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

Report Nos.: 50-250/91-51 and 50-251/91-51

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: December 16-18, 1991

Inspector: Frank Jape 1/16/92
F. Jape Date Signed

Accompanying Personnel: T. Farnholtz

Approved by: Caudle A. Julian 1/15/92
Caudle A. Julian, Chief Date Signed
Engineering Branch
Division of Reactor Safety

SUMMARY

Scope:

This special, announced inspection was conducted in the areas of procurement engineering; specifically item equivalency evaluations including applicability, procedures, training, and QA/QC review.

Results:

In the areas inspected, violations or deviations were not identified.

The item equivalency evaluation packages reviewed were generally detailed and technically adequate. They included a 10 CFR 50.59 screening and were prepared, reviewed, and approved by qualified personnel. Adequate procedures were in place and being followed and QA/QC reviews were being performed.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*C. V. Rossi, Supervisor, QA
G. A. Patrissi, QA Systems and Audits
*J. D. Ferrare, Supervisor - Procurement Engineering
*J. M. Mowbray, Supervisor - Procurement Engineering
G. D. Kuhn, Procurement Engineer
R. L. Marsh, Procurement Engineer
R. J. Cuthbertson, Procurement Engineer
*M. P. Huba, Nuclear Site Engineering Supervisor
J. M. King, Nuclear Engineer
G. Labarraque, Employee Concerns
J. DeAngelis, Employee Concerns Investigator
D. Powel, Licensing Superintendent
L. Pearce, Plant Manager
*J. E. Knorr, Regulatory Compliance
G. E. Regal, Manager, Procurement Engineering
J. P. N. Procurement Superintendent

Other licensee employees contacted during this inspection included engineers, technicians, and administrative personnel.

NRC Resident Inspectors

R. Butcher (Senior Resident Inspector)
G. Schnebli (Resident Inspector)
L. Trocine (Resident Inspector)

*Attended exit interview

2. Quality Instruction 8.3, Item Equivalency Evaluations

JPN-QI 8.3, Item Equivalency Evaluations IEEs, Rev. 2, dated March 1991 was reviewed by the inspectors. This instruction provides the requirements for screening, defining and evaluating IEEs due to changes in an item by the original supplier or an alternate replacement by another supplier, to ensure acceptability as a replacement item for an original item. The instruction had been approved by the Director of Nuclear Engineering and outlines the methodology and processes to perform an IEE. Criteria are specified to determine if a substitute item can or cannot be used. Basically the process results in a determination of functionality, fit and form of this item before it is accepted for use. If the process results in a change of function, fit or form, then the item cannot be used through an IEE. A design change must then be prepared.

The QI contains a number of forms and checklists for the evaluator's use to aid in the equivalency evaluations. Included is a screening checklist

for 10 CFR 50.59, JPN Form 104. If the answer to any question on Form 104 is yes, the IEE may not be used and a design change must be processed. The inspector found the instruction to be adequate. The method and process is comprehensive and complete. The forms included within the instruction cover mechanical, electrical, instrumentation and control and civil components as well as material substitution items. The process requires vender catalog revision and drawing updates, if appropriate. Seismic and environmental considerations are also covered for the items.

Each IEE is signed by the preparer, verified by another knowledgeable engineer and approved by the project manager.

3. Item Equivalency Evaluation Reviews

The following item equivalency evaluations (IEEs) were selected from the index of completed IEE packages for the period June 1, 1991 through December 13, 1991 and were reviewed on-site.

Document Number	Date	Description
PTNP-91-0771 Rev. 0	June 12, 1991	Steam Generator Feedwater Pump Second Stage Impeller.
PTNP-91-1831 Rev. 0	August 16, 1991	Solenoid Valve for the Reactor Coolant to Non-Regenerative Heat Exchanger Flow Control Valve CV-3/4-204.
PTNP-90-2253 Rev. 2	August 26, 1991	Internal Parts for 3/4 MOV-872 RHR Alternate Low Head SI to Cold Legs Containment Isolation Valves.
PTNP-90-3385 Rev. 1	August 29, 1991	Reactor Cooling Pump Number 3 Seal Runner.
PTNP-91-2334 Rev. 0	November 12, 1991	High Head SI Pump Casing Gasket.
PTNP-91-1753 Rev. 1	November 18, 1991	Internal Parts for RWST to Charging Pump Isolation Valve.
PTNP-91-2484 Rev. 1	November 22, 1991	Flow Control Valves FCV-6668 and FCV-6671 for the Post Accident Sample System (PASS)

These IEEs were reviewed to determine the adequacy of the evaluations performed; verify that the use of an IEE was appropriate for the described

item; and verify that the IEE was prepared, reviewed, and approved in accordance with licensee administrative controls.

All of the above IEEs met the requirements of FP&L document JPN-QI 8.3 "Item Equivalency Evaluations (IEEs)" which includes a required 10 CFR 50.59 screening to determine if an IEE is appropriate. Each of the reviewed IEEs contain data concerning item identification, vendor information, safety classification determination, quality level determination, purchase order requirements, and acceptance requirements. Also included is an explanation of why the item is not identical to the item being replaced and the equivalency evaluation basis.

The following breakdown of why IEE requests were originated was offered by the procurement engineering department of FP&L for the period June 1, 1991 through December 17, 1991.

Percent of IEEs	Reason for Performing IEE
54%	Manufacturer changes - original part of component is still available, however, minor manufacturer originated changes make it non-identical.
28%	Obsolete - original part or component is no longer available; an alternate manufacturer or updated equivalent is required.
18%	FP&L originated - includes maintenance requests, emergency alternates and engineering requests (PC/M reduction or TEDB update).

Drawing changes necessitated by an IEE are documented on a drawing change request (DCR) and reviewed by JPN and projects. The change is tracked by the drawing change tracking system (DCTS). The change itself is made according to a priority system containing time requirements. A current backlog of changes exists but is planned to be cleared according to priority by the end of 1992.

4. Personnel Qualifications and Assignments

The education, experience and training of engineering staff involved with processing IEEs was reviewed. At the time of the inspection there were 28 people involved with the IEE process. Ten were contractors and 18 were FP&L personnel. The number and need for contract personnel has declined since the duel outage has ended. Within the group of 28, 17 are degreed engineers and 11 were non-degreed personnel, excluding clerks. The experience level of the non-degreed personnel ranged from seven years to thirty-three years, with an average of 16.5 years. Ten of the 28 personnel had 10 CFR 50.59 training using NSAC-125, Guidelines for 10 CFR 50.59 Safety Evaluation, June 1989.

All procurement employees receive orientation training and are trained on administrative policies, types of manuals, such as procedures, quality instructions and other documents necessary to perform or function in the assigned role. In addition each individual involved in procurement engineering activities received training on FP&L Topical QA Program, Quality Procedure, JPN Quality instruction and vender manuals. Commercial grade declaration, corrective action, and nonconformance programs are also included in the required training agenda.

The assignment of a procurement engineer to perform an IEE is done by his supervisor. Interviews with the supervisors reveals that the decision to assign an IEE is by their knowledge and experience with the procurement personnel. The assignments are done on a logical basis by matching the engineers' experience with the discipline. The procurement engineers are advised, through their training, that if they are assigned an IEE that they consider outside their experiences or background, they need to request a reassignment or seek appropriate technical advice. Each IEE is approved by a nuclear projects person who reviews the equivalency evaluation for technical adequacy. This independent check is intended to catch IEEs that are not properly and technically justified. The process seems to work well in that few IEEs require rework.

5. QA Audit of Procurement Process

The QA department conducted several audits of procurement engineering and nuclear materials management.

The reports are

a. QAS-JNP-90-1, dated September 12, 1990 and,

b. QAS-NMM-91-1, dated September 11, 1991

The inspector reviewed both reports and found no major issues or concerns with the IEE process or methodology.

The first audit indicated that the technical evaluation forms were completed as required and contained the required information. It also stated that the basis for the determination was given.

The second audit identified several strengths within the nuclear materials management program. In general the personnel demonstrated a positive attitude and desire to improve, and they were knowledgeable of the requirements of procuring quality items and services. Management's commitments to achieving a quality program were also noted. The second audit identified a desire to make the technical evaluation a controlled document. These evaluations provide the basis for the IEEs and other procurement decisions and should therefore be a QA record and be handled as an controlled document. Resolution of this item is underway by the licensee.

6. Interviews

Interviews with three procurement personnel were conducted. All three identified an awareness of the IEE process and methodology. They each stated that the IEE is a useful tool and are aware of its limitation. No undue pressure had been used to have IEEs completed. Each stated that they take the time needed to do a through, technical evaluation and had all the resources necessary to do the job. They expressed that they had no reservations about returning an assignment if they thought the issue was not within their area of expertise or that the item did not meet the criteria to be processed as an IEE.

Discussions were held with the supervisors in charge of the IEE program. All appeared to be very knowledgeable of the program and were satisfied that the evaluations are correct. It was stated that about 10% of the requests for an IEE are rejected due to not meeting the criteria given in the procedure. They also stated that the number of requests was higher during the recent dual unit outage than during operating periods. A review of where requests for IEEs come from reveals the following breakdown:

54% Manufacturer Changes
28% Obsolete Parts
18% Maintenance Requests

7. Exit Interview

The inspection scope and results were summarized on December 18, 1991, with those persons indicated in paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results listed below. Proprietary information is not contained in this report. Dissenting comments were not received from the licensee. No violations, deviations, or unresolved safety issues were identified.

8. Acronyms and Initialisms

DCR	-	Drawing Change Request
DCTS	-	Drawing Change Tracking System
IEE	-	Item Equivalency Evaluation
PASS	-	Post Accident Sample System
PC/M	-	Plant Change/Modification
RHR	-	Residual Heat Removal
RWST	-	Refueling Water Storage Tank
SI	-	Safety Injection
TEDB	-	Total Equipment Data Base