



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-250/89-41 and 50-251/89-41

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33102

Docket Nos.: 50-250 and 50-251

License Nos.: DPR-31 and DPR-41

Facility Name: Turkey Point 3 and 4

Inspection Conducted: August 28 - September 1, 1989

Inspector: S. J. Uias
H. O. Christensen, Team Leader

10/25/89
Date Signed

Team Members: L. E. Nicholson
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R. C. Lenjak, Chief
Reactor Projects, Section 2B

10/25/89
Date Signed

SUMMARY

Scope:

This special announced inspection was conducted in the area of the licensee's implementation of the PEP Program. Selected task items for Project 2, Operations Enhancement; Project 3, Procedures; Project 5, Training; Project 6, Management Action Plan; Project 7, Licensing; Project 8, Quality Assurance/Quality Control; and Project 11, Operability of Safety Systems, were reviewed.

Results:

In the areas inspected, no violations or deviations were identified.

The inspectors confirmed the completion of all project task items assigned with the exception of Project 5, Task 1.0, Performance Based Training Programs, Subtask 1.2, Develop and Implement Training Programs for Maintenance Journeyman, Foreman/Chiefs and Chemistry Technician and Subtasks 1.3, Develop and Implement Performance Based Training Program for Reactor Engineering, Technical Department and Quality Control. The inspectors based project task completion on successful completion of the original PEP task or a present action that meets the PEP task intent.

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This item is identified as Inspector Followup Item (IFI) 250,251/89-41-01, Performance Based Training for QC/Maintenance Foreman and Reactor Engineering (paragraph 5).



REPORT DETAILS

1. Persons Contacted

License Employees

J. Arias, Technical Asst. to Plant Manager
K. Beatty, Training Superintendent
W. Bladow, Quality Assurance Superintendent
D. Chaney, Director, Nuclear Licensing
J. Cross, Plant Manager, Turkey Point
S. Franzone, Lead Engineer
S. Hale, Engineering Project Manager
G. Labarraque, Asst. to Plant Manager
E. Lyons, Compliance Engineer
P. Pace, Section Supervisor, Nuclear Licensing
L. Pearce, Operations Superintendent
D. Powell, Regulatory Compliance Supervisor
F. Southworth, Asst. to Site Vice President
J. Walls, Juno Quality Assurance
G. Warriner, Quality Control Supervisor

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

NRC Personnel

R. Butcher, Senior Resident Inspector
G. Schnebli, Resident Inspector
M. Sinkule, Branch Chief, Division of Reactor Projects

All persons listed above attended exit interview.

Note: An alphabetical tabulation of acronyms used in this report is listed in paragraph 11.

2. Performance Enhancement Program (92701)

The PEP was developed by the licensee and mandated by the NRC in a confirmatory order dated July 13, 1984. The program was developed to meet the following objectives: continued safe and reliable plant operation; improve plant and site material conditions; increase emphasis on quality performance in systems, controls and personnel; and to continue responsiveness to regulatory requirements and corporate goals.

This inspection was performed to verify completion of selected PEP tasks. The closure of these selected items was based on the review of a PEP task completion audit (QAS-PEP-88-1) conducted by the licensees' Quality Assurance Department in 1988; review of the licensees effectiveness assessment; discussions with responsible licensee personnel; and review of selected procedures and programs.



3. PEP PROJECT 2 - OPERATIONS ENHANCEMENT

Task 3.0 Independent Verification

Subtask 3 of Project 2 required the licensee to upgrade the IV program in various station procedures. This effort was accomplished by a task team that reviewed the requirements of NUREG 0737, Item I.C.6, and developed a definition of IV and recommendations for the implementation of this program.

Subtask 3.1 Review and Consolidate the IV Process

The inspector reviewed the eleven recommendations developed by the task team and concluded that the guidelines were sufficient to produce a comprehensive IV program that complies with NUREG 0737, Item I.C.6.

Subtask 3.2 Revise Procedures

The licensee implemented the task team recommendations by a revision to administrative procedure O-ADM-031, "Independent Verification." The inspector verified that audit findings have been corrected in this area. In addition, the inspector sampled procedures to ensure that the program is working. The station decided to limit the implementation of the IV program to safety-related components in lieu of the larger technical specification system group that was recommended by the task team. The inspector discussed this philosophy with station management and noted that the IV program has now been expanded to include all systems in response to more recent problems with valve misalignment. The inspector concluded that the necessary procedures have been revised to incorporate an upgraded IV Program.

Subtask 3.3 Personnel/Training

The licensee has implemented ongoing training to applicable operations and craft personnel regarding the implementation of the IV program. The inspector reviewed selected lesson plans and training attendance records and concluded that training in this area is adequate.

Subtask 3.4 Audit Implementation

The inspector reviewed the current revision to the station audit schedule, QI-18-QAD-3, and verified that an audit of the independent verification program is required on a 24 month frequency.



Task 6.0 Management Action Plan

Subtask 6.1 Management Meetings

The licensee has implemented a weekly planning meeting, chaired by the plant manager with mandatory attendance by the site department supervisors. This meeting is addressed in procedure O-ADM-010, Activity Planning and Coordinator Program.

Subtask 6.2 Identification and Clarification of Turkey Point Nuclear Policies

The Turkey Point plant policies could not be located, however, the QA audit, conducted February 1, 1988 to February 11, 1988, stated that the Plant Manager found that the plant policies were incorporated into plant procedures. Additionally, a policy statement, from W. F. Conway, dated June 9, 1988 was issued. This policy statement defined organizational roles and responsibilities, management expectations for communications and team work and accountability for recurring activities.

Subtasks 6.3 Evaluate Administrative Burden on Plant Staff and 6.4 Implement Recommendations of Study

The Plant Manager evaluated the administrative burden, letter dated August 27, 1984. This evaluation resulted in clerks being assigned to the Plant Manager, Operation Superintendent and Maintenance Superintendent. Additionally, a technical assistant to the Plant Manager was assigned.

Task 7.0 Housekeeping

Subtasks 7.1 Develop Standards & Programs, 7.2 Establish Plant Housekeeping Baseline, 7.3 Train Personnel and 7.4 Survival Implementation

The housekeeping program is described in Administrative Procedure (AP) 0103.11, Housekeeping. The inspector reviewed (AP) 0103.11, dated June 12, 1989 and verified that the procedure defined the housekeeping program and contained housekeeping inspection guidelines and requirements. The inspector verified that a training lesson plan had been developed and that quality control surveillances of the housekeeping program were procedurally required and accomplished. The inspector also conducted tours of selected plant areas to determine the material condition of the plant.



During plant tours the inspector noted that the condition of the plant areas in most cases had improved since the inspector had previously been onsite, in particular the auxiliary feedwater pump area and the component cooling water pump rooms which are the model rooms for the plant. The inspector also noted that the hallways in the auxiliary buildings were being painted.

A Review of QC surveillance and monthly housekeeping reports determined that a problem exists in the submittal of the housekeeping reports from the responsible departments. Discussions with the QC Supervisor determined that actions are under way to correct this problem via a revision to the housekeeping procedure.

Task 8.0 Regulatory & Procedure Compliance

Subtask 8.1 Review and Consolidate Regulatory Compliance Issues Based Upon Personnel Error.

The licensee has implemented the Performance Monitoring Information Report. This report is issued monthly and one of the performance parameters is personnel error.

Subtasks 8.2 Develop a Training Program on Regulatory Compliance and 8.3 Train Applicable Personnel.

The General Employee Training (GET) program includes training in regulatory compliance. This training is required by all badged personnel at Turkey Point. The inspectors reviewed this training, which is performed by video tape.

4. PEP PROJECT 3 - PROCEDURES

The licensee committed to a procedure upgrade program which meets the requirements of NUREG 0737, Item I.C.1. This was accomplished by the development of writer's guides and then upgrading the existing procedures in a prioritized order. The program has been expanded to include an even larger number of procedures than was agreed to under the original scope of this project. This program is ongoing with the remaining procedures, approximately 300, to be updated by 1992.

The inspector reviewed the QA audit of this project, in conjunction with a review of the list of procedures that remain to be upgraded and concluded that the procedures contained within the original scope had been upgraded. This review included a check of the writer's guides and verification that the upgraded procedures were in compliance with the new format. In addition, the inspector discussed the new procedures with various station staff personnel in the field and witnessed the use of an upgraded procedure to operate an emergency diesel generator. The upgraded



procedures were found to be clearly written with due regard given to human factors concerns. The pre-implementation review process that each procedure received was extensive and included input from appropriate knowledgeable staff members.

5. PEP PROJECT 5 - TRAINING

Task 1.0 Performance based Training Programs

- Subtasks
- 1.1 Develop and Implement Training Programs for All Operators,
 - 1.1 Develop and Implement Training Programs for HP Technicians,
 - 1.2 Develop and Implement Training Programs for Maintenance Journeyman, and Foreman/Chiefs and Chemistry Technicians and
 - 1.3 Develop and Implement Performance Based Training Programs for Reactor Engineering, Technical Department and QC.

The inspector reviewed the applicable administrative procedures that defined the training program for the above plant positions and conducted interviews with licensee training personnel. The inspector determined that performance based training programs have been established for all programs except maintenance foremen/chiefs, reactor engineering and quality control.

Based on discussions with the licensee the commitment to provide performance based training in these areas was based on INPO accreditation. INPO does not currently accredit those training programs. The inspector determined that a performance based training program is partially developed for quality control inspectors and that the licensee is considering developing a performance based training program for maintenance foremen. The licensee stated that a letter would be submitted to the NRC to clarify the intent of PEP subtasks 1.2 and 1.3. This submittal and NRC review will be identified as IFI 89-41-01. Based on this review PEP task 1.0 is closed and PEP subtask 1.2 and 1.3 are open pending submittal and review of the licensee's letter to the NRC.

Task 2:0 INPO Accreditation

The inspector verified that the following training programs have received INPO Accreditation:

- Non-licensed Operators
- Reactor Operators
- Senior Reactor Operators/Shift Supervisors
- Shift Technical Advisor
- I & C Technician
- Electrical Maintenance Personnel
- Mechanical Maintenance Personnel

Chemistry Technicians
 Radiological Protection Technician
 Technical Staff and Managers

Task 3.0 Plant Reference Simulator

The inspector verified that the simulator was onsite, operational and that simulator training has been incorporated into plant training programs.

Task 4.0 Performance Based Training Program

Employee Awareness Program

The purpose of this program was to increase employee awareness of their accountabilities in regard to procedural compliance, regulatory compliance and quality of work. This program has been incorporated into the GET program and attendance is mandatory prior to access to the site.

Task 5.0 Management Training Program

The purpose of this program was to develop a topical outline and schedule for a management training program that discussed the functional capabilities, limitations, and regulatory requirements associated with the emergency/safety systems at both plant sites. The inspector reviewed the original course schedule and the topics covered. The inspector determined that the topics contained in the original program were incorporated into the manager/technical staff training program.

6. PEP PROJECT 6 - MANAGEMENT ACTION PLAN

Task 1.0 Organizational Issues

- Subtasks 1.1 Determine Responsibility/Authority of Key Manager,
 1.2 Develop Organizational Manual and
 1.3 Implement Manual

The organizational manual was considered a one time task which was completed in January 1984. The licensee has developed and maintains Quality Instructions which establish Turkey Point's organizational responsibilities and qualification requirements for key managers. Additionally, corporate organizational requirements have been defined by the implementing procedures for policy of the Nuclear Energy Organization (TQC 100 series).



Task 2.0 Resource Allocation

Subtask 2.1 Perform a Resource Allocation Evaluation for Select Areas

The licensee considered this task a one-time only task. 80 new positions were approved.

Subtask 2.2 Develop a Nuclear Energy Manpower Plan

As a result of PEP, 80 positions were approved in 1984. The positions are: 4 for the system section; 9 for maintenance management; 14 for plant operations; 5 for procedure upgrade; 12 for configuration control; 4 for training; 14 for management action; 6 for licensing; and 12 for QA/QC. The inspector reviewed the present manning and the licensee has these positions, plus additional filled positions.

Task 3.0 Managerial Development

Subtasks 3.1 Formulate a Managerial Development Program and 3.2 Implement the Managerial Development Plan

A Managerial Development Program was Developed in August 1984. The program provided for the identification of viable successors to key positions; a rotational position to provide exposure and broadening of skills of personnel; and management training. The program had been revised in 1988 and still is in effect. The program consists of outside management schools, job assignments, job rotation, INPO assignments and in-house training. The program was implemented, however, the Independent Management Assessment recommended that the rotational assessments be temporarily suspended. This recommendation was implemented, with plans to recommence rotational assignments in the 1989/1990 time frame.

Task 4.0 Management Information Systems

Subtask 4.1 Analyze and Adjust Information Flow

The inspector reviewed the data use, to determine information flow for the Nuclear Energy Department. The QA audit stated that this was a one time task. A final report on the results of this data analysis was not located, however, several corporate procedures were developed to address various concerns on changing authorization levels, which allowed approval at lower managerial levels.



Subtask 4.2 Analyze and Implement Consolidated Records/Storage

The QA audit performed between February 22, 1988 to April 17, 1988 indicated that the corporate records were consolidated in the Juno Office Building and that all nuclear records management functions and document control at Turkey Point were consolidated and stored on-site. The inspector noted that site records are located in one area.

Subtask 4.3 Design and Implement Automated Data Systems.

On a January 31, 1986 inter-office correspondence for the completion of this task, stated that nine automated data systems were implemented. The licensee continues to use automated systems.

Task 5.0 Extend QIP Throughout the Nuclear Energy Department

The QIP process consists of three major components. These components include policy deployment, quality in daily work and quality improvement teams. This program also includes training, which is being scheduled and conducted. The QIP process has been extended throughout the Nuclear Energy Department. At the time of this inspection the site had 52 quality improvement teams in operation. The progress of these teams are monitored and the results are trended.

Task 6.0 Provide Management Development Courses

The licensee has a management development course program in place. Records of the individuals who have completed the courses are maintained. Each department head determines which individuals will be sent to the courses.

Task 7.0 Personnel Recognition**Subtask 7.1 Develop Program for Recognizing Outstanding Performance**

A recognition program was developed in May 1984, as stated in FPL inter-office correspondence from C.O. Woody, dated May 21, 1984. The licensee considered this task as a one time item.

Subtask 7.2 Implement Performance Recognition Program

The licensee's QA audit on this item indicated that the May 21, 1984 letter was not well communicated and understood at the supervisory level. The QA audit recommended that the program be reissued. In a letter dated October 19, 1988 from W.F. Conway, the recognition program was re-issued.



Task 8.0 Senior Management Involvement

Subtask 8.1 Provide Periodic Senior Manager Shift Coverage

The periodic shift coverage was performed from January through May 1984. This coverage was terminated after the establishment of the Site Vice President position. The licensee has a periodic independent observation program implemented, O-ADM-010.1, Periodic Independent Observers. This program was established during the Independent Management Appraisal. This program will terminate by January 31, 1990.

Subtask 8.2 Conduct Onsite, Semi-annual Executive Review Meeting

The licensee continues to have senior management meetings.

Subtask 8.3 Conduct Periodic Plant/Department Manager Staff Meetings.

Each department continues to have department meetings.

Additionally, the licensee conducts daily plant status meetings, daily planning meetings, weekly planning meetings and weekly critique meetings as required by procedure O-ADM-010, Activity Planning and Coordinator Program.

Subtask 8.4 Present a Video Tape by Corporate Management on the PTP Enhancement Program for Presentation to all Department Employees.

A video tape was developed and presented to employees. However, records of attendance to presentations could not be located. A QA audit performed in 1985, documents attendance at the presentations.

Task 9.0 Senior Management Control

Subtask 9.1 Continue Senior Management Annual QA Committee Meetings

The licensee continues to hold semi-annual QA meetings, as required by FPL's Topical QA Report

Subtask 9.2 Develop and Implement a Plant Performance Monitoring Program

The licensee continues to trend various performance indicators on a monthly basis.



Subtask 9.3. Extend Management by Objective (MBO) Program to First Line Supervision

The MBO Program was discontinued by the licensee due to program weakness. The MBO program has been replaced by the Quality Improvement Program. The QIP has been implemented and the licensee continues to use the QIP process to improve plant operations.

Subtask 9.4 Chart Key Plant Performance Parameters

The licensee continues to monitor key performance parameters and publishes a monthly report.

7. PEP PROJECT 7 - LICENSING

Task 1.0 Commitment Tracking System

- Subtasks 1.1 Computerized NRC Commitment Tracking System (TRAC): "Develop and Implement an NRC Commitment Control System",
 1.2 Computer User Equipment: "Provide Appropriate Computer Hardware to Access the Computerized Commitment Tracking System" and
 1.3 Administrative: "Develop and Implement Appropriate Procedure to Administer the Commitment Tracking System"

The licensee's CTRAC is a computerized system that uses the corporate mainframe computer. A system users manual was developed to aid operators in the use of the CTRAC system. The quality in daily work control system process is used for the coordination and tracking of NRC commitments. Additionally, the licensee has implemented an NRC commitment status report, that tracks the number of commitments due during a given week and who is the responsible individual.

Task 2.0 Living Schedule

Subtask 2.2 Program Equipment

The licensee has adequate computer hardware to manipulate the IS data base. The licensee uses a PC based computer system to aid the IS prioritization process. The corporate mainframe computer is used to develop the IS schedule.



8. PEP PROJECT 8 - QUALITY ASSURANCE AND QUALITY CONTROL

Task 1.0 QA/QC Surveillance

- Subtasks 1.1 Provide 24-hour surveillance, 7 days/week and
 1.2 Re-evaluate Surveillance needs at Quarterly Review

The initial programs outlined in the 1984 order have evolved into a diverse series of surveillance inspections. The basic QA and QC surveillances are supplemented with off normal shift inspections performed by quality groups and other functionaries. Segments of the management-on-shift are still on-going. Present inspection efforts exceed those of the original task item in inspection personnel quality and inspection detail.

Task 2.0 QA/QC Verification and Inspection Functions

- Subtasks 2.1 Evaluate Department Roles and Administration Verification Functions and
 2.2 Evaluate Audits and Inspections to increase efficiency

A program currently exists to evaluate department roles and administrative functions. The QA closeout audit did address this point based on an audit closeout in 1986. A subsequent audit in 1988 found no adverse findings in the area. The existing program provided for verification function in job performance.

Task 3.0 QA Auditing and QC Inspection,

- Subtasks 3.1 Evaluate Audits and Inspections to Increase Efficiency,
 3.2 Implement Audit Enhancements,
 3.3 Implement Inspection Program and
 3.4 Computerizing Quality Programs

Since 1984 when this task was initiated many changes to the QA/QC programs have occurred. Some of the changes have led to program enhancements. Many of aspects that were counter productive were removed from the program. Notably on the positive side was the hiring of qualified QA personnel; the SRO training of personnel; and diversification of inspection activities. Corporate QA has performed a scoping study for computerization of quality commitments, the implementation (which is outside of the PEP scope) has yet to occur at the site level.



Task 4.0 QA/QC Organizational Structure

- Subtasks 4.1 Evaluate Organization Structure and
4.2 Implement Organizational and Administrative Changes

The QA/QC structures have been evaluated and altered as indicated in the FPL letter on which this task is based. Subsequently, the structure and function has changed and has been audited by corporate QA with no substantial findings. The new QA/QC structure and function has been transmitted to the NRC via the QA topical report.

Task 5.0 Quality Indicators

- Subtasks 5.1 Examine Quality Indicators - Recommend Changes and
5.2 Implement Quality Indicators as Recommended

The licensee did review the existing quality indicators. The recommended actions of the review were implemented and the indicators are presently provided to staff management. The current indicators include the original 1984 subjects plus additional subjects.

Tasks 6.0 Communicate QA/QC Program Changes

- Subtasks 6.1 Implement Effective Communication and
6.2 Verify Dept Structures and Administration are Implemented to Support Their Role in Quality

TASK 6 results were relayed within the QA/QC departments and to other site groups. These communication paths have improved since the PEP program inception. Coupled with Task 2.0, QA/QC roles and functions were implemented to verify quality.

9. PEP PROJECT 11 - OPERABILITY OF SAFETY SYSTEMS

- Tasks 1.0 Technical Specification Review and
2.0 Interim FSAR Review

This task, operability of safety systems, was addressed in the 1986 NRC Order (EA-86-20, Page 3, FPL letters L-86-112 and L-86-197). The main thrust of this task was discussed in FPL commitment letter L-84-265 of September 28, 1984, and as amended by FPL letter L-84-275 of October 3, 1984. Both of the above FPL letters are titled Program for Improved Operation. The program task was the review of the TS and the FSAR to address perceived operability problems in plant procedures.



The majority of the review of the TS and the FSAR occurred in 1984. The end products of the review were the SORP and the upgraded site procedures. These products were worked on through 1987.

The reviews of the TS and FSAR produced documents that were tracked by the licensee. The review findings were captured on the CTRAC. Plant personnel initially reviewed the TS and a contractor initially reviewed the FSAR. The final reviews were performed by a contractor, who produced the final SORP. The licensee stated that the SORP, aside from being reference material, was not used during the subsequent design reconstitution and the SORP has not been revised since 1987.

The inspector reviewed the above indicated documents and discussed the program with site and corporate personnel. The primary output of the tasks were the upgraded procedures, which have been upgraded several times since the task initiation. PEP Project 4, Configuration Control, which was part of the design basis reconstitution resulted in many more procedure changes (See Inspection Reports 250, 251/86-18 and 87-32). An interim TS was written and its impact has been introduced into site procedures.

10. Exit Interview

The inspection scope and results were summarized on September 1, 1989, with these persons indicated in paragraph 1. The inspectors described the areas inspected and discussed in detail the inspection results. Although reviewed during this inspection, proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

<u>Item</u>	<u>Description</u>
IFI 89-41-01	Performance Based Training for QC, Maintenance Foreman/Chief and Reactor Engineers. (paragraph 5)

11. Acronyms and Initialisms

AP	Administrative Procedure
CTRAC	Commitment Tracking System
FSAR	Final Safety Analysis Report
FPL	Florida Power and Light
INPO	Institute of Nuclear Power Operations
IS	Integrated Schedule
IV	Independent Verification
MBO	Management by Objective
NRC	Nuclear Regulatory Commission
PC	Personal Computer



PEP	Performance Enhancement Program
QA	Quality Assurance
QC	Quality Control
QI	Quality Instruction
QIP	Quality Improvement Program
SORP	System Operability Review Package
SRO	Senior Reactor Operator
TS	Technical Specification

