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

Report Nos.: 50-250/87-02 and 50-251/87-02

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: January 12-16 and January 26-30, 1987

Inspectors: C. Smith — Date Signed 3/17/87
R. Moore — Date Signed 3/17/87
R. Gibbs — Date Signed 3/17/87

Approved by: G. A. Belisle, Chief — Date Signed 3/17/87
Quality Assurance Programs Section
Division of Reactor Safety

SUMMARY

Scope: This routine, announced inspection was conducted in the areas of quality assurance effectiveness and licensee action on previously identified inspection findings.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*T. Abbatiello, Supervisor, Quality Assurance (QA) Performance Monitoring
M. Ammerman, Human Performance Evaluation Team Coordinator
*J. Anderson, Supervisor, QA Regulatory Compliance
J. Arias, Supervisor, Regulatory Compliance
*C. Baker, Plant Manager
O. Beasley, Manager, Plant Engineering Support Services
*W. Bladow, Superintendent, QA
M. Bowskill, Technical Department
J. Carter, Juno Power Engineering - Civil
D. Coleman, Assistant Project Site Manager
*M. Crisler, Supervisor, Operations Quality Control (QC)
*J. Donis, Supervisor, Site Engineering
R. Earl, Operations QC
*R. Englemeir, Procurement Document Review Team
*T. Finn, Supervisor, Operations
J. Franklin, Project Manager, Juno Engineering
D. Grandage, Superintendent Operations
D. Haase, Safety Engineering Group Head
*R. Hart, Licensing Engineer
*E. Hayes, Quality Indicator Coordinator
P. Higgins, Site Engineering Department
J. Kappes, Superintendent, Maintenance
C. Kent, Manager, Mechanical Engineering
D. Meils, Institute of Nuclear Power Operations (INPO) Evaluation Coordinator
*J. Mendieta, Services Manager
*W. Miller, Training Superintendent
J. Montgomery, Lead Electrical and Instrumentation and Control (I&C) Engineer
W. Nortuner, Power Plant Engineering Supervising Engineer
*D. Osborn, Configuration Control
P. Pace, Licensing Supervisor
*E. Preast, Site Engineering Manager
B. Sharp, Production Supervisor, I&C Maintenance
P. Shidel, Design Draftsman
F. Southworth, Senior Technical Advisor
*L. Thomas, Outage Manager
*R. Wade, Power Plant Engineering
C. Wethy, Site Vice-President
W. Williams, Assistant Superintendent, Planned Maintenance
L. Wilson, Construction QC
*H. Young, Project Site Manager

Other licensee employees contacted included construction craftsmen, engineers, technicians, operators, mechanics, security force members, and office personnel.

NRC Resident Inspectors

*R. Brewer
*J. MacDonald
*K. Van Dyne

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on January 30, 1987, with those persons indicated in paragraph 1 above. The inspectors described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee.

Inspector Followup Item, Completion of Design Control Procedures JPE-AP-3.11 and ASP-4.

The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. One new unresolved item identified during this inspection is discussed in paragraph 7.

5. The objective of this inspection was to assess quality assurance effectiveness. For the purpose of this inspection, quality assurance effectiveness is defined as the ability of the licensee to identify, correct and prevent safety-related problems. Quality assurance is not limited to the licensee's Quality Assurance Department or Quality Assurance Program, but extends to include all departments and personnel in a plant-wide commitment to quality.

This was a performance-based rather than compliance-based inspection. Rather than focus on the licensee's ability to meet the literal regulatory requirements, this inspection was intended to assess whether the intent of the requirements was being achieved; that intent being assurance of safe and reliable operations.

The inspection effort was divided into the following areas:

Operations and Maintenance
Quality Assurance, Quality Control and Licensing Commitments
Design Control

In performing this assessment, the inspectors examined various management trend indicators monitored by the licensee, available audits and reports applicable to the specified areas, and long- and short-term programs for improvement. Each area is addressed separately in this report. The following abbreviations are used in this report:

ABPM	Analytically Based Preventive Maintenance
ASME	American Society of Mechanical Engineers
CAR	Corrective Action Request
CRN	Change Request Notice
DFC	Discrepant Field Condition
DR	Deficiency Report
ERT	Event Response Team
ESF	Emergency Safeguards Features
FCN	Field Change Notice
FCR	Field Change Request
FP&L	Florida Power and Light
JCO	Justification for Continued Operation
LCO	Limiting Condition for Operation
LER	Licensee Event Report
MD	Maintenance Documents
NCR	Nonconformance Report
NJPS	Nuclear Job Planning System
PC/M	Plant Change/Modification
PDRT	Procurement Document Review Team
PEP	Performance Enhancement Program
PFE	Project Field Engineers
PM	Preventive Maintenance
PNSC	Plant Nuclear Safety Committee
POD	Plant Operating Document
PMMI	Performance Monitoring Management Information
PTN	Plant Turkey Point Nuclear
PWO	Plant Work Order
QA	Quality Assurance
QC	Quality Control
QIDW	Quality In Daily Work
QIT	Quality Improvement Team
RCA	Request for Corrective Action
REA	Request for Engineering Assistance
REE	Request for Engineering Estimate
RTA	Request for Technical Assistance

SALP	Systematic Assessment of Licensee Performance
SFR	Startup Field Report
SNOW	Short Notice Outage Work
SRO	Senior Reactor Operator
SSFI	Safety System Functional Inspection
TSA	Temporary System Alteration

6. Operations And Maintenance

The licensee utilizes numerous indicators to measure trends in various plant performance areas at varying levels of management. The indicators vary in the degree of detail ranging from relatively general at the corporate level to greater specifics at first line level of management. This range of indicator detail provides both an overview and a narrow view of performance which permits more complete identification of trend identified problems. The inspector noted a disparity between similar or identical indicators monitored at different management levels. For example, the forced outage and personnel error indicators tabulated and graphed by nuclear operations line management did not present the same values as those presented by the PMMI October 1986 report to corporate management. More specifically, the Nuclear Operations Department lists 28 personnel errors for 1986 while the PMMI only shows a total of 9. The source noted for both values was LERs. Other variations in indicator data were of less significant magnitude. The variation in data at various management levels could result in an inconsistent perception of plant performance. The disparity could be due to differing definitions of indicators which result in similar but not identical parameters and/or tabulation of the same or similar data by different personnel who interpret the base data differently. The efficiency of this aspect of the identification process would be improved by establishing uniform criteria for trend indicators monitored by the various plant departments and management levels. Use of management indicators was relatively new at Turkey Point and represented an important role in the developing management controls program. The inspector discussed the indicator disparity problem with plant personnel who appeared to be aware that some problems existed in this area. The licensee indicated that personnel were to be assigned responsibility for generating and maintaining specific indicators and would then be the information source for these parameters as needed by other plant departments. This action should provide information consistency throughout plant management levels.

The licensee was establishing a QIDW program which was a component of the overall quality improvement program. The QIDW program required the identification of responsibilities for a specific position and those parameters or trend indicators which illustrate performance in the specified responsibility area. The indicators are trended and analyzed as to cause and responsibility breakdowns (PARETOS) so primary causes for poor performance areas can be identified and corrective actions developed. The cognizant individual additionally presents the status of his responsibilities including trends and corrective actions to upper level management.

The inspector observed a QIDW board meeting for the Operations Supervisor and Operations-Maintenance Coordinator. The supervisor and coordinator stated their responsibilities and presented information to indicate performance in their particular areas for a board consisting of upper plant management members. Additionally, the individual presented root causes and corrective actions for weak areas, and the board provided suggestions for clarifications of problem identification and evaluation of corrective action. The QIDW program was being progressively incorporated into lower levels of management and appears to be a good tool for problem identification and management focus.

The inspector reviewed several trend indicators to determine a general overview of performance in the operations area for the previous four to six quarters. The parameters reviewed were automatic reactor trips, ESF actuations, surveillances missed, and forced outages. Reactor trips decreased from a total of 15 in 1985 to 9 in 1986. This appeared to be an improvement, but with respect to the seven month outage for Unit 4 does not provide a reliable improvement indicator. The total ESF actuations remained consistent at 15 and 14 for 1985 and 1986, respectively. There was improvement noted in the performance of surveillances within 1986 in that a total of 12 surveillances were missed but none after July 1986. Forced outages were at 16 for 1985 and 18 for 1986. The inspector was unable to clearly determine any large scope improvement in the operations performance area as reflected by trend indicators. This was primarily due to the time span involved to permit the indicators to demonstrate changes and the skewing of trends due to operating status such as the seven month Unit 4 outage.

The licensee has initiated numerous corrective action programs to address specific operationally identified problems. Some of these activities have demonstrable results reflecting performance improvement in operations while others require more time to demonstrate effective corrective action through changes in management trend indicators.

An activity which had produced verifiable short-term improvements was the establishment and utilization of the ERT. The ERT was formed to address SNOW or significant operating problems as designated by the Plant Supervisor-Nuclear Operations, i.e., LCO or reactor trips. The team consists of both technical and management personnel representing the majority of the departments on site and provides coordination of efforts to address the identified problem/task from initiation to completion. The inspector reviewed an ERT report which addressed a Unit 3 reactor trip on January 12, 1987. The report provided an introductory explanation of the event, background technical information, short-term and long-term corrective actions. An indicator of the effectiveness of the ERT in the identification and correction process was the success in decreasing repeated outages. Since August 1985, when the team was initially utilized, 11 of 21 forced outages have received ERT assessment and not one of the outages has been repeated.

A quality improvement team assigned to study automatic reactor trips has identified a number of causes resulting in various corrective actions. Most obvious was the large number of trips attributable to electrical failures and personnel errors. During 1985 all 120-140 volt DC static inverters were replaced and an automatic transfer function incorporated. These actions directly reduced the number of automatic reactor trips. Two large scope corrective action programs were developed to reduce personnel errors, an equipment labeling program and a procedures upgrade program. The 1987 policy deployment statement for FP&L Company states that 40 percent of reactor trips at PTN were caused by personnel error. The equipment labeling program provided a visually instructive environment which will compensate for the conditions of compactness and multiple shared systems characteristic of this plant. This program has shown its effectiveness to some extent in that no wrong train/wrong unit personnel error reactor trips have occurred since May 1986. The procedure upgrade program is intended to provide "user friendly" procedures for safety-related systems. An example of this upgrade is that multiple action items are separated into distinct performance steps. These corrective action programs address the major identified causes of personnel error reactor trips and should improve the long-term performance in this area.

An operations enhancement program implemented in 1985 has potential for providing effective results on parameters relating to plant reliability. The major focus of this program was freeing control room personnel from administrative work thereby reducing operator distractions. The enhancement program established the following positions:

a. Technician for control room administrative work and the assignment of a third SRO.

b. System enhancement supervisor who interfaces with other departments for plant modifications, procedure changes, and in-house monitoring.

c. Operations-maintenance coordinator to interface with maintenance personnel.

The licensee has initiated both long-term and short-term corrective actions in the operations performance area. Improvement can be verified in specifically identified problem areas, but a larger scope general improvement of this functional area, was difficult to verify. The general conclusion in this area was that the licensee can identify and correct problems although the larger scope programs have not generated enough momentum to turn previous trends.

The maintenance department has initiated several activities/projects in an effort to improve performance in this functional area, increase plant reliability and improve previous poor SALP performance ratings. The trend indicators utilized for measuring the effectiveness of maintenance

activities do not yet reflect convincing trend changes in the area. There are several reasons for this unclear overview of plant performance. The major one is the relatively short period of time since the initiation of the specific improvement programs. Additionally, the improvements with the greatest potential, such as upgrading the preventive and corrective maintenance programs, may demonstrate results over an extended time period. The general parameters reviewed to measure maintenance effectiveness were corrective maintenance backlog, preventive maintenance to total maintenance ratio, unplanned days off line and equipment out of service. The trends for these parameters are accurate if plants operate continuously for an extended time period (i.e., six quarters or greater) but are skewed by outages, especially long outages such as the seven month outage of Unit 4.

The Maintenance Department trended the parameters above on a 13 week moving average. Based on the time period encompassed by the information provided, the inspector reviewed the trends for the last quarter of 1986. The corrective maintenance backlog has increased, almost doubled, although the present status is within accepted licensee guidelines of no more than half of the backlog greater than three months old. The preventive maintenance to total maintenance ratio decreased from approximately 52 percent to 30 percent which is below a target of 60 percent. The 1986 policy deployment statement identified the actual unplanned days off line to be above the limit for both units; in the case of Unit 4 it was far above the limit due to the extended outage resulting from Appendix R and diesel generator loading design changes. The equipment out of service indicator demonstrated an improvement over the last quarter of 1986, largely due to the completion of the Unit 4 outage and associated design changes.

Although the performance indicators reviewed did not conclusively reflect improvement in maintenance performance, the inspector observed a number of examples of the identification and corrective action process in specific areas. These examples are important as verification that adequate identification and correction processes do exist in this area even though the large scale corrective actions have not yet achieved the momentum to turn the previous trends identified in previous SALP reports and trend indicators.

One example was the improvement in source range instrumentation reliability. The estimated life span of the detectors predicted by the vendor was ten years, but the average life span was approximately three years accompanied by frequent parts failures. The Quality Improvement Team (QIT) reviewing the chronic failure problem identified two mechanisms of detector failure. As a result of this review and the ensuing corrections, the failure rate for the detectors has been greatly reduced. Reduction of the detector failures and subsequent decreased maintenance performed on the detector permits more maintenance manpower on other areas and increased source range instrument reliability. The maintenance identification and correction process was also successful in substantially reducing the maintenance performed on the R-15

Process Radiation Monitoring System from 25 work orders in 1983 (system was out of service for the majority of 1984 and 1985) to three work orders in 1986. The frequency of failure for 120-140 volt DC static inverters has been reduced from 23 and 31 for 1984 and 1985, respectively, to 8 for 1986, which made a significant contribution to the reduction of automatic reactor trips and subsequently increasing plant reliability. Plant work orders on the Area Radiation-Monitoring System (ARMS) have decreased from a high of 102 for 1985 to 46 for 1986 as a result of an ARMS upgrade which included increased maintenance and training in this area. These examples represent verifiable improvements resulting from licensee identification and correction processes which have directly resulted in improved plant safety and reliability. These activities affected specific areas and contributed to the broader scope long term improvement of maintenance performance.

The licensee has initiated some larger scope corrective actions which have greater potential for overall improvement in this area. Chief among these actions was an improved PM program, improved NJPS, and establishment of positions for engineers dedicated to root cause analysis. Prior to 1985 the preventive maintenance system emphasized a five-year plan which centered work on outages. A majority of the safety-related equipment was in the system, however, there were not necessarily procedures for each maintenance task. The maintenance history system was utilized mainly for cost and manpower accounting and parts-material identification. Maintenance planning was based on experience of the person in charge of the equipment. The development of the ABPM is an upgraded program to prepare and implement procedures based on recommended vendor PMs. Scheduled maintenance activities will be based on equipment history and feedback from technicians operating and maintaining equipment. This system will prioritize equipment with input from operations and includes a continuous oil sampling and vibration testing program to identify potential failures. The long-term goal of this system is to increase plant reliability by performing maintenance on equipment which will preclude failure during operations.

The NJPS was another large scope improvement for maintenance performance which computerized the job planning process throughout its evolution. This system includes a total equipment data base which allows compilation of a greater range of information on equipment history than the previous maintenance history system. The NJPS will provide a more effective planning and tracking tool which will facilitate completion of a maintenance task from identification to closeout. Additionally, the maintenance department has established and filled positions for engineers dedicated to performing root cause analysis on plant work orders. These corrective actions, establishing the ABPM program, NJPS and root cause analysis positions, have the potential to improve maintenance performance resulting in increased reliability and safety of Turkey Point Nuclear Plant.

The functional areas of operations and maintenance are both moving towards improved performance. An obvious and important factor in this movement towards improvement was the attitude and enthusiasm of the plant to improve the quality of plant activities. This attitude was evident in the display

of plant overall and individual goals on charts and graphs conspicuously posted throughout the nuclear operations administrative building and the responses and enthusiasm of personnel interviewed. Short-term improvements were evident in response to specific identified problems. Determination of overall improvement in both operational and maintenance functional areas requires more time for improvement programs to turn the direction of trend indicators which are not reliable parameters to measure performance over a short period of time.

7. Quality Assurance, Quality Control And Licensing Commitments

Quality Assurance Department:

Review of the Turkey Point Quality Assurance Program on site consisted of an evaluation of the activities of both sections which report directly to the site QA Manager (i.e., the Regulatory Compliance Section and the Performance Monitoring Section). Assessment of each section's activities was conducted by interviews with each section supervisor. A detailed review of audit findings, corrective action requests, audit schedules, scheduling compliance, incomplete findings lists, and the results of special quality assurance investigations was conducted. The evaluation concluded that the site QA program is adequately accomplishing its assigned function of identifying and correcting site problems. This conclusion is based on the following observations:

Group size and experience level is appropriate.

Productivity in the department appears to be good with each auditor accomplishing approximately four audits per quarter.

There is a formal scheduling system in place which identifies the audits to be conducted during the calendar year and additionally, breaks this schedule down into calendar quarters. Adherence to these schedules is adequate.

Audits and investigations appear to be in-depth and identify relatively significant problems for management corrective action.

There is a system in place which formally documents all problem follow-up actions and assures proper closeout.

Problems are tracked to closeout by a computer tracking system.

The number of incomplete findings/CARs (findings for which corrective actions are not complete) is in line with the number of findings/CARs issued. The length of time the findings and CARs are incomplete, with one exception which is discussed in paragraph 8 (Finding #1 of QAO-TPB-86-116), is appropriate for the individual problem identified.

Closeout of problems is accomplished by reinspection of the deficient area by the lead auditor/engineer.

Establishment of the performance monitoring section in June 1986 which included the addition of personnel with reactor operator backgrounds is viewed as a positive step. This management action should improve the technical capability of the site QA Department.

Quality Control Department:

The Quality Control organization on site is distinctly separated into two different groups reporting to their own individual supervisors. This organization is different from most other sites and leads to a somewhat fragmented view of site QC activities. The backfit QC group is primarily involved in construction type activities, plant change modifications, etc. The operations QC group is responsible primarily for surveillance type inspections. The assessment of this area was accomplished by interviews with the appropriate supervisors, investigation of the deficiency reporting systems, and a review of Deficiency Trend Reports. There are many different types of deficiency reports used on site, specifically:

PWO - Plant Work Orders
NCR - Nonconformance Reports
DR - Deficiency Reports
DFC - Discrepant Field Conditions
REA - Request for Engineering Assistance
RTA - Request for Technical Assistance
SFR - Startup Field Reports
RCA - Request for Corrective Action
- Two way memorandums (Operations QC)

With this number of different kinds of deficiency reporting systems in place, meaningful trending is difficult. As a result, trending was being done by nearly every group on site or, as in the case of operations QC, was not being done at all. Reducing the kinds of deficiency reports and establishing a central trending program should be considered in order that significant problem areas receive appropriate management attention.

The total number of outstanding NCRs was found to be 550 which does not appear to be excessive for two operating units. Additionally, it was noted that all NCRs receive an immediate operability evaluation by the on-site engineering organization. This issue is discussed further in paragraph 8.

Three additional areas were noted where management attention may help improve performance:

- Operations QC uses a two-way memo attached to inspection reports to resolve issues such as failure of maintenance to properly complete the work on a plant work order (PWO) or to report procedure violations. It has been observed that these types of issues receive more attention and

more formal corrective action when reported on reports such as NCRs. This practice also aids the deficiency trending program previously discussed.

- The receipt inspection rejection rate reflected in the monthly backfit QC Trending Report was noted to be higher than at most sites. The rate is currently averaging about 25 percent rejects. Management involvement in this area along with a review of the actions taken with vendors by the Procurement Quality Assurance Group in Juno Beach might be used to drive the reject rate down to a more acceptable level.

- The monthly Backfit Trending Report currently reflects that about 80 percent of the outstanding deficiency reports (approximately 377 of 500) are being held awaiting engineering evaluation by either onsite field engineering or Juno Plant Engineering (JPE). Definite improvement in plant reliability and performance could be obtained by release of the work packages from engineering in order to accomplish the field work as plant conditions permit.

Procurement Quality Assurance:

A brief review of procurement quality assurance activities was conducted during the assessment. The activities of the Juno Beach Procurement QA Group were not reviewed. This assessment was conducted by interview with the head of the Procurement Document Review Team (PDRT). The team was established as a part of Turkey Point's performance enhancement program (PEP) to conduct a complete review of procurement documents on-site to ensure they included the necessary technical and regulatory requirements. This review consists of some 24,000 documents. The team has been in place for about a year and has completed its review of about one half of required documents. This effort is scheduled for completion in December 1987. The establishment of the PDRT is viewed as a positive step in improving Turkey Point's performance.

Licensing Commitments:

One key indicator in determining how well a plant is performing can be found in the trend analysis of LERs. Initial review of the raw data on the number of LERs generated could lead to the conclusion that performance at Turkey Point is deteriorating. However, further investigation by the inspector resulted in a conclusion to the contrary. The conclusion that plant performance and compliance to regulatory requirements is improving is based on the following facts:

The raw data on the number of LERs issued by PTN is as follows:

Year	Number of LERs Issued
1984	63
1985	70
1986	72

The inspector discussed the increasing trend in LERs with the head of the licensing group and performed an independent verification of the information he provided. The inspector reviewed the data and discussed this area with other personnel on site and concluded that the following factors have affected the number of LERs issued:

Over the past year (1986) the licensing group has significantly increased its involvement in PTN events. The group is notified by operations any time there is an event or potential event, and the group assists resolving the problem by providing proper interpretation of technical specifications and NRC requirements. This effort is directed toward preventing problems from escalating to the point where an LER would be required. While this effort tends to reduce the number of LERs, the more consistent interpretation of requirements results in the reporting of events which may previously have gone undetected or unreported. The net effect of this program is to improve regulatory compliance and increase the number of LERs generated. This management action is considered to be a positive step in improving PTN overall performance.

Recognition of the requirement to initiate an LER each time the plant operates under the "motherhood" (section 3.0.1) section of Technical Specifications, but does not have to shut down, resulted in 13 additional LERs in 1986. These situations were not reported on LERs in previous years.

The performance of the Site Safety Analysis Review has resulted in the initiation of several LERs.

In addition to investigating LER trends, a random sample of LERs were reviewed for corrective action. This review determined that the problems had been thoroughly investigated, appropriate corrective actions had been assigned, and that corrective action was either closed out or was being properly followed on the sites "C Track" computer system.

Policy Deployment:

Discussion with personnel revealed that there are several special projects/programs on site which are aimed at improving plant performance in the QA/QC/Licensing areas. These projects/programs are an integral part of the plant's Policy Deployment Program for improving performance. The following is a discussion of these projects and an assessment of their overall effect:

Quality Improvement Teams - This program is similar to the Quality Circles Program which was originated by the Japanese. The program consists of assembling teams of personnel from different departments with the common goal of working on a problem area and providing recommendations for improvement to reduce cost and improve quality and

productivity. This program is very active at PTN. Approximately 25 teams have been established to date with about half of those teams completing a project. Several of these teams have resulted in improvements at PTN. Of special note is the team that resulted in establishment of a dedicated decontamination crew to reduce the amount of contaminated floor space in the plant's operating areas. This effort will result in fewer skin contaminations and overall reduction in man-rem expenditure. Performance in this area is trended and has resulted in over a 15 percent reduction in contaminated floor space in 1986.

Quality Instructions - This project included a rewrite of the site's administrative and quality procedures in an effort to update them to conform and parallel more closely the site's QA manual and the eighteen criteria of 10 CFR 50 Appendix B. The project is near completion with over half of the forty-five quality instructions being issued. The remaining instructions have completed the review cycle and are ready for final signature.

Human Performance Evaluation Program - This program is at PTN. The program currently has one full time coordinator assigned and work on projects in the plant began January 1, 1987. The thrust of the program is aimed at performing investigations of personnel error problem types to determine what management actions can be taken to prevent recurrence. This program will receive support from the operations and maintenance departments on site once the benefits of the program are fully recognized by personnel in those departments.

Within this area one unresolved item was identified. During this assessment an investigation of site Nonconformance Report NCR-86-437 was conducted. The NCR was issued as a result of findings in an FP&L audit of Ingersol Rand Pump Company. The audit and the NCR reported that Ingersol Rand had not passed on 10 CFR 21 and 10 CFR 50 requirements to subtier vendors for pump parts as required by FP&L purchase orders. Ingersol Rand also could not verify traceability of parts. These pump parts had been used at PTP in the spent fuel pumps and the auxiliary feedwater pumps. The operability evaluation of the NCR had provided a technical justification to conclude that the parts were satisfactory and operability of the pumps was not affected. This evaluation was questioned and this item was left as unresolved at the NRC exit. Subsequent investigation during the week of February 2-6, 1987, in Region II concluded that this evaluation was correct based on ASME Code Section XI Article IWA 7000. This item has been resolved.

8. Design Control

The inspector reviewed various management trending indicators and engineering procedures to assess the status of QA effectiveness in the performance area of engineering design activities. Licensee management in their letter number L-86-389 dated October 1, 1986, to Mr. James M. Taylor,

Director, Office of Inspection and Enforcement, described corrective action plans developed and implemented to correct deficiencies in design control, 10 CFR 50.59 evaluations, and timeliness of corrective action. The scope of the QA effectiveness inspection was expanded to include review of selected elements of the corrective action plans described in this letter.

Licensee management has established a site engineering organization headed by a site engineering manager who reports to the Vice President, PTN. The site Engineering Manager has been assigned responsibility and authority for organizing, staffing, directing, and controlling the engineering activities at PTN. He is assisted in the execution of his duties and responsibilities by a staff comprised of the following:

Technical Staff System Engineering Supervisor
Safety Engineering Group Chairman
Engineering Configuration Control Manager
Design Basis Reconstitution Manager (Temporary)
Site Engineering Supervisor
Engineering Schedule Control Manager
Project Control Supervisor
Juno Engineering Project Manager
Administrative Supervisor
Engineering Outage Coordinator
Administrative Assistant

The site engineering supervisor, assisted by a staff of lead discipline engineers, is responsible for providing all engineering services required to support plant and backfit operations, including project and functional direction to design engineering and backfit engineering organizations. To better assess the site engineering organizational structure, functional responsibilities, levels of authority, and lines of internal and external communication interfaces, interviews were conducted with the site engineering manager, site engineering supervisor, and other engineering personnel from onsite and the Juno office. The inspector determined that within the constraints of resources available to the site engineering supervisor, his staff prepares design modification packages. Major modifications involving long lead time for preparation of PC/M packages and/or extensive engineering design activities, are performed in the Juno engineering office or by their contractors. The administrative and functional reporting requirements of the site engineering organization staff were discussed. The inspector determined that FP&L management has formed a task force headed by the Chief Engineer to assess and provide recommendations for improving the site engineering/Juno engineering office management interface configuration control. Because of the early stage of planning involved with this effort licensee management was unable to provide the inspector with details concerning the scheduled activities of this task force.

FP&L management, in accordance with their commitment described in letter number L-86-389, has established a site engineering organization with increased engineering staffing levels. Funds have been budgeted to support the increase in the engineering staff. The organizational structure, functional responsibilities, levels of authority, and lines of internal and external communication interfaces have been delineated in writing. Additionally, a PTN engineering procedure manual has been developed to provide guidance to staff members in the conduct of their assigned responsibilities. This manual is incomplete in that the following procedures have not been completed:

Configuration Control Organization
As-Built Verification Process
Plant System Reviews and Walkdowns

Overall assessment of QA effectiveness in connection with the site engineering organization including staffing levels, staff qualifications, and written procedures is average to good. Additionally, improvement in design engineering management configuration has been determined by the licensee to be desirable to better define responsibilities and accountabilities. The establishment of the position of site engineering supervisor, who with his staff provides dedicated support to plant operations and backfit construction activities, should improve PTN operation and establish better controls for design modifications implemented on site.

FP&L management, in their letter #L-86-389, stated that changes to the plant are subject to formal design controls delineated in the standard Engineering Design Packages for Nuclear Plants. This document was developed as a result of a program started in 1981 to improve engineering design activities at PTN. Subsequent to the imposition of a Civil Penalty by the NRC on August 12, 1986, the design control requirements delineated in this document have been implemented on site. The inspector was informed that existing station modification packages prepared by Juno power engineering contractors are done in accordance with the requirements of the Standard Engineering Package for Nuclear Plants. The inspector reviewed the Standard Engineering Package for Nuclear Plants and discussed its implementation with site engineering organization personnel. The inspector determined that the packaging of PC/Ms in accordance with the requirements of the above document provides the capability for relating the final design back to the source of design input, in addition to documenting this traceability in accordance with ANSI N45.2.11-1974. Improvement in design control measures should result from the implementation of the Standard Engineering Package for Nuclear Plants.

The design process is not specifically addressed in the Standard Engineering Package for Nuclear Plants. The inspector conducted interviews with the license engineering staff to assess the status of the design process for PC/Ms prepared by Juno power engineering. A flow chart, New Work Origin and

Authorization, which depicted the design process from initial RTA to final installation of the developed PC/M, was used as the basis for the discussion. The inspector verified, based on the review of the following procedures, that the front end of the design process that includes initial generation of RTA by plant staff, and its processing by site engineering personnel, appears to be adequately delineated in writing:

PTN-EP-3.9, Processing of Requests for Technical Assistance (RTA), Revision 0

PTN-EP-24, Processing of Requests for Engineering Assistance (REA) Requests for Engineering Estimate (REE), Revision 0

The PC/M process which includes the engineering design activities has not been proceduralized in writing. A draft procedure, JPE-AP-3.11, Engineering Packages for Nuclear Plants, is presently being prepared to implement the design control requirements delineated within the Standard Engineering Package for Nuclear Plants. The inspector further determined that the administrative controls applicable to the back end of the design process, i.e. implementation of PC/M packages by the backfit organization, is presently being revised. Construction procedure, ASP-4, Change Request Notice Control, describes the requirements and responsibilities for initiating, reviewing, controlling and distributing a change to an approved PC/M package. The revision involves the discontinuation of a two tier method for initiating changes, with substitution of CRNs which will be used as the only process for initiating changes recognized by power plant engineering. This enhancement to the design process will ensure that changes to PC/M packages are given adequate review by the engineering organization.

FP&L management does not monitor the effectiveness of engineering design activities by the use of management trend indicators. The inspector reviewed a bar graph which listed from 1980 to 1986, the number of PC/M packages approved per year, and the number of revisions to PC/M packages for the same year. Based on discussions with licensee technical staff, the inspector determined that PC/M packages are generally revised if the design basis, design analysis safety evaluation, or PODs and MDs are affected. The bar chart reviewed therefore indicates perturbations to the design process. It appears that improvement in the design process has occurred over time, with 1982 as the worst year, i.e., 266 PC/Ms approved with 678 PC/M packages revised; as against the best year 1986 with 258 PC/Ms approved and 62 PC/M packages revised. An exact determination of improvement in the design process cannot be made, however, because the data base does not differentiate between PC/Ms approved but not released for construction, as compared to PC/Ms approved and presently being implemented in the field. Additionally, the data base does not quantify or require an analysis of the root cause of the factors which resulted in revisions to approved PC/M packages being worked in the field.

As part of the effort to enhance the engineering design process, licensee management is presently developing a comprehensive system for monitoring engineering design activities associated with the preparation of engineering packages. The inspector reviewed a QIDW, AP 3.11-1, and a process flow chart which depicted the preparation and review of engineering packages. Four process indicators and criteria for methods of measurement have been established for monitoring the quality of the work product at various stages of development. Responsibility and the frequency for assessing the status of the process indicators have been assigned to cognizant individuals. Action limits or targets have not been established for the process indicators. Discussions with licensee engineering staff revealed that action limits will be established after a data base has been generated subsequent to implementing the process. The above engineering design process delineated on QIDW, AP 3.11-1, represents a significant effort by FP&L management to improve the quality of engineering design output documents. Full implementation of the enhanced engineering design program should contribute to the establishment of formal controls under which plant changes are made.

Changes to approved PC/M packages may be initiated by backfit construction departments via a CRN. The inspector determined that the administrative controls for initiating a CRN are presently being revised. Administrative site procedure ASP-4, Change Request/Notice Control, revision 3, delineates a two tiered administrative process for initiating a CRN. An FCR is the higher tiered process and requires the review and approval of the design organization and project PFE prior to implementation. An FCN is defined as a design change that requires the approval of the PFE, construction supervisor, and the cognizant design organization. FCNs may, however, be implemented prior to receipt of approval from the design organization. To establish better control over changes to approved PC/M packages during field implementation, FP&L management is presently revising ASP-4 to implement the use of a single source document, i.e. CRN for identifying requests to engineering for changes to PC/M packages. Use of the single source document for initiating changes should enhance design control and prevent inadvertent design changes to approved design output documents.

The inspector reviewed the status of FCNs to assess the number of outstanding FCNs and the root cause why the FCNs have not been closed. The impact on plant operability, and the drawings required to support plant operation were also assessed, i.e., hardware and/or software changes required for FCNs. The inspector determined that the QA Department identified deficiencies with the backfit organization in March 1986 because of a failure to incorporate FCNs into primary design documents in a timely manner. This audit finding is documented in Audit number QAO-TPB-86-116 and the following is the subsequent sequence of events surrounding this issue:

March 7, 1986 - QA Audit QAO-TPB-86-116 issued to H. T. Young

April 10, 1986	-	Response received, outlining actions to be taken. All actions to be complete by June 15, 1986. (PTP-JPM-86-186, H. T. Young to L. W. Bladow)
June 17, 1986	-	QA verification of required actions revealed incomplete implementation. Memo sent requiring additional response to situation by July 2, 1986. (QAO-PTN-86-323, L. W. Bladow to H. T. Young)
July 9, 1986	-	Response from H. T. Young not received. Letter sent to C. M. Wethy requesting expedited response. (QAO-PTN-86-385, L. W. Bladow to C. M. Wethy)
August 4, 1986.	-	Received response from C. M. Wethy outlining additional corrective actions to be undertaken to close the finding by January 1, 1987. (PTNE-86-140, C. M. Wethy to G. J. Boissy)
September 8, 1986	-	Status Report of QA Audit QAO-TPB-86-116 from E. Preast to L. W. Bladow. (PTNE-86-185)

Investigation by the QA Department to verify closure of the FCNs on January 2, 1987, revealed that the FCNs were still open. In addition there was now a backlog of 3200 drawings that required updating. The audit finding was escalated by the QA Department to the level of the Site Vice President, and a management meeting with engineering personnel was held on January 14, 1987, to address closure of the outstanding FCNs. The following documents were reviewed by the inspector in connection with this effort:

FP&L interoffice memorandum from C. M. Wethy/D. A. Chaney to G. J. Boissy, subject: Turkey Point Units 3 and 4 QA Audit QAO-TPB-86-116, Design Control File: PTP100-2 dated January 21, 1987

FP&L interoffice memorandum from L. W. Bladow to C. M. Wethy, subject: Corrective Action to Audit Finding I, Quality Assurance Audit QAO-TPB-86-116, dated January 7, 1987

FP&L interoffice memorandum from L. W. Bladow to C. M. Wethy, subject: Minutes from Management Meeting, dated January 15, 1987

Quality Assurance Audit Report No. QAO-TPS-86-116

Pursuant to the management meeting held on January 14, 1987, the inspector reviewed the developed corrective action plans to ensure that concerns of plant operability, impact on drawings required to support plant operation, and root causes of deficiencies were addressed. Developed corrective action

plans appear adequate. The inspector reviewed a computer printout dated January 13, 1987, listing 325 FCNs and was informed by licensee engineering staff that approximately 670 drawings were impacted by the outstanding FCNs. These drawings are a subset of the 3200 drawings referred to in the QA interoffice memorandum. Reviews are presently ongoing by the civil, mechanical and electrical disciplines to establish an overall schedule commensurate with a determination of impact on plant operating drawings. The scope of the effort required to update the drawings may require the use of outside consultants, and will involve a schedule covering several months. The inspector assessed QA effectiveness in this area as poor, as demonstrated by inadequacies in the corrective action program to effectively correct a deficiency identified in March 1986. Additionally, the fact that FP&L management does not monitor the status of open FCNs via management trend indicator with action limits may be regarded as a lack of management involvement in assuring quality.

A two tiered administrative process has been established to document and initiate corrective action for discrepancies such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances. A DR is the lower tiered process and is used for discrepancies that do not require engineering evaluation prior to disposition. NCRs are the higher tiered process and are used for discrepancies which require an engineering evaluation or when responses to DRs have been inadequate. The inspector reviewed and analyzed various management trend indicators and program requirements to assess QA effectiveness in this performance area.

The construction QC organization trends the status of NCRs and provides a weekly report to management concerning the status of NCRs overdue for disposition or scheduling. The inspector determined that of a total of 500 NCRs open on January 21, 1987, 377 NCRs were assigned to the engineering organizations for disposition. The inspector subsequently conducted interviews with Bechtel field engineering personnel to ascertain the status of NCRs to be dispositioned via hardware changes in the field. The following breakdown was provided by field engineering concerning constraints that were preventing disposition of the NCRs:

Constraints	No. of NCRs
Outage related	111
Clearance required	6
Awaiting material	12

Twenty-nine NCRs were identified as being in the process of field implementation. The inspector requested information concerning the establishment of action limits or goals for the trend graphs in order to control the number of open NCRs. It was ascertained that FP&L management is in the early stage of establishing goals to be used along with the trend graphs for NCRs. Based on review of objective evidence and discussion with the field engineers the inspector assessed QA effectiveness as average for this performance area.

A review was conducted of those NCRs assigned to the site engineering organization for review and disposition. The inspector determined that a program audit of quality procedures 15.1 and 15.2 was conducted on October 3, 1986 - December 17, 1986, regarding the processing, installation and operation of nonconforming items. The following audit findings were listed in audit report number QAO-PTN-86-785, dated January 7, 1987:

Control of Installed Nonconforming Items

The Construction QC organization is documenting Nonconformance Reports on installed plant equipment. This is contrary to the requirements specified in ASP-8, section 6.3.

Timely Response to and Closure of Nonconformances

a. There is a discrepancy between ASP-8 and JPE QI 3.1 with regard to the timeliness of responses to NCRs.

b. Contrary to established requirements, a random selection of open NCRs revealed that out of sixty (60) NCRs reviewed, fifteen (15) were generated in February 1986 and as of November 13, 1986, were still awaiting initial response. (As of December 9, 1986, "responses" had been provided for eight (8) of the fifteen (15) NCRs.)

Dispositioning of Nonconformance Reports

Contrary to established requirements, NCRs have not received the necessary reviews that would comply to established requirements. Therefore, there has been no review of subject NCRs that would determine plant or system operability concerns.

Caution Tagging of Installed Nonconforming Equipment

As identified in referenced criteria, AP 0190.12 does not specifically allow for the control and identification of installed nonconformances that require limitations in the use or the utilization of "caution" tags identifying their limitations to appropriate operating and maintenance personnel.

The inspector conducted interviews with site engineering organization personnel, and the QA Department staff to assess the adequacy of the recommended corrective action delineated in the audit reports. Special attention was directed at the activities performed by engineering personnel to determine those NCRs having a potential operability concern. The inspector reviewed a Summary Listing by NCR Number for Open NCRs dated January 24, 1987. The inspector identified a total of 250 NCRs listed as open as of this date. Discussions with the licensee engineering staff

revealed that operability reviews had been conducted for the listed NCRs. The inspector determined that five NCRs were initially determined to have operability concerns. Subsequent detailed review eliminated three NCRs. Of the remaining two NCRs, one resulted in a plant shutdown prior to disposition by the engineering organization, and a JCO was prepared for disposition of the other NCR.

The following NCRs were selected by the inspector for review to assess the adequacy of the corrective action plans implemented and to determine root causes for the identified deficiencies.

NCR No: NCR-1294-86 dated December 31, 1986
Discrepancy description: Damage to hangers H-322-04, H-322-07 and adjacent insulation

NCR No: NCR-C-0008-87 dated January 7, 1987
Discrepancy description: Unit 4 emergency boration system - potential leak/failure in emergency boration line to Unit 4 charging system

NCR No: NCR-1261-86 dated December 12, 1986
Discrepancy description: Flexible conduit to the starting air pressure switches (PS6670A & B) violates the maximum length of 5'-0" required by specification 5177-E-302.

NCR No: NCR-C-0003-87, dated January 6, 1987
Discrepancy description: Unit 4 spent fuel pool bridge crane rail exhibits high degree of rusting and corrosion.

NCR No: 87-009 dated January 19, 1987
Discrepancy description: There appears to be a crack on the inlet of the north air reserve tank on the 319 MSIV. There is a visible area of corrosion around the threadulet and some vibration exist on the line.

Review of the above NCRs revealed that they were dispositioned by site engineering organization personnel in accordance with administrative controls delineated in procedure PTN-EP-2.3, Processing Nonconformance Reports. An operability assessment was performed and documented on the initial engineering item form. In some instances, however, a root cause determination of the discrepant condition was not made. The inspector requested information concerning developed corrective action plans for effective correction of identified deficiencies. The inspector was informed that a schedule had been prepared for correcting the deficiencies; objective evidence of licensee actions for permanent solution of the deficiencies was not presented to the inspector. It appears that interim disposition of NCRs by site engineering personnel is used as a temporary solution for identified problems in order to maintain plant operation. Inadequate consideration appears to be paid to equipment reliability to assure long term effective corrective actions. Resolution of problems from

a nuclear safety standpoint appears weak, despite conformance to approved administrative processes. Based on objective evidence reviewed and discussions with licensee engineering staff, QA effectiveness in this performance area was assessed as poor.

The monthly performance monitoring management information report presented to senior management contains line graphs of temporary modification status in the technical section. Comparison of this data with data available on site that depicts TSA status reveals discrepancies in the data base. This information was conveyed to FP&L management for their action. Identified discrepancies between the data bases of various trend indicators was previously discussed in paragraph 6.

The TSA program was recently revised to correct inadequacies in administrative controls that were earlier identified by the licensee. Procedure AP 0103.5, Control and Use of Temporary System Alterations was replaced with procedure 0-ADM-503 dated December 4, 1986. This procedure was recently revised to address deficiencies of inadequate administrative controls of TSA; inadequate technical reviews of TSA; and inadequate control of TSA status log. The inspector reviewed trending indicators and program procedures to assess the status of QA effectiveness in this performance area. The inspector determined that the procedural deficiencies contained in Procedure AP0103.5 appear to have been adequately corrected to address the deficiencies identified. Licensee management has established goals for TSAs with 40 TSAs selected as the total number to be opened at any one time, and 30 TSAs selected as the number not to be opened greater than six months. The bar chart reveals that licensee management has failed to achieve these goals for 1986.

To better assess the situation, the inspector reviewed the following logs for Unit 3:

TSAs awaiting unit shutdown for restoration
TSAs awaiting closeout short-term
TSAs awaiting closeout long-term

The inspector verified that 16 TSAs awaiting unit shutdown for closure were scheduled to be worked. Additionally, the status of 14 TSAs awaiting short-term closeout and 12 TSAs awaiting long-term closeout were discussed with the cognizant engineer. The administrative process for disposition of TSAs appears to be adequately implemented. Consequent to licensee management's failure to achieve established goals for 1986, QA effectiveness in this area was assessed as poor. The developed corrective action plans for earlier identified deficiencies, however, demonstrates management's involvement in assuring quality. Full implementation of existing administrative controls should produce positive trends in the future.

JCOs are 10 CFR 50.59 nuclear safety reviews performed by engineering organization personnel of discrepant conditions with possible associated administrative limitations on operations. The inspector determined that JCOs are neither administratively controlled, nor trended by FP&L management.

The QA department in Corrective Action Request (CAR) QAO-PTN-86-801 dated December 12, 1986, identified deficiencies in the JCO program in that the PNSC was not reviewing JCOs in accordance with the requirements of the Technical Specifications. The following is the developed corrective action plan and schedule for the deficiency identified with Turkey Point Unit 3 and 4 JCO-EDG Air Start Tank Anchor Bolt threading engagement problem.

Corrective Actions

1. This JCO was sent to the PNSC for review and was approved on December 12, 1986, meeting number 86-306.

2. Technical Department and JPE have initiated a review of all existing JCOs and will verify PNSC review.

3. A log is being implemented in the Technical Department to track incoming JCOs and assure future PNSC review as necessary.

4. Criteria is being developed for establishing and terminating a JCO.

Schedule

Item 1 was complete as of December 12, 1986.
Item 2 is scheduled for completion by February 28, 1987.
Item 3 will be complete by January 27, 1987.
Item 4 will be complete by February 27, 1987.

The inspector determined that a task force has been formed in the Juno power engineering office to perform a review of 50.59 evaluations initiated as far back as 1981. The results of corrective action #2 listed above will determine the scope of the problem. A review of the JCO log referred to above was performed by the inspector, and discussions with the cognizant technical department engineer was conducted concerning its development and maintenance. Additional discussions were conducted with QA Department personnel regarding corrective action #4 and the degree of involvement of the QA Department in ensuring prompt resolution of the identified deficiencies. QA effectiveness in this performance area was assessed as poor.

FP&L management has established a drawing update program as part of their configuration management program. An audit of the Configuration Management program was conducted by the QA Department on July 3-11, 1986, in connection with the auxiliary feedwater system. The auditors stated that configuration

management is undefined within FP&L Quality Assurance Program, and an approved configuration management program has not been described in writing.

The inspector, in discussion with site engineering organization personnel, determined that configuration control is but another element of the corrective action plans developed to support the comprehensive review of select systems. It consists of the following projects:

Develop computerized data links between data bases existing on "Focus."

Survey and enhance the Vendor Drawing Register

Consolidate, coordinate and develop unit autonomous drawings related to piping system.

Select system primary document upgrade effort.

Enhance the Master Drawing index to make it more "user friendly."

The inspector reviewed trend indicators and program documents to specifically assess QA effectiveness in the drawing update program. Monthly drawing update program status reports with trend graphs are prepared for the attention of senior management. A review of the status reports for October 1986 - January 1987 revealed a constant trend of approximately 3200 PC/M related drawings that have been out of date for greater than 60 days. Discussions with licensee staff identified the following administrative controls that are being implemented for timely update of various type drawings:

Drawing Type

Plant Operating Documents (POD) - Documents which are used to operate the plant and which must be revised to indicate the portions of the drawings affected by modifications under each PC/M.

Remaining Drawings - Those drawings/documents other than Plant Operating Documents, which are required in order to implement the plant modifications.

Maintenance Documents (MD) - Those specific Remaining Drawings that the Plant Maintenance Department uses to maintain the plant equipment and controls.

Other Affected Documents - Engineering drawings/documents which are not required for implementation of, but are affected by, the plant modification.

Drawing Update Schedule

Upon receipt of the as-built drawings/documents from Engineering, the drawings/documents shall be updated within the following time frames:

Plant Operating Documents (POD) - immediately upon receipt

Maintenance Documents (MD) - within 20 days of receipt

Remaining Drawing/Other Affected Documents. Balance of drawings (other than PODs and MDS) shall be updated within 60 days of receipt.

In further discussions with licensee staff the inspector determined that neither PODs nor MDs were included in the outstanding backlog. Root cause analysis for the huge backlog of drawings revealed the following. In October 1986 a decision was made by licensee management to include in the drawing update program 1443 pipe support drawings, 670 Juno power engineering drawings and 347 vendor drawings. Various reasons were listed as the cause for including these drawings in the update program; typical of which is the 670 Juno power engineering drawings included as a result of the QA audit regarding outstanding FCNs. This subject was previously discussed in the report.

The inspector determined that the requirements of the drawing update program had not been delineated in writing. A draft procedure PTN-EP-4.21, Updating of Drawings Required by PC/M Process, is presently being prepared to established administrative controls that will be implemented during drawing update. Additionally, the drawing update section level procedure that provides guidance to staff members within the drawing update group is also being reviewed. A documented program to accomplish the update of PC/M related drawings has not been established. At the exit interview licensee management was informed that additional management attention, and allocation of resources is required in this area. QA effectiveness was assessed as poor based on review of objective evidence and interviews with licensee personnel.

Within this area one inspector followup item was identified. Pursuant to commitment delineated in FP&L letter L-86-389 concerning developed corrective action plans for design control, 50.59 evaluations, and timeliness of corrective actions, licensee management is enhancing the design control process. Based on reviews of selected elements of the developed corrective action plans for design control activities associated with PC/M package preparation, it was determined that design control measures have not been proceduralized. Until the licensee completes the preparation of procedures number JPE-AP-3.11 and ASP-4, this is identified as inspector followup item 250, 251/87-02-01.

9. Licensee Action On Previously Identified Inspection Finding

(Open) Inspector Followup Item (250, 251/85-18-01): Programmatic Deficiencies Within the PC/M Program.

Subsequent to the above identification of deficiencies within PC/M program an SSFI was performed by the NRC on the auxiliary feedwater system. Significant findings were identified during the conduct of this inspection.

Developed corrective action plans to address deficiencies in design control, 50.59 evaluations, and timeliness of corrective actions are delineated in FP&L letter L-86-389 dated October 1, 1986. A QA effectiveness inspection of selected elements of the developed corrective action plans revealed incomplete development and implementation of the corrective action plans. This item remains open until the design control process has been fully delineated in writing.

(Closed) Inspector Follow-Up Item (250, 251/85-36-01): Material Destined to be Installed in Plant. This item addressed a weakness in programmatic controls and implementation of material for the period between receipt inspection and installation. This item is closed based on completion of the following corrective action:

Purging storage areas of unacceptably marked material.

Revision of material control procedures ASP-9 and Store Quality Instructions to require improved control of materials in the storage and installation phases.