UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

APR 23 1984

Report Nos.: 50-335/84-09 and 50-389/84-12

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33101

Docket Nos.: 50-335 and 50-389

License Nos.: DPR-67 and NPF-16

Facility Name: St. Lucie Units 1 and 2

Inspection at St. Lucie site near Ft. Pierce, Florida

Inspectors: G A Belisle — 4/18/84
G. A. Belisle — Date Signed

L. E. Foster — 4/18/84
L. E. Foster — Date Signed

C. F. Smith — 4/17/84
C. F. Smith — Date Signed

Accompanying Personnel: H. Whitcomb, III, Region II

Approved by: C M Upright — 4/18/84
C. M. Upright, Section Chief — Date Signed
Engineering Program Branch
Division of Engineering and Operational Programs

SUMMARY

Inspection on March 19-23, 1984

Areas Inspected

This routine, unannounced inspection involved 120 inspector-hours on site in the areas of licensee action on previous enforcement matters; QA program review; non-licensed personnel training; licensed operator requalification training; design changes; procurement control; receipt, storage, and handling of equipment and materials; and licensee action on previously identified inspection findings.

Results

Of the eight areas inspected, no violations or deviations were identified in seven areas; one apparent violation was found in one area (Failure to maintain records, paragraph 6.a).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*J. Barrow, Operations Superintendent
*J. Baysinger, QA Engineer
E. Becker, QC Training Supervisor
J. Bilder, Senior Purchasing Agent
P. Boyd, Records Analyst (Backfit Document Control Center)
D. Brodnick, Nuclear Licensing-CNRB Executive Secretary
T. Coxe, GET Training Coordinator
P. Fincher, Training Supervisor
A. Gould, Purchasing Agent
*R. Jenning, Supervisor Technical Department
J. Lewis, Senior Records Analyst
D. McAfee, QA Engineer, Spare Parts Procurement
*W. McGavic, QA Engineer
L. McLaughlin, Plant Engineer
C. Narmi, Plant Engineer
*D. Oliver, Power Plant Stores Area Supervisor
*N. Roos, QC Supervisor
*D. Sager, Operations Supervisor
D. St. John, Mechanical Maintenance Training Coordinator
*R. Symes, Supervising QA Engineer
J. Walling, Senior Engineer
D. West, STA Training Coordinator
*C. Wethy, Plant Manager
C. Wood, Assistant Nuclear Plant Superintendent

Other licensee employees contacted included technicians, operators, security force members, and office personnel.

NRC Resident Inspector

*C. Feierabend, Senior Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on March 23, 1984, with those persons indicated in paragraph 1 above. The licensee acknowledged the following inspection findings:

Violation 335/84-09-01, 389/84-12-01: Failure to Maintain Records, paragraph 6.a.

Inspector Followup Item 335/84-09-02, 389/84-12-02: Procedure Inconsistency, paragraph 6.b.

Inspector Followup Item 335/84-09-03, 389/84-12-03: Reactivity Control Manipulation Clarification, paragraph 7.

Inspector Followup Item 335/84-09-04, 389/84-12-04: Control of Shaft Keys, paragraph 10.a.

Inspector Followup Item 335/84-09-05, 389/84-12-05: Program to Control the Use of Aerosols, paragraph 10.b.

Inspector Followup Item 335/84-09-06, 389/84-12-06: Level "A" Storeroom, paragraph 10.c.

3. Licensee Action on Previous Enforcement Matters (92701)

a. (Closed) Severity Level IV Violation (335/83-02-01): Failure of Licensed Operators To Be Cognizant Of Facility Design Changes, Procedure Changes, and License Changes. The licensee response dated March 31, 1983, was considered acceptable by Region II. The inspector reviewed the licensed operator requalification training as discussed in paragraph 7. During this review, the inspector verified that measures have been established to assure that licensed personnel are aware of facility design changes, procedure changes, and license changes. This is accomplished by two methods. The first is by reviewing these during regularly scheduled requalification training. The second is by routing selected items through the control room for operator review. The inspector also verified that material routed through the control room was being read by various shift personnel. The inspector concluded that the licensee had determined the full extent of the violation, taken action to correct current conditions, and developed corrective actions needed to preclude recurrence of similar problems. Corrective actions stated in the licensee response have been implemented.

b. (Closed) Severity Level IV Violation (335/83-02-02): Failure To Follow Procedures - Multiple Examples. The licensee response dated March 31, 1983, was considered acceptable by Region II. The inspector verified that corrective action for each example identified had been corrected. This was accomplished by objective evidence review and multiple licensee interviews. The inspector concluded that the licensee had determined the full extent of the violation, taken action to correct current conditions, and developed corrective actions needed to preclude recurrence of similar problems. Corrective actions stated in the licensee response have been implemented.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Quality Assurance Program Review (35701)

Reference: 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants

The inspector reviewed the licensee Quality Assurance (QA) program required by the reference to verify that activities were conducted in accordance with regulatory requirements, and industry guides and standards.

The following criteria were used during this review:

- Personnel responsible for QA program changes understand the change significance.

- Implementing procedure changes are in conformance with the approved QA program.

The licensee submitted a QA program update to NRC Region II for review on June 10, 1983, (L-83-356). This program revision (FPL-NQA-100A) was approved in a Region II letter to FP&L dated September 7, 1983.

The following documents were reviewed to verify that previously listed criteria had been incorporated into licensee QA program activities:

FPL-NQA-100A, Topical Quality Assurance Report, Revision 4

QP 2.3, Preparation and Revision of Quality Procedures, Revision 6

QP 2.4, Preparation and Revision of Quality Instructions, Revision 5

QP 3.4, Plant Changes and Modifications for Operating Plants, Revision 6

QP 3.7, Evaluation and Control of Contractor Design for Nuclear Fuel, Revision 0

QP 4.2, Evaluation of Contractor Bids - Technical, Revision 3

QP 6.6, Drawing Control for Operating Nuclear Power Plants, Revision 1

QP 7.8, Review and Disposition of Supplier Deviation Notices, Revision 2

QP 13.1, Handling, Storage, and Shipping of Materials, Parts, and Components at the Site During Construction, Revision 3

QP 15.2, Control of Nonconforming Material, Parts, or Components - Operating Plants, Revision 1

QP 16.1, Corrective Action, Revision 7

QP 18.1, Audits, Revision 8

Within this area, no violations or deviations were identified.

6. Non-Licensed Personnel Training (41700)

References: (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants

(b) Regulatory Guide 1.8, Personnel Selection and Training, September 1975

(c) ANSI/ANS-3.1-1978, Selection and Training of Nuclear Power Plant Personnel

(d) Regulatory Guide 8.13, Instruction Concerning Prenatal Radiation Exposure

(e) Technical Specifications

The inspector reviewed the licensee training program required by references (a) through (e) and verified that these activities were conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review:

- The program complies with regulatory requirements and licensee commitments.

- The program covers training in administrative control areas and procedures, radiological health and safety, industrial safety, security procedures, the emergency plan, quality assurance, fire fighting, and prenatal radiation exposure.

- Non-licensed personnel were trained in functions they perform including related technical and on-the-job training where required.

The documents listed below were reviewed to verify that previously listed criteria had been incorporated into licensee training programs:

QI2-PR/PSL-2, Indoctrination and Training of St. Lucie Plant Personnel, Revision 11

0005722, Shift Technical Advisor and Technical Staff Training Program, Revision 5

0005723, Shift Technical Advisor and Technical Staff Requalification Program, Revision 2

0005727, QC Department Training, Revision 3

0005728, Reactor Engineering Group, Revision 2

0005129, Fire Protection Training, Qualification, and Requalification, Revision 3

0005730, I&C Departmental Training Procedure, Revision 2

0005731, Electrical Maintenance Training Program, Revision 3

0005732, Outage Management Training Program, Revision 3

0005733, Mechanical Startup Training Program, Revision 1

0005734, Emergency First Aid and Personnel Decontamination Team Training, Qualification and Requalification, Revision 1

0005735, PSL Training Department Training Program, Revision 2

0005737, Health Physics Department Training Program, Revision 2

0005738, Security Department Training Procedure, Revision 2

0005739, Administrative Department Training Program, Revision 1

0005740, Non-Licensed Operator Training, Qualification and Requalification, Revision 1

0005820, Startup Department Training Program, Revision 0

QP 17.1, The Collection and Storage of Quality Assurance Records for Nuclear Power Plants, Revision 11

QI 17-PR/PSL-1, Quality Assurance Records, Revision 5

The inspectors reviewed specific training provided mechanical maintenance personnel and QC personnel, in addition to the General Employee Training (GET) provided all personnel requiring entry into radiation controlled areas. The inspectors interviewed mechanical maintenance training coordinators, the health physics training coordinator, the QC training coordinator, and the GET coordinator. The inspectors verified that prenatal radiation exposure requirements were given to female employees entering radiation controlled areas. The inspectors also verified that GET requirements had been administered to approximately 40 personnel requiring radiation controlled area access.

The inspectors reviewed the following Shift Technical Advisor (STA) lesson plans:

Reactor Protection System, Study Guide 96
Low Pressure Safety Injection System, Study Guide 46
Boron Recovery System, Study Guide 53

STAs who are not licensed attend regular licensed operator requalification training classes. They also take the regularly scheduled requalification examinations. However, these examinations are modified (both grading and questions) to be applicable for STAs. Five of ten STAs do not presently hold RO or SRO licenses. The remaining five receive applicable licensed operator requalification training.

The inspectors reviewed various departmental annual training schedules and monthly training reports.

Within this area, one violation and one inspector followup item were identified and are discussed in the following paragraphs.

a. Failure to Maintain Records

Licensee departmental training records are kept by the various training coordinators. Procedure QP 17.1 delineates requirements for records storage (paragraph 5.3.1). Procedure QI 17-PR/PSL-1 delineates requirements for temporary record storage (paragraph 5.3.4). Record storage at satellite locations is allowable by current regulatory requirements if adequate controls are established at these satellite locations. Records storage in one-hour rated fire cabinets is allowable by current regulatory requirements if the fire load analysis required by 232-NFPA-1975 is performed and verifies the adequacy of one-hour rated fire cabinets. The licensee has performed a fire load analysis that addresses such items as fire protection, flood protection, theft protection, and eight additional items. This fire load analysis, however, does not determine by calculation the adequacy of one-hour fire rated cabinets for record storage.

Failure to control record storage required by QP 17.1, paragraph 5.3.1, and failure to determine by calculation the adequacy of one-hour fire rated cabinets constitutes a Violation (335/84-09-01, 389/84-12-01).

b. Procedure Inconsistency

QP 17.1, paragraph 5.3.b, states that protection of QA records from fire shall meet the requirements of 232 NFPA-1974. The correct code is 232 NFPA-1975. It appears that this is a typographical error. Until this procedure is updated to reflect the correct code requirements, this is identified as an Inspector Followup Item (335/84-09-02, 389/84-12-02).

7. Licensed Operator Requalification Training (41701)

References: (a) 10 CFR 55, Appendix A, Requalification Programs for Licensed Operators for Production and Utilization Facilities

(b) NUREG-0737, Clarification of TMI Action Plan Requirements

(c) Technical Specifications

(d) Regulatory Guide 1.8, Personnel Selection and Training, September 1975

(e) ANSI/ANS-3.1-1978, Selection and Training of Nuclear Power Plant Personnel

(f) Letter from H. R. Denton, Director, NRR, to All Power Reactor Applicants and Licensees, Subject: Qualifications of Reactor Operators dated March 28, 1980

The inspector reviewed the licensee requalification training program required by references (a) through (f) to verify that activities were conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review:

- Determination that changes to the requalification training program were in conformance with NRC requirements.

- Documentation that required procedure reviews were performed.

- Lesson plans were prepared for subject matter presented during requalification training.

- Determination that all aspects of the requalification program were being adequately addressed.

The following documents were reviewed to verify that previously listed criteria had been incorporated into licensee requalification training activities:

0005720, Licensed Operator Requalification Program, Revision 11

0005721, Hot License Operator Training Program, Revision 5

0005740, Non-Licensed Operator Training, Qualification and Requalification, Revision 1

The inspector reviewed these documents to determine adherence to requirements. The inspector reviewed documentation concerning the following areas; retraining conducted in 1983; annual written examinations and individual responses; documentation of required control manipulations; schedules for conducting lectures; and participation in an accelerated training program when applicable.

The inspector reviewed the requalification training records for 12 licensed operators (these include SRO, RO, STA, Staff, and Instructors). During the review, the licensee could not produce objective evidence to verify that a RO had completed a Unit 1 Refueling Test. This missing record appears to be

an isolated case. Consequently, a violation is not being written for failure to document activities affecting quality.

The inspector identified that a number of licensed personnel had not completed their requalification training within Procedure 005720 annual requirements. The licensee produced a letter dated November 22, 1983, from C. M. Wethy to Dr. H. Booher requesting a four-month extension (from 12 to 16 months) to the annual requalification requirements. This was necessitated, in part, by a major commitment of plant operating staff for Unit 2 startup and power ascension testing. As of this inspection, a response had not been received by the licensee to this request. Licensed operator requalification for 1983 was being performed during this inspection period.

During the review, the inspector identified one RO that had failed an SRO upgrade test and an RO annual requalification test. The inspector verified that this RO was removed from licensed duties upon failure of the RO test and given intensive retraining. The inspector verified acceptable retesting, grading, and return to duties for this RO.

Within this area, one inspector followup item was identified. Procedure 0005720 contains the required reactivity manipulations for licensed personnel required by Reference (f). One item required to be done annually has no specific marking that indicates the need for this manipulation to be done annually. The inspector verified that all personnel had performed this manipulation annually and it appears that a typographical error exists in the procedure. Until this procedure is updated to accurately reflect requirements of Reference (f), this is identified as an Inspector Followup Item (335/84-09-03, 389/84-12-03).

8. Design Changes (35744 and 37702)

References:

(a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants, Criterion III

(b) Regulatory Guide 1.64, Quality Assurance Requirements for the Design of Nuclear Power Plants, Revision 2

(c) ANSI N45.2.11-1974, Quality Assurance Requirements for the Design of Nuclear Power Plants

(d) Regulatory Guide 1.33, Quality Assurance Requirements (Operations), Revision 2

(e) ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

(f) Regulatory Guide 1.120, Fire Protection Guidelines for Nuclear Power Plants, Revision 1

(g) Technical Specification, Section 6.5.1, Facility Review Group, and Section 6.5.2, Company Nuclear Review Board

(h) FSAR Section 17.2, Quality Assurance During the Operation Phase

The inspector reviewed the licensee design change program required by references (a) through (h) and verified that these activities were being conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during the review:

- Procedures have been established to control design changes which include assurance that a proposed change does not involve an unreviewed safety question or a change in the Technical Specifications as required by 10 CFR 50.59.

- Procedures and responsibilities for design control have been established including responsibilities and methods for conducting safety evaluations.

- Administrative controls for design document control have been established for the following:

  - Controlling changes to approved design change documents

  - Controlling or recalling obsolete design change documents such as revised drawings and modification procedures

  - Release and distribution of approved design change documents

- Responsibility has been assigned in writing to assure implementation of the release and distribution of approved design change documents.

- Administrative controls and responsibilities have been established commensurate with the time frame for implementation to assure that design changes will be incorporated into:

  - Plant Procedures

  - Operator training programs

  - Plant drawings to reflect implemented design changes and modifications

- Design controls require that implementation will be in accordance with approved procedures.

- Design controls require assigning responsibility for identifying post-modification testing requirements and acceptance criteria in approved test procedures and for evaluation of test results.

- Procedures assign responsibility and delineate the method for reporting design changes to the NRC in accordance with 10 CFR 50.59.

- Controls require review and approval of temporary modifications in accordance with Section 6 of the Technical Specifications and 10 CFR 50.59.

The documents listed below were reviewed to verify that these criteria had been incorporated into the licensee design change program:

FPL-NQA-100A, TQR 3.0, Design Control, Revision 4

QP 3.2, Identification and Control of Design Interfaces, Revision 3

QP 3.4, Plant Changes and Modifications for Operating Plants, Revision 6

QP 3.6, Control of FP&L Originated Design, Revision 3

QP 6.6, Drawing Control for Operating Nuclear Power Plants, Revision 1

QI 3-PR/PSL-1, Design Control (After Fuel Loading), Revision 9

QI 16-PR/PSL-1, Corrective Action, Revision 13

AP 0010124, Control and Use of Jumpers and Disconnected Leads in Safety Related Systems

AP 0010520, Facility Review Group, Revision 11

FP&L Co, Company Nuclear Review Board Charter, Revision 7

JPE-QI 3.1, Control of Design Performance by JPE, Revision 9

JPE-QI 3.2, Design and Safety Analyses Performed by JPE, Revision 3

JPE-QI 3.3, Modifications to Operating Nuclear Units Work Performed by JPE, Revision 4

The inspector reviewed licensee administrative and design control procedures and conducted interviews with licensee management to verify that reviews of unreviewed safety questions and proposed technical specification changes were conducted in accordance with Technical Specifications (Sections 6.5.1 and 6.5.2) and requirements of 10 CFR 50.59. Licensee Technical Specification, Section 6.5.1, assigns responsibility to the Facility Review Group (FRG) for performing safety evaluations of all plant change/modifications (PCMs) required by 10 CFR 50.59. The inspector verified that FRG reviews PCMs in accordance with requirements of 10 CFR 50.59. Section 6.5.2 of the Technical Specifications assigns responsibility to the Company Nuclear Review Board (CNRB) for performing independent offsite nuclear safety

reviews. The inspector interviewed licensee management to determine the scope of the review performed by this body. Licensee management stated that CNRB performs independent offsite reviews of nuclear safety-related PCMs previously reviewed by FRG. The inspector determined that these reviews were normally performed after implementation of the modification as permitted by licensee technical specifications.

The inspector verified implementation of the design change program by a review of the following PCM packages:

Modification Package No.	Title
PCM 289-283	Reactor Coolant Pump Seal Injection System
PCM 198-283	Safety Injection System Vent Line Modification
PCM 91-82	ECCS Vent Flow Instrumentation
PCM 256-183	Excore Neutron Detector Replacement
PCM 97-81	Supplement #4, TSC/CR HVAC Bypass
PCM 580-79, Rev. 3	MSIV/MSCV Steam Line Trap and Valve Modifications
PCM 92-82	Diesel Generator Upgrade
PCM 240-83	Raychem Cable Replacement
PCM 87-82	Supplement #5, SAS Inputs
PCM 87-82	Supplement #1, Miscellaneous Restrain Rework
PCM 392-283	Turbine Trip by Reactor Trip Logic
PCM 371-183	Hydraulic Snubber Changeout

The inspector determined from review of the above modification packages that, for the majority of the packages reviewed, design drawings have not been revised to show the as-built configuration brought about by implementation of the PCM. The inspector interviewed licensee management concerning the updating of plant drawings. Licensee personnel assigned to the Backfit Document Control Center stated that the status of design drawings impacted by PCM packages are monitored by a computer listing of Backfit Construction Sketches (BCS), the affected drawings (plant drawings), the plant change/modification number, and an entry to show completion of each PCM. In response to the inspector's question concerning the status of drawings in the control room, licensee personnel stated that upon approval of a PCM by

FRG, controlled copies of affected drawings are transmitted to the control room. The inspector reviewed a computer printout sheet dated March 20, 1984, titled Selected Record Drawings Affected by PC/M's. The following drawings associated with PCM 92-82, Diesel Generator Upgrade, were selected for review and verification of status in the control room.

Drawing Number	Title
8770-B-327, Sheet 1119	Control Wiring Diagram D.G. 1A Idle Start-Stop Annunciator
8770-B-327, Sheet 1120	Diesel Generator 1A, Oil Circulating Pump 1A-1
8770-B-327, Sheet 1121	Diesel Generator 1A, Oil Circulating Pump 1A-2
8770-B-327, Sheet 1122	D.G. 1A, Air Compressor
8770-B-327, Sheet 1124	D.G. 1A, Emergency Turbocharger Oil Circulating Pumps
8770-B-327, Sheet 1129	D.G. 1B, Idle Start-Stop Annunciator
8770-B-327, Sheet 1130	Diesel Generator 1B, Oil Circulating Pump 1B-1
8770-B-327, Sheet 1131	Diesel Generator 1B, Oil Circulating Pump 1B-2
8770-B-327, Sheet 1132	D.G. 1B, Air Compressor

Procedure QP 6.6 is the controlling procedure for drawing control for operating nuclear power plants. This procedure delineates the method to be used for controlling and updating engineering drawings that are safety related or important to safety and required to support operating nuclear power plant design, operation, and maintenance after turnover of drawing control responsibility by the contractor design organization to FP&L. This procedure is not in effect because drawing control has not yet been turned over to the St. Lucie plants. The inspector reviewed the above listed drawings which are maintained in the control room and interviewed licensee control room personnel concerning the method employed to verify the status of as-built systems relative to proposed modifications of these systems. The inspector determined that the listed drawings have been stamped to indicate that they are impacted by a PCM and the status should be verified before they are used. The verification process involves confirmation of the drawing status by the Backfit Supervisor. The inspector noted that Drawing Number 8770-B-327, Sheet 1124, was missing from the folder kept in the

control room. This appears to be an isolated example and licensee management was advised to obtain this drawing for filing in the control room folder.

The inspector reviewed the disconnected lead and temporary jumper log maintained in the Unit 2 control room. Procedure AP 0010124 is the controlling procedure for the control and use of jumpers and disconnected leads in safety-related systems. Page eight of this procedure, Disconnected Lead/Temporary Jumper Log, is used to document the processing of temporary jumpers and disconnected leads. The inspector verified that licensee controls over jumpers and lifted leads includes a documented review required by 10 CFR 50.59.

Within this area, no violations or deviations were identified.

9. QA Program, Procurement Control (35746)

References:

(a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants

(b) Regulatory Guide 1.33, Quality Assurance Program Requirements (Operations), Revision 2

(c) ANSI N45.2-1971, Quality Assurance Program Requirements for Nuclear Power Plants

(d) Regulatory Guide 1.123, Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants

(e) ANSI N45.2.13-1976, Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants

(f) ANSI N18.7-1976, Quality Assurance for the Operational Phase of Nuclear Power Plants

(g) Florida Power & Light Topical QA Report

(h) FSAR Section 17.2, Quality Assurance for Station Operation

(i) FSAR Section 3.2, Classification of Structures, Systems, and Components, Amendment 10

The inspector reviewed the licensee procurement program required by references (a)-(f) and his commitments in references (g), (h), and (i) to determine if the procurement program was being conducted in accordance with

regulatory requirements, industry guides and standards, and commitments made in the application. The following criteria were used during this review:

- Administrative controls have been established to assign departmental responsibilities for procurement activities.

- Administrative controls have been established to identify safety-related equipment, supplies, consumables, and services to be procured under the QA program.

- Controls have been established to provide measures and assign responsibilities for the preparation, review, approval, and changes to procurement documents.

- Procedures have been established for qualifying and maintaining a current list of approved vendors, suppliers, and contractors.

- Procedures have been established to assure that vendors, contractors, and suppliers conform to procurement and quality assurance document requirements, industry standards and codes, and that nonconformances are properly reported and corrected.

- Controls have been established to provide for audits and surveillances of vendor and supplier facilities and for witnessing acceptance tests.

The documents listed below were reviewed to verify that the above criteria had been incorporated into the licensee QA program to control procurement of safety-related items and services:

TQR 1.0, Organization, Revision 6

TQR 4.0, Procurement Document Control, Revision 1

TQR 7.0, Control of Purchased Items and Services, Revision 2

TQR 8.0, Identification and Control of Materials, Parts, and Components, Revision 0

Appendix C, Baseline Document Matrix, Revision 6

TQR 13.0, Handling, Storage and Shipping, Revision 3

QP 2.7, Identification of Safety-Related Structures, Systems, and Components, Revision 1

QP 4.1, Control of Requisitions and the Issuance of Purchase Orders for Spare Parts, Replacement Items, and Services, Revision 14

QP 4.2, Evaluation of Contractor Bids - Technical, Revision 3

QP 4.5, Procurement of Safety-Related Equipment Important to Safety Electrical Equipment

QP 4.4, Review of Procurement Documents for Items and Services other than Spare Parts, Revision 14

QP 7.4, Evaluation of Suppliers of Safety-Related Items or Services, Revision 5

QI 4 QAD 1, QA Review of Procurement Documents, Revision 4

QI 7-PR/PSL-1, Control of Purchased Material, Equipment and Services, Revision 6

QI 4-PR/PSL-1, Procurement Document Review, Revision 3

QI 7-S-1, Control of Purchased Material, Revision 8

Form 2115-R1R, Requisition on Purchasing Agent, Revision 1

Form 2115-QCR, Requisition on Purchasing Agent, Revision 1/80

QA Approved Supplier List for Safety-Related Items and Services, Revision 48, dated January 3, 1984

Special QA Documents (SQAD)

1001, QA Requirements for Items Requiring Nuclear Quality Assurance, Revision 3

1002, Defect or Noncompliance Reporting Requirements for Nuclear Related Purchases, Revision 3

1003, Quality Requirements for Nuclear Related Services, Revision 2

1004, Surveillance Requirements, Revision 2

1005, Standard Quality Control Notices, Revision 1

1006, Quality Requirements for Commercial Grade Items, Revision 0

1999, References, Definitions, Abbreviations and Forms, Revision 2

The approved suppliers list was examined to determine if any evaluation and reaudit due dates had been exceeded. Several supplements to the approved suppliers list were examined to verify that controls were used to remove vendors, add vendors, and change the scope or requirements placed on an approved vendor. Supplements examined were QAP-84-071 (January 20, 1984), QAP-81-649 (Revision 1, October 1, 1982), QAP-84-020 (January 6, 1984), QAP-84-064 (January 20, 1984), and QAP-83-337 (Revision 1, July 1, 1983).

Several purchase orders (POs) and associated documents were examined to determine if approved suppliers had been used; if the technical, quality, and administrative requirements had been incorporated into the purchase order; and if the purchase orders had received the required review and approval. The following procurement documents were examined:

P.O. 38610-79017B, Supplement 1, Requisition 366377, Verification Sheet and Proposal Sheet concerning procurement of Swagelok Fittings

Request for Quotation, Inquiry No. AC-10701 dated March 2, 1984, to Namco Controls

Namco Controls Quotation on Inquiry AC-10701 dated March 19, 1984

Requisition for Spare Parts, M&S No. 002-92339-4 dated February 22, 1984

P.O. 01075 - 79068B, Requisitions HC 505-01012 and 03014, Verification Sheet and Proposal Record Sheet concerning procurement of expansion anchors from Action Bolt & Tool Company

Requisition No. 419682 dated March 14, 1984, and associated verification sheet (form 2918X-Revision 1) used for nuclear safety-related purchases

P.O. 71086 - 23879S, Requisition 385971 and associated verification sheet concerning procurement of items from QC Metallurgical Incorporated dated March 21, 1984

A procurement package for a 1½ horsepower motor purchased under P.O. 93099 - 22234 was examined to determine if the package contained pertinent information. The packet contained the PO, certificate of compliance, requisition (hard card), QA Report No. 11371, Form 273, two followup letters, vendors packing slip, freight bill, Hold Tag 11371, vendor reply to discrepancy report, receiving report (Form 445M), Form 989 (Notice of Material Received), and QC's acceptance letter dated March 14, 1984.

The inspector interviewed licensee personnel and observed work activities to verify that personnel understood their position responsibilities and were performing procurement functions as required by procedures.

Within this area, no violations or deviations were identified.

10. Receipt, Storage, and Handling of Equipment and Materials (35747)

References: (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants

(b) 10 CFR 50, Part 21, Reporting of Defects and Noncompliance

(c) Regulatory Guide 1.38, Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants

(d) ANSI N45.2-1972, Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants

(e) Regulatory Guide 1.33, Quality Assurance Program Requirements (Operations) Revision 2

(f) ANSI N18.7, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

(g) FP&L Topical QA Report

(h) FSAR Section 17.2, Quality Assurance for Station Operation

The inspector reviewed the licensee program and procedures required by references (a)-(h) to verify that controls have been established and were being implemented for receipt inspections, initiation of nonconformance reports, disposition of nonconformances, handling, storage, and issue of safety-related equipment. The following criteria were used during this review:

- Administrative controls have been established for conducting and documenting receipt inspections and reporting nonconformances.

- Administrative controls have been established for disposition of items, marking, storing, and protection of items during storage.

- Administrative controls have been established for limited shelf-life items and for performing audits and surveys of storeroom activities.

The following licensee documents were examined to verify that the licensee had prepared and was implementing procedures to control receipt inspections, handling, storage, maintenance, and protection of reactor plant items:

TQR 8.0, Identification and Control of Material, Parts, and Components, Revision 0

TQR 13.0, Handling, Storage, and Shipping, Revision 2

TQR 15.0, Nonconforming Materials, Parts or Components, Revision 4

AP 0010438, Control of Heavy Load Lifts, Revision 3

AP 0010433, Special Nuclear Material Control, Records, and Reports, Revision 15

AP 001041, Preventative Maintenance, Revision 4

HP-40, Shipment and Receipt of Radioactive Material

TQR 7.0, Control of Purchased Items and Services, Revision 2

Operating Procedure 1610020, Receipt and Handling of New Fuel

QP 7.1, Receipt Inspection of Materials, Parts and Components for Operating Plants, Revision 5

General Maintenance Procedure M-0028, Welding Electrode and Filler Metal Control, Revision 2

QI 13-PR/PSL-1, Handling, Storage, and Shipping, Revision 7

QI 4-PR/PSL-1, Procurement Document Control, Revision 4

QI 7-PR/PSL-2, Receiving Inspection, Revision 6

QI 8-PR/PSL-1, Identification Control of Materials, Parts, and Components, Revision 1

QI-13-S-1,Handling, Storage, and Shipping, Operating Stores, Revision 6

QI-7-S-1, Control of Purchased Material, Operating Stores, Revision 8

QI 13.2, Handling, Storage, and Shipping of Material, Parts, and Equipment During Plant Operation, Revision 1

QP 15.2, Control of Nonconforming Materials, Parts, or Components, Operating Plants, Revision 1

OP 16.1, Corrective Action, Revision 7

QI 9-PR/PSL-3, Welding Control, Revision 2

QI 10-PR/PSL-1, Quality Control Inspection, Revision 7

QI 15-PR/PSL-1, Nonconforming Materials, Parts, and Components

Form 989, Notice of Material Received, June 1977

The inspector performed a walk-through inspection of the storeroom to verify that controls were being implemented during receipt inspection, storage, and handling. Three items awaiting receipt inspection were observed in the receiving inspection area. These items consisted of a GE Control Switch (P.O. 36540-20238), an Hour Meter (P.O. 15062-79675), and Testing Material (P.O. 5463779628). Storeroom personnel had removed these items from their containers, examined them for visual damage, checked contents against P.O. and packing slip, and notified QC that items were ready for receipt inspection.

During review of licensee procedures, discussions with licensee personnel, and during the walk-through inspection of the storeroom, the inspector concentrated on several problems previously identified at other nuclear plants. The items were: Shelf-Life Program, Control of Shaft Keys, Control of Aerosols, Level "A" Storage. and Preventive Maintenance of Items in Storage. The licensee Shelf-Life Program and Preventive Maintenance Program appeared adequate; however, control of shaft keys, aerosols, and monitoring of the Level "A" storage areas indicated that additional management attention was needed as discussed below.

Within this area, the following inspector followup items were identified.

a. Control of Shaft Keys

The inspector could not find and the licensee could not identify a mechanism (program) that controlled shaft keys. This lack of control could result in misapplication of low strength keys where high strength keys are required and vice versa. One example concerning improper shaft keys used in Limitorque Valve Motors was discussed in IE Information Notice 81-08. Keys designed for a particular application (torque and impact requirements) should be controlled during procurement, storage, issue, and installation activities. An examination of motors and several shafts located in the storeroom revealed that some motors had keys taped to the shaft or in separate packages attached to the motors; however, other motors and shafts did not have keys attached. Examination of spare shaft keys showed that some had the part number etched on the key and others were identified by tags. Until the licensee develops and implements a program to control the use of safety-related shaft keys throughout the plant (storeroom and maintenance), this is identified as an Inspector Followup Item (335/84-09-04 and 389/84-12-04).

b. Program to Control the Use of Aerosols

The licensee did not have a program in effect to control the use of commercial aerosols such as mosquito spray, bug spray, hair spray, spray waxes, cleaners, lubricants, rust removers, and other commercial grade aerosols. These types of consumables may contain elements which are detrimental to reactor plant equipment and systems if inadvertently used in areas where stainless steel, nickel alloys, plastics, and other materials are stored or being maintained. An example was a can of "Johnson Dust Mop Treatment" being used in the storeroom and the contents of the aerosol were unknown. During discussion with licensee personnel the inspector was advised that a task team had been formed in the chemistry group to review items not allowed to be used on or around stainless steel items. Also Combustion Engineering had prepared a list of items allowed to be used in reactor systems. Until the licensee develops and implements a program to control the use of commercial grade aerosols, this is identified as an Inspector Followup Item (335/84-09-05 and 389/84-12-05).

c. Level "A" Storeroom

The licensee has a large building (storeroom) classified as a Level "A" Storeroom which contains most of the spare and replacement parts for the St. Lucie plant. The building is air conditioned by five separate air conditioners and the licensee stated that the building is kept normally at 70°F and a relative humidity of 50%. An inspection of this storeroom revealed that it was air conditioned and the temperature was controlled at 70°F by five thermostats (one per air conditioner unit) and the humidity gage read 51%. Further inspection revealed that neither the Humidity Gage nor the thermostats had been calibrated and their readings were not monitored. Until the licensee establishes a calibration program for these instruments and initiates a monitoring program, this is identified as an Inspector Followup Item (335/84-09-06 and 389/84-12-06).

11. Licensee Actions on Previously Identified Inspection Findings (92702)

(Closed) Inspector Followup Item (389/82-64-01): Unresolved Safety Question Determination for Special Tests or Experiments. The inspector reviewed QI 5-PR/PSL-1, Preparation, Revision, Review/Approval of Procedures, Revision 25. This procedure delineates procedure processing. Special tests or experiments are performed by writing necessary procedural controls. QI 5-PR/PSL-1, Figure 12, requires that new procedures meet FSAR or 10 CFR 50.59 requirements.