the above requirements including the following.

- a master schedule has been established for surveillance and calibration testing
- responsibilities have been assigned for performance tests and to assure that test schedules are satisfied
- methods and responsibilities have been established for review and evaluation of data, for reporting deficiencies and failures, and for verification that LCO requirements have been satisfied
- adequate manpower is available to perform required testing
- interfaces with other organizations were defined
- responsibilities for training and qualification of test personnel were defined
- implementing procedures for performance of tests have been established

7.3 Program Implementation

The program as defined in paragraph 7.2, has not been completely implemented. Surveillance procedures are being written (approximately 75 percent have been completed, of which 55% have been PORC approved). The licensee is currently identifying all plant instrumentation used to verify operability of components identified in the Technical Specifications or Inservice Test program. Upon completion, these instruments will become part of the preventive maintenance program, thus ensuring periodic calibration.

7.4 Findings

As described in paragraph 7.3, the licensee plans to control the calibration of installed plant instrumentation under the preventive maintenance program. The Instrument and Controls Engineer described to the inspector the process by which the periodic calibration of plant installed instrumentation would be accomplished. However, it was determined that a station administrative procedure(s) was not in place which governed the

control, evaluation, and responsibilities of this program. PECO management stated that a station administrative procedure(s) governing the control of plant installed instrumentation would be developed and in place prior to O.L. issuance. PECO action will be verified during a subsequent inspection(s) (352/84-21-04).

8. Plant Measurement and Test Equipment Calibration and Control Program

8.1 References

- Technical Specifications (Proposed), Section 6
- Regulatory Guide 1.33-1978, Quality Assurance Program Requirements (Operation)
- ANSI N18.7-1976, Administrative Controls and Quality Assurance for ... Nuclear Power Plants
- ANSI N45.2.4-1972, Installation, Inspection and Testing Requirements for Instrumentation ... of Nuclear Power ... Stations
- RT-12-5000B, Control of Calibration of Measurement and Test Equipment
- RT-12-50007, Control of Calibration for Primary, Secondary and Tertiary Standards

8.2 Program Review/Implementation

The program for the calibration and control of measuring and test equipment was examined to ensure conformance to the above requirements. The following areas of the program were reviewed to verify the following.

- responsibilities for control and calibration of test equipment were established
- calibration schedule was maintained
- test equipment control records were adequate and maintained
- storage and labeling of test equipment were adequate
- a system is in place that provides for the calibration of test equipment on or before the expiration date
- usage was traceable for out of calibration test equipment

8.3 Findings

No violations were identified.

9.0 Document Control Program

9.1 References/Requirements

- Proposed Technical Specifications, Section 6, Administrative Control
- Final Safety Analysis Report (FSAR), Sections 13.5 and 17.2
- ANSI N45.2-1977, Quality Assurance Program Requirements
- ANSI N18.7-1976, Administrative Controls and Operational Quality Assurance for the Operational Phase of Nuclear Power Plants
- Reg. Guide 1.33, Rev. 2, February 1978, Quality Assurance Program Requirements

9.2 Program Review

PECo's program for document control was examined to determine whether the program is in conformance with the requirements of the references listed in paragraph 9.1 and to determine the following

- current as-built drawings, including piping and instrument drawings (P&IDS's) will be provided to the plant in a timely manner
- proposed drawing changes and the revised drawings receive the same level of management review required of the originals
- provisions have been made for identifying and marking of drawings that have outstanding revisions
- control of obsolete drawing has been established
- discrepancies found between as-built drawings and the as-constructed facility are handled as design changes
- master indices will be maintained for drawings, manuals, technical specifications, and procedures indicating current revisions
- provisions have been made for document issuance, distribution, use, and periodic review

The following procedures which describe the administrative controls for document control were reviewed.

- A-1, Procedure for Preparation and Approval of Administrative Procedures, Revision 1
- A-1, (Appendix 1)-Procedure Writing Guidance, Revision 0

- A-2, Procedure for Control of Procedures and Certain Documents
- A-3, Procedure for Temporary Changes to Approved Procedures, Revision 0
- A-4, Plant Operations Review Committee Procedure, Revision 0
- A-5, Procedure for Safety Evaluations, Revision 0
- A-6, Procedure for Control and Distribution of Drawings, Manuals and Drawing Logs, (Draft)
- A-14, Procedure for Control of Plant Modifications, Revision 0
- A-15, Procedure for Preparation and Revision of Health Physics Procedures, Revision 2
- A-17, Procedure for Preparation and Control of Health Physics Analytical/Chemical Analytical Procedures, Revision 1
- A-18, Procedure for Preparation and Control of Fuel Handling Procedures, Revision 1
- A-19, Procedure for Preparation and Control of Maintenance Procedures, Revision 0
- A-20, Procedure for Preparation and Control of System Operating Procedures, Revision 0
- A-21, Generation of Emergency Plan (EP) Procedures, Revision 1
- A-22, Procedure for Preparation and Control of Operational Transient, Off-Normal, Event, and Special Event Procedures
- A-23, Generation of Special Procedures, Revision 1
- A-25, Procedure for Preparation and Control of Preventive Maintenance Procedures, Revision 0
- A-26, Procedure for Corrective Maintenance, Revision 1
- A-47, Procedure for Preparation and Control of Surveillance Test Procedures, Revision 1
- A-93, Procedure for Preparation and Control of General Plant Procedures, Revision 0
- A-94, Procedure for the Preparation and Control of Transient Response Implementation Plan (Trip) Procedures, Revision 1

9.3 Implementation

- 9.3.1 Drawings, procedures, manuals, and forms were selectively sampled at the site to determine that controlled copies were consistent with the revisions indicated in the indices and drawing log. Ten or more administrative, operating, surveillance, maintenance procedures, and operational procedure forms, were checked against the indices at each of the following controlled copy locations.
- Control Room - station procedures, forms, Alarm Response Procedures (ARP) and drawings.
 - Technical Support Center - Administrative, Emergency, System Operating and Off Normal procedures
 - Maintenance Foreman Office - Administrative, Emergency and Preventive Maintenance procedures
 - Training Coordinator - Administrative, Emergency, System Operating, Trip, and Fuel Handling procedures
 - Operations Engineer - Administrative, Emergency, System Operating and Trip Procedures

9.4 Findings

No violations were identified. However, two items were identified that require resolution or correction prior to fuel load.

9.4.1

Administrative procedures delineate responsibilities for the plant staff QA Engineer. Currently the position is not filled and the QA Engineer's responsibilities are being assumed by other staff engineers. PECO has not committed to a plant staff QA Engineer in their FSAR. Therefore, either the position must be filled prior to O.L. or the administrative procedures revised to reassign the QA Engineer's responsibilities to others. PECO action will be reviewed during a subsequent inspection(s)(352/84-21-05).

9.4.2

Administrative Procedure, A-6 (draft), "Procedure for the Control and Distribution of Drawings, Manuals and Drawing Logs" references A-14, Revision 0, "Procedure for the Control of Plant Modifications." Several disparities exist between the two procedures in the control and updating of controlled drawings. The licensee informed the inspector that A-6, when approved, would be the governing document and the necessary corrections to A-14 would be made. The inspector stated that this item must be completed prior to O.L. issuance. PECO action will be reviewed during a subsequent inspection (352/84-21-06).

10. Management Interview

PECo management was informed of the scope and purpose of the inspection at the entrance interview conducted at the Limerick Station on April 30, 1984.

The preliminary findings of this inspection were discussed with PECO representatives periodically during the inspection. An exit interview was conducted at the Limerick Station (see paragraph 1 for attendees) on May 4, 1984, at which time the findings of the inspection were presented to PECO management.

At no time during the inspection was written material provided to the licensee.