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

Report Nos.: 50-250/87-07 and 50-251/87-07

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: February 2-6, 1987

Inspector: S. D. Stadler, Team Leader — 4/20/87 Date Signed

Team Members: H. O. Christensen
P. B. Moore
T. J. O'Connor
C. L. Vanderniet

Approved by: M. B. Shymlock, Chief — April 20, 1987 Date Signed
Operational Programs Section
Division of Reactor Safety

SUMMARY

Scope: This routine, announced inspection was in the area of closeout of open inspection items.

Results: No violations or deviations were identified.

## REPORT DETAILS

1. Persons Contacted

Licensee Employees

*C. J. Baker, Plant Manager - Nuclear - Turkey Point
*F. H. Southworth, Senior Technical Advisor
*T. A. Finn, Operations Supervisor
*W. Bladow, Quality Assurance (QA) Superintendent
*R. G. Mende, Reactor Engineering Supervisor
*J. Arias, Regulation and Compliance Supervisor
*R. Hart, Regulation and Compliance Engineer
*J. A. Labarraque, Technical Department Supervisor
*R. E. Lee, Acting QC Supervisor
*J. M. Donis, Site Engineering Supervisor
*J. W. Anderson, QA Supervisor Regulatory Compliance
*T. V. Abbatiello, QA Performance Monitoring Supervisor Engineering
*D. W. Haase, Site Engineering Group Chairman

Other licensee employees contacted included instructors, engineers, technicians, operators, and office personnel.

NRC Resident Inspector

*K. W. Van Dyne, Resident Inspector
*J. B. MacDonald, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on February 6, 1987, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the following inspection findings. No dissenting comments were received from the licensee. The following items from previous inspection reports were closed:

Violation 250/84-25-02, 251/84-26-02 (Closed). Failure to conduct 72 hours of on-shift training for STAs prior to assumption of STA shift duties as required by AP-0307, details in paragraph 3.

Violation 250/84-25-04, 251/84-26-04 (Closed). Failure to follow AP-0306 and inadequate blue badge General Employee Training, details in paragraph 3.

Violation 250,251/86-18-06 (Closed). Failure to properly establish and implement maintenance procedures, details in paragraph 3.

Violation 250, 251/86-26-07 (Closed). Failure to meet requirements of 10 CFR 50.59, (EA86-20), details in paragraph 3.

Violation 250, 251/86-37-02 (Closed). Failure to maintain eight operable construction radios in the control room for safe shutdown communications during control room inaccessibility conditions, details in paragraph 3.

Deviation 250/84-25-03, 251/84-26-03 (Closed). Failure to meet the STA training commitments in FP&L letter L-81-1, dated January 2, 1981, by either providing 40 hours of simulator training or verifying adequate equivalent knowledge, details in paragraph 3.

Deviation 250, 251/86-24-04 (Closed). Failure to meet commitments in Confirmation of Action Letter dated April 2, 1986, concerning diesel generator loading, details in paragraph 3.

Unresolved Item 250, 251/85-40-08 (Closed). Inadequate scaffolding controls around safety-related equipment in housekeeping procedures AP-010.11 and ASP-29, details in paragraph 3.

Unresolved Item 250, 251/85-40-12 (Closed). OSP-075.1 failed to verify MOVs 3-1404 and 3-1405 are independently capable of functioning as designed, details in paragraph 3.

Unresolved Item 250, 251/85-40-27 (Closed). Review "on-the-spot" changes which change the intent of procedures, details in paragraph 3.

Unresolved Item 85-40-31 (Closed). Review calculations for steam loss from AFW vent valves for low steam pressure conditions, details in paragraph 3.

Unresolved Item 250, 251/86-18-04 (Closed). Require licensee confirmation that the RWST has been operated within system parameters, details in paragraph 5.

Unresolved Item 250, 251/86-18-08 (Closed). Additional information required on improperly installed scaffolding, details in paragraph 3.

Unresolved Item 250, 251/86-18-11 (Closed). Licensee to provide records on installed replacement instruments, details in paragraph 3.

Unresolved Item 250, 251/86-19-02 (Closed). Failure to follow licensed operator requalification program for retesting operator, details in paragraph 3.

Unresolved Item 250, 251/86-24-03 (Closed). Action statements in notes section of EOPs, details in paragraph 3.

Unresolved Item 250, 251/86-37-01 (Closed). Licensee to provide documentation that inverter breaker setpoints were determined and documented prior to inverter installation, details in paragraph 3.

Unresolved Item 250, 251/86-46-01 (Closed). Quality control training records, details in paragraph 3.

Inspector Followup Item 250, 251/85-22-05 (Closed). Failure to provide documented feedback of operating experience to maintenance personnel per the requirement of NUREG-0737 Item I.C.5, details in paragraph 5.

Inspector Followup Item 250, 251/85-40-15 (Closed). NRC walkthrough evaluation of the control room inaccessibility procedure (0-ONOP-103) by shift personnel, details in paragraph 5.

Inspector Followup Item 250, 251/85-40-21 (Closed). Development of a method to assure that all procedures are updated by use of a cross-reference procedure, details in paragraph 5.

Inspector Followup Item 250, 251/86-18-07 (Closed). Review of evaluation on expansion joint swelling of the 4C Intake Cooling Water pump, details in paragraph 5.

Inspector Followup Item 250, 251/86-18-12 (Closed). Licensee to revise instrument calibration program, details in paragraph 5.

Inspector Followup Item 250, 251/86-24-02 (Closed). Failure to review EOPs concerning computer room chiller operation and diesel generator loading, details in paragraph 5.

Inspector Followup Item 250, 251/86-24-07 (Closed). Review monthly calibration of EDG ammeters, details in paragraph 5.

Inspector Followup Item 250, 251/86-24-09 (Closed). Determine that component cooling water flow balance test was completed prior to restart of Unit 4, details in paragraph 5.

The following items were not closed.

(Open) Unresolved Item 250, 251/86-18-13. Lack of Procedures for Loss of DC Power, details in paragraph 3.

Inspector Followup Item 250/84-25-01, 251/84-26-01 (Open). Review of operator logs, adequate procedural controls not yet established, details in paragraph 5.

Inspector Followup Item 250,251/85-40-16 (Open). ALARA Caution in Off Normal Operating Procedure, details in paragraph 5.

Inspector Followup Item 250, 251/86-18-09 (Open). Licensee to combine scaffold control procedures, details in paragraph 5.

The following new items associated with inspection report 50-250, 251/87-07 were opened:

Inspector Followup Item 250, 251/87-07-01. Final resolution of QC training files, details in paragraph 3.

Unresolved Item 250, 251/87-07-02. Implementation of revised required reading program and resolution of outstanding required reading items, details in paragraph 6.

Inspector Followup Item 250, 251/87-07-03. Generation of electrical breaker setpoint document by FP&L engineering, details in paragraph 3.

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 (92702)

(Closed) Violation 250/84-25-02, 251/84-26-02. On-Shift Training for STAs. The draft revision of AP-307, Shift Technical Advisor (STA) Program, has increased the required length of on-shift training from 72 hours to 120 hours. A review of training records for two STAs who completed training in June 1986, indicated that 120 hours of on-shift training has been completed. Based on the requirement for 120 hours of on-shift-training in the revision to AP-307 and the review of the two STA training records, this item is closed.

(Closed) Violation 250/84-25-04, 251/84-26-04. Inadequate General Employee Training. The violation involved a failure to provide those employees whose job requires them to enter the plant protected area (Blue Badge) with an orientation which addresses the subjects of security, QA/QC, general plant layout, emergency alarms and employee response, as required by AP-0306. In response to the violation the licensee developed a new orientation video tape which adequately addresses the above mentioned orientation requirements. AP-0306 has been superseded by 0-ADM-306, dated August 14, 1985. A review of selected employee records documented the viewing of the new video tape, thereby meeting the requirements of 0-ADM-306. Interviews with plant employees confirmed the viewing of the film and reiterated the adequacy of the video tapes coverage of the subject matter. This violation is closed.

(Closed) Violation 250, 251/86-18-06. Failure to Properly Establish and Implement Maintenance Procedures. The inspector reviewed the corrections made by the licensee to resolve this violation. The violation was divided into four examples. The first issue involved the use of incorrect torque settings during the maintenance of some motor-operated valves. The corrective action required issuing on-the-spot changes (OTSC) to O-CME-102.1 and instructing maintenance procedure writers to review Plant Change/ Modifications (PC/Ms) in order to incorporate new changes into their procedures. The OTSCs were issued and procedure O-CME-102.1 was revised to incorporate the changes permanently. Two separate meetings were held on August 25 and 28, 1986, to address the issue of PC/Ms that affect maintenance procedures and an individual was assigned to review all PC/Ms for applicability to maintenance procedures. The second issue concerned a component cooling water valve that was found out of position during a system walkdown by an inspector. The corrective actions included the hanging of an information tag on the valve informing individuals as to the reason for the abnormal position, and instruction of operations personnel in the proper use of AP-0103.36 and the use of the information tagging system. The inspector reviewed documentation indicating that an information tag was hung on the valve and an inter-office correspondence issued to all departments explaining AP-0103.36 and instructing supervisors to inform all plant personnel. The third issue concerned another valve found in an incorrect position during an intake cooling water system walkdown using OP-300.1. The corrective action for this item included the revision of OP-300.1 and the inclusion of the mispositioned valve in a new procedure with its correct valve position. The inspector reviewed O-OP-012, Service Water Operation Procedure, and found the valve listed in its correct position.

The final issue contained under this violation was identified as a failure to properly reinstate the Equipment Out Of Service (EOOS) log after returning to a Cold Shutdown condition on Unit 4. The corrective action for resolution of this issue consisted of revising AP-0103.2, Technical Department Training Program, to require the use of the EOOS log in all modes of operation. The inspector reviewed AP-0103.2 and determined that the intended revision had been completed. All issues in this violation have been addressed and adequate corrective actions have been accomplished. This violation is closed.

(Closed) Violation 250, 251/86-26-07. Failure to Adequately Control Plant Changes/Modifications (PC/Ms), Temporary System Alterations (TSAs) and Justifications for Continued Operation (JCOs). The violation was issued by Confirmatory Order, Notice of Violation and Proposed Imposition of Civil Penalties (EA 86-20) dated August 12, 1986. Example A involved the failure to perform an adequate safety evaluation on AFW steam vent valves for low pressure conditions. The licensee conducted an analysis, documented in calculation MOS-462-02, dated October 11, 1985, that confirmed adequate steam supply to the AFW system in the event of a vent valve failure. Additionally, the vent valves have been removed under PC/Ms 85-119 and 85-200. Additional corrective actions for inadequate

safety evaluations of a plant design change included the review of an instruction, Standard Engineering Package for Nuclear Plants, dated August 20, 1986, which provides guidance for Engineering on how to prepare and conduct proper reviews of plant changes. Procedure AP-0190.15, Plant Change and Modification, dated December 18, 1986, also requires the Turkey Point Technical Department to independently review PC/Ms and the Plant Nuclear Safety Committee (PNSC) to independently review PC/Ms for unreviewed safety questions.

Example B involved an inadequate safety evaluation of a temporary system alteration (TSA) for determining the mechanical reliability of the AFW pump under the TSA condition. The licensee has revised procedure 0-ADM-503, Control and Use of Temporary System Alterations, dated December 4, 1986, so that TSAs for equipment in service will receive a PNSC review prior to installation, and the Shift Technical Advisor will determine the necessity for an engineering review under 10 CFR 50.59 (50.59).

Example C involved exceeding the assumptions contained in a JCO supporting EDG loading without an additional 50.59 safety evaluation. Corrective actions included the following:

- A 50.59 safety evaluation was performed on the diesel loading conditions imposed by the cross-tie of the A and B 480 volt load centers. This evaluation concluded that under the specific plant conditions during this event, i.e., Unit 4 normal containment coolers were removed from service, that the EDG loading limits in the JCO would not have been exceeded during a loss of offsite power.

- Procedures 3(4)-OP-006, 480 Volt Switchgear System, were revised to require that the 480 volt load centers tie breakers be racked out and tagged. These breakers can be racked in and closed only in cold shutdown; or, in accordance with Technical Specifications, a 50.59 safety evaluation or as directed by the Technical Support Staff under the Emergency Plan.

- Tags were placed on the 480 volt tie breaker to preclude tying the 480 volt load centers together.

- Programmatic changes were made to assure a more formal review of the control of design changes, TSAs, and JCOs by the Change Review Team, the Plant Review Board, and the PNSC.

The corrective actions addressed in examples A, B, and C of this violation appear adequate and this violation is closed.

(Closed) Violation 250, 251/86-37-02. Failure to Maintain Eight Operable Construction Radios in the Control Room for Safe Shutdown Communications During Conditions of Control Room Inaccessibility. The licensee implemented a program with construction, to ensure that at least eight

operable radios are maintained in the control room for emergencies. Radios removed for testing or repair are to be replaced to ensure at least eight are always available. The inspectors verified that the eight operable radios were in place in the control room chargers on February 4, 1987. The licensee intends to replace these radios with a new communications system with an independent power system. This new system is scheduled for installation during the next Unit 3 refueling outage. Based on the above information, this violation is closed.

(Closed) Deviation 250/84-25-03, 251/84-26-03. Simulator Training for STA. The deviation involved the failure to meet the STA training commitments in FP&L Letter L-81-1 dated January 2, 1981, by either providing 40 hours of simulator training or verifying adequate equivalent knowledge. A revision to AP-307, Shift Technical Advisor Program, was reviewed in draft, and was scheduled for PNSC approval within two weeks following the inspection. This procedure requires a minimum of 40 hours of simulator training prior to assuming shift duties. The only equivalency allowed in lieu of this simulator training is the obtaining of an RO or SRO operating license. A review of the training records for two STAs who completed training in June 1986, indicated that the required 40 hours of simulator training was completed for each STA. Additionally, the draft revision to AP-307 will require that non-licensed STAs complete 40 hours of requalification simulator training on an annual basis.

The upgrade to AP-307 also lists the following minimum training requirements for STA candidates:

- Fundamentals - 80 hours to include reactor theory, core physics and thermodynamics

- System Descriptions and Logics - 60 hours on primary and secondary systems

- Technical Specifications - 8 hours of Turkey Point Technical Specification training

- Mitigation of Core Damage and Transient and Accident Analysis - 40 hours of training in these areas.

The only equivalency allowed for any of this required STA training by AP-307 is the obtaining and maintaining of an RO or SRO license. Based upon the information contained in the STA training records and the revised AP-307, this item is closed.

(Closed) Deviation 250, 251/86-24-04. Confirmation of Action Letter Commitments on Emergency Diesel Load limit. Operating procedures 3(4)-OP-006, 480 Volt Switchgear System, were not revised to ensure that the emergency diesel load limit of 2845 K.W., specified in Confirmation of Action Letter, dated April 2, 1986, was not exceeded. On April 14, 1986,

this procedure was utilized to cross-tie two separate 480 volt Engineered Safety Feature centers together without a safety evaluation. This action placed the plant operation outside the assumptions in the Justification for Continued Operation (JCO).

The licensee initiated the following corrective actions in response to the above deviation:

- A 50.59 safety evaluation was performed on the diesel loading conditions imposed by the cross-tie of the A and B 480 volt load centers. This evaluation concluded that under the specific plant conditions during this event, i.e., Unit 4 normal containment coolers removed from service, that the EDG loading limits in the JCO would not have been exceeded during a loss of offsite power.

- Procedures 3(4)-OP-006, 480 Volt Switchgear System, were revised to require that the 480 volt load centers tie breakers be racked out and tagged. These breakers can be racked in and closed only in cold shutdown; or, in accordance with Technical Specifications, a 50.59 safety evaluation or as directed by the Technical Support Staff under the Emergency Plan.

- Tags were placed on the 480 volt tie breakers to preclude tying the 480 volt load centers together.

The inspector verified the above corrective actions, and this deviation is closed.

(Closed) Unresolved Item 250, 251/85-40-08. Inadequate Scaffolding Controls Around Safety-related Equipment. The inspector performed a walkdown of erected scaffolding throughout the plant including the turbine building and inside the RCA. The inspector found that all of the scaffolding appeared to be constructed properly using only plant support except for one which had been properly tagged and logged. All had been certified as being constructed with fire resistant materials, and most of them had a tag attached indicating that security had reviewed the structure. Scaffolding erected inside the RCA, on the southeast corner of the radwaste building had no identifying tags or information attached to it or in the vicinity. A contractor had erected this structure and considered it a "safeway staircase." The licensee concurred with the inspector that technically this was scaffolding and should be controlled as such. Based on the inspectors observations of erected scaffolding throughout the plant, this item is closed.

(Closed) Unresolved Item 250, 251/85-40-12. AFW Flow Control Valves. This item involved concerns related to the verification of the capability of Motor Operated Valves (MOVs) 3-1404 and 3-1405 to independently open all associated AFW flow control valves as designed. The inspector reviewed procedures 3-OSP-075.1, dated November 4, 1986, and 3-OSP-075.2, dated December 18, 1986, Unit 3 Auxiliary Feedwater Train 1 and Train 2

Operability Verification, respectively, and 4-OSP-075.1, dated November 4, 1986, and 4-OSP-075.2, dated December 18, 1986, Unit 4 Auxiliary Feedwater Train 1 and Train 2 Operability Verification, respectively. The inspector verified that the procedures adequately insure that the steam supply valves are independently capable of opening all their associated AFW flow control valves as designed. This unresolved item is closed.

(Closed) Unresolved item 250, 251/85-40-27. Concerns Pertaining to the Licensee Administrative Procedure 0109.3, On the Spot Changes (OTSC) to Procedures. Procedure 0109.3 governs the mechanism allowing temporary changes to procedures in accordance with Technical Specification (TS) 6.8.3. Questions were raised on whether the procedure was improperly used to change steps, which altered the intent of a procedure. A review of 0109.3 dated August 12, 1986, indicated that adequate controls were in place to preclude the altering of a procedure's intent without the Plant Nuclear Safety Committee approval as required by Technical Specifications (TSs). A review of active OTSCs confirmed that procedure 0109.3 was being implemented. Staff members demonstrated a good working knowledge of the permissible changes and procedural requirements under the OTSC procedure. This unresolved item is closed.

(Closed) Unresolved Item 85-40-31. Review Calculations for Steam Loss from AFW Pump Vent Valves for Low Steam Pressure Conditions. Bechtel Power Corporation Calculation No. M08-462 approved September 30, 1985 appears acceptable and it indicates that a 17 percent margin of steam is available with the 3/4 inch vent valve open. Additionally, the vent valves in question are no longer in the system. They were removed under Plant Change and Modification (PC/M) 85-119 and 85-200.

(Closed) Unresolved Item 250, 251/86-18-04. Confirmation That the RWST Has Been Operated Within System Parameters. The licensee provided the following response to the inspector. The following is an excerpt from a memorandum from J. A. Labarraque to E. Preast-PPE, titled Turkey Point Units 3 and 4 RWST Temperature Criteria Investigation, REA TPN 86-46, dated June 1, 1986:

The Westinghouse Standard Technical Specifications (STS) Revision 5, require that the Refueling Water Storage Tank (RWST) remain within specified temperature limits consistent with the plant's LOCA analysis. For Turkey Point, the temperature limits on the RWST specified by Westinghouse (reference 2) are a minimum of 39°F and a maximum of 100°F. These temperature limits are incorporated in draft STS 3/4.5.4 presently under review by the plant staff. T.S. 3/4.5.4 requires measurement of RWST temperature by portable instrumentation every 24 hours when outside air temperature is less than 39°F or greater than 100°F. Due to the large volume of the RWST, air temperature would have to be less than 39°F or greater than 100°F and remain at that temperature continuously for several days for the RWST solution to approach its temperature limits. To our knowledge, such sustained temperature extremes have never occurred in

the Miami area. For this reason, a detailed evaluation of the effect of exceeding the RWST temperature limits for the time period prior to adoption of the STS is not required. An evaluation would be required, however, to show that the RWST temperature does not go outside its limits should the plant prefer not to adopt the STS in this area.

The inspector concurs with the licensee's position on this issue, and since the surveillance will be covered by the revised Technical Specifications, this item is closed.

(Closed) Unresolved Item 250, 251/86-18-08. Additional Information Required on Improperly Installed Scaffolding. The licensee's response stated that no problems were noted with the scaffolding cited in the IFI. The licensee noted that a suspension cable touched two pipes, but that it had rubber between the cable and the pipe. The scaffold was taken down June 6, 1986. Because the licensee has committed to upgrade the control of scaffolding (reference IFI 250, 251/86-18-09, paragraph 5), and a plant tour by the inspector indicated no improper scaffolding erection (reference unresolved item 250, 251/85-40-08, paragraph 3), this item is closed.

(Closed) Unresolved Item 250, 251/86-18-11. Installation of Local Intake Cooling Water Instrumentation Which Differed from the Instrument Index. The licensee had addressed the discrepancies via discrepant field condition (DFC) and request for technical assistance (RTA) reports. The instrumentation had been determined to be acceptable for this application. The inspector noted at the time of the inspection, that RTAs 86-381-110 and 86-286-019 were unresolved nine months after their initiation. The licensee stated that documentation discrepancies will be rectified pending resolution of these reports. Additionally, the inspector reviewed procedure 0190.4, Procurement Document Control, dated November 6, 1986, and 0190.19, Control of Maintenance on Safety Related and Quality Related Systems. These procedures delineate controls to ensure that proper replacement parts are purchased and installed. This unresolved item is closed.

(Closed) Unresolved Item 250, 251/86-19-02. Failure to Retest Requalification Examination Failures Within Required Time and Using Same Test for Reexamination. The licensee significantly upgraded the administrative controls over the administration, grading, and security of examinations through a letter to the Training Staff issued on May 19, 1986, and training procedures, or administrative guidelines AG-012 and AG-013 issued on January 13, 1987, and September 20, 1986, respectively. The May 19, 1986 letter required that the following controls be incorporated into procedures and guidelines:

- All examinations shall be graded within two (2) weeks of administration including review and approval by the Training Group Supervisor.

- After completion of the grading of an examination, the grader shall sign the examination and submit it to the Training Group Leader. The group leader will review it for adherence to procedure AG-012, Guidelines for Administration, Control and Security of Examinations, and shall sign it.

- If a licensed operator fails the annual requalification examination, the Operations Supervisor shall be immediately notified in writing and the operator shall be immediately removed from licensed duties.

- If a licensed operator fails a requalification cycle examination he shall be notified immediately in writing and shall have sixty (60) days to complete remedial training and reexamination or shall be relieved of licensed duties.

Procedure AG-012 requires that for reexamination on the same area, that the content be changed to ensure no more than 50 percent of the questions are repeated. AG-012 also stipulates additional controls over examination administration, grading, QC regrading, assembled examination security, and the changing of grades or questions. Based upon these corrective actions and the upgraded examination controls, this unresolved item is closed.

(Closed) Unresolved Item 250, 251/86-24-03. Emergency Operating Procedure (EOP) Action Statements in (EOP) Notes. Attachment "D" of E-0, Reactor Trip or Safety Injection, contained action statements in an insert marked "notes." The inspector reviewed Attachment "D" of EOP E-0 dated December 12, 1986. The insert marked "notes" contained a summary of six essential actions that should be completed over a period of time following a loss of offsite power in order to prevent diesel generator overload. Although these items address operator actions, they do not specifically require actions. All of the actions addressed under notes in Attachment E are previously accomplished through action statements within the body of EOP E-0. Based on the above information, and the fact that the final Turkey Point approved EOP Procedure Generation Package will specify the content of note inserts, this item is closed.

(Closed) Unresolved Item 250, 251/86-37-01. Documentation That Coordination of Breakers Associated With Newly Installed Inverters and Control of the Breaker Setpoints Were in Place Prior to Operation. No formal document was in place at the time of the plant modification to install the new SCI inverters. The licensee provided documentation, however, that inverter shunt trip settings were provided in Change Request No. 4 to PCM-83-117. This change was processed on July 25, 1985, prior to placing the inverters in service. Due to the lack of a breaker setpoint document, the breaker setpoint curves in the Appendix R Coordination Study were added to the PCM at a later date for record purposes. Since the breaker setpoints were stipulated in the PCM prior to inverter operation, this item is considered closed. Since a request for engineering assistance (REA) has been issued requesting the development and issuance of a breaker setpoint document, a new Inspector Followup Item (250, 251/87-07-03) will be identified to track issuance and implementation of this document.

(Closed) Unresolved Item 250, 251/86-46-01. Quality Control Training Records. The licensee, in accordance with Administrative Procedure O-ADM-971, Certification of Quality Control Inspectors, is required to maintain complete training files on all Quality Control (QC) personnel. In a previous NRC inspection the records were identified as being incomplete. The inspector interviewed several licensee personnel regarding the current maintenance of QC training records to determine if the licensee was improving the quality of the records. The inspector was informed of a change in the individual responsible for maintaining the records, and through a discussion with that individual, determined that more attention was being provided to the training files. The inspector also noted that the weaknesses in the QC training files were identified by the licensee's own training assessment conducted in February 1986. Due to the present status of the training records and the impending corrections directed by the licensee's training assessment, this unresolved item is closed. Inspector Followup Item 250, 251/87-07-01 will be opened to track the final resolution of the QC training files deficiencies.

(Open) Unresolved Item 250, 251/86-18-13. Lack of Procedures for Loss of DC Power. The licensee is still awaiting an engineering input so that the procedure can be developed. The projected procedure issue date is September 15, 1987. The REA associated with the procedure should be expedited along with the procedure development and associated operator training. This item will remain open pending completion of these actions.

4. Unresolved Items*

One unresolved item was identified during the inspection in the area of required reading. Details are in paragraph 6.

5 Licensee Action on Previous Inspector Identified Items (92701)

(Closed) Inspector Followup Item 250, 251/85-22-05. Failure to Perform Periodic Audits of the Effective Functioning of the Operating Experience Feedback Program at All Levels. A QA audit performed in 1985 was determined to have audited the effectiveness of this program at the supervisor level only, and had not detected that this training was not provided to maintenance personnel as required by NUREG-0737, Item I.C.5. Since the QA audit program was on a three year cycle, this area had not been audited again since the 1985 audit. In response to the NRC concern, the licensee conducted an audit of this area the week of February 9, 1987. The audit verified that adequate training in the area was being provided to mechanics, I&C technicians and electricians as part of continuing training which was implemented in 1986. In addition, the licensee committed to revise the QA procedures to require these audits on a two year cycle versus three. Because operating experience feedback training is now being accomplished and the audits by QA include reviews at all levels, this item is closed.

*An Unresolved Item is a matter about which more information is required to determine whether it is acceptable or may involve a violation or deviation.

(Closed) Inspector Followup Item 250, 251/85-40-15. Walkthrough of Control Room Inaccessibility Procedure (O-ONOP-103) to Evaluate Adequacy of Upgrades to the Procedure, Communications, Lighting, Equipment and Training. On Wednesday, February 4, 1987, the inspector witnessed a walkthrough of the control room inaccessibility procedure by shift personnel. Prior to the procedure walkthrough the inspectors had verified several areas of improvement by the licensee since the previous walkthrough in 1985 (NRC Inspection Report 250, 251/85-40) including:

- Revision of procedure O-ONOP-103 to address deficiencies.
- Training on this procedure as part of License Requalification Training.
- Addition of numerous emergency lighting units to ensure adequate lighting to support local emergency operations.
- Upgrade in radios utilized for emergency communication. A new communications system is on order and scheduled to be installed at the next Unit 3 refueling outage. As a temporary measure, eight construction radios are being kept on standby in the control room for emergency use.
- Improvement in accessibility of local AFW valves through the installation of reach rods and the removal and control of scaffolding.
- Installation of instrumentation necessary to support local observation of Train 2 of AFW (not yet operable).

The positive effects of the above improvements were obvious during the walkthrough evaluation conducted on February 4, 1987. An increased level of training and confidence was displayed by the shift personnel in the simulation of shutting down and controlling the plant from outside of the control room. The Shift Supervisor issued keys, radios, and equipment to designated personnel at the beginning of the scenario, and provided good control and direction for the duration. The issuance of keys for access and for the reset of tripped Auxiliary Feedwater (AFW) pumps had been a deficiency noted during the previous walkthrough. The inspectors verified that the shift personnel were knowledgeable of the procedure and could adequately demonstrate all of the following evolutions:

- Trip of the reactors from outside the control room.
- Local breaker and valve operations necessary to control the reactor, steam generator levels, and to prevent overloading the diesel generators during a loss of offsite power.
- Control of steam generator levels from train 2 of AFW including the balancing of flows with only one AFW pump running.
- Reset of an AFW pump that had tripped on mechanical overspeed.
- Transfer of control from train 2 to train 1 of AFW following restart of second AFW pump.

Only two areas of concern, procedural deficiencies and communication problems, were identified during the evaluation. Attachments 5 and 6 to O-ONOP-103 direct the operators in manually controlling AFW and steam generator water levels from AFW train 1 or train 2 feedwater platforms.

The procedure utilized directed control from train 2 only if the train 1 platform was inaccessible. It did not address this area for the case where train 1 was not operating such as with the loss of AFW pumps A and C. The operators, however, appeared to be aware of this discrepancy and did utilize the section of the procedure to control train 2. This procedural deficiency and several other minor deficiencies were corrected in a draft revision before the inspectors left the site. Although the construction radios utilized were far better than the standard radios utilized in 1985, one specific area of radio communication still appeared inadequate. The Shift Supervisor in the technical support center (TSC) had difficulty communicating by radio with the operators performing local operations inside the radiation controlled area (RCA). As an alternative, the Shift Supervisor utilized the page system which appeared adequate. Prior to installation of the new communications system, testing should be done to determine if special equipment is required in this area. Based on the above information this item is closed.

(Closed) Inspector Followup Item 250, 251/85-40-21. Development of a Method to Ensure All Procedures Are Properly Updated by Use of a Cross-reference Procedure. The licensee has implemented a computer cross referencing system which appears adequate to resolve the concern. Based on this information, this IFI is closed.

(Closed) Inspector Followup Item 250, 251/86-18-07. Review of the Evaluation on the Expansion Joint Swelling of the 4C Intake Cooling Water (ICW) Pump. The licensee determined that the expansion joint had been installed with an axial elongation greater than that recommended in the vendor manual. All ICW (six) expansion joints were replaced with joints of the proper size. This item is closed.

(Closed) Inspector Followup Item 250, 251/86-18-12. NRC Concerns Pertaining to Weaknesses in the Control and Administration of the Calibration Program. A review of the licensee's scheduling program, Generation Equipment Management System (GEMS), indicated a calibration program coupled with preventative maintenance. GEMS tracks TS and non-TS calibrations, in addition to preventative maintenance items. A review of the planning schedule and several completed packages indicated that the program is capable of functioning as intended. The review, however, noted that some preventative maintenance calibration had exceeded the due date as a result of systems being unavailable for release by Operations. This did not effect Technical Specification required calibrations. The licensee stated that the upcoming units outage will rectify a majority of these cases, thereby returning the non-TS required instrumentation to service. This item is closed.

(Closed) Inspector Followup Item 250, 251/86-24-02. Failure to Revise Attachment "E" of EOP E-0 to Ensure That the Computer Room Chiller was not Started Until After the Containment Spray Pump is Secured During a Loss of Offsite Power. Attachment "E" to Emergency Operating Procedure E-0, Reactor Trip or Safety Injection, was deleted through a July 27, 1986,

procedure revision. The need for Attachment "E" was eliminated by plant modifications which reduced the potential loading on the diesel generators attributable to non-safety loads. The inspector reviewed a revision to E-0 dated December 21, 1986, and verified that Attachment "E" had been deleted. Based on the above information, this item is closed.

(Closed) Inspector Followup Item 250, 251/86-24-07. Review Monthly Calibration of Emergency Diesel Generator (EDG) Ammeters. The licensee was operating under a Justification for Continued Operation (JCO) concerning overloading of the EDGs. The licensee was determined that due to the very small tolerances on the electrical loads, that an out of tolerance ammeter could result in exceeding the EDGs load tolerance. Because of this, the licensee recommended that a calibration check be performed monthly and an engineering evaluation be conducted to determine whether or not the ammeters had a tendency to drift out of tolerance between their normal calibration interval of every 18 months. The inspector reviewed the licensee's calibration records of the EDG ammeters between May and July 1986, and a correspondence to J. A. Labarraque from E. Preast-PPE titled, "Turkey Point Units 3 and 4 EDG Wattmater and Ammeter Calibration Data." The inspector concurred with the licensee's evaluation which concluded that there was not sufficient drift of the measuring equipment to warrant their calibration every month. Further more, the decision to extend the calibration interval back to 18 months appeared justified, and this item is closed.

(Closed) Inspector Followup Item 250, 251/86-24-09. Determine That Component Cooling Water Flow Balancing Test Was Completed Prior to Restart of Unit 4. Special Test 86-11, was completed on May 1, 1986, and prior to the Unit 4 restart. The valve position recommended by the special test has been included into Operating Procedure 4-OP-030, Component Cooling Water System, revision dated November 25, 1986, and O-ADM-205, Administrative Control of Valves, Locks and Switches, revision dated October 16, 1986. Based on this information, this item is closed.

(Open) Inspector Followup Item 250/84-25-01, 251/84-26-01. Review of Operator Logs by Shift Personnel. The inspector reviewed Administrative Procedure (AP) 0103.2, Responsibilities of Operators and Shift Technicians on Shift and Maintenance Logs and Records, to ascertain whether operators are required to review control room logs prior to assuming the shift. AP-0103.2 does not instruct the on-coming operator to perform a review of the control room logs prior to assuming the shift. It does, however, state that logs may be reviewed after the shift relief. This does not demonstrate that the logs are to be reviewed prior to assuming the shift or how much of the past logs are to be reviewed. Log review is of major concern when an individual is returning from several days off-shift or when the watch is assumed by an off-shift individual. Some clear direction is needed to instruct the operators assuming the shift as to the amount of review that is needed to be accomplished prior to the relief of the shift. The review should be back to the last shift worked by the individual. At present this is done only under vague guidance and does not appear to be sufficiently documented for the inspector to close this item.

(Open) Inspector Followup Item 50-250, 251/85-40-16. ALARA Caution in Off Normal Operating Procedure. The inspector was concerned that the licensee was not fully aware of the implications of the Post Accident Radiation Zone Map 5177-119-SK-M-1, dated April 27, 1981. In particular, the inspector was concerned that a need may arise which would require auxiliary feedwater to be provided to Unit 4 while experiencing a LOCA event on Unit 3. A review of licensed, non-licensed, and red badge training indicated that adequate training on the use of dose rate instruments is provided. Two non-licensed operators, who were observed using the instruments, demonstrated proper use. No caution statement, however, is contained in off-normal operating procedure 7308.1, Malfunction of Auxiliary Feedwater System, dated September 26, 1986, which would advise the operators of the potential for an extremely high radiation environment that would exist in the event of a Unit 3 LOCA at the auxiliary feedwater pump station. This item will remain open pending a revision to procedure 7308.1 to include a caution statement as outlined above.

(Open) Inspector Followup Item 250, 251/86-18-09. Licensee to Combine Scaffold Control Procedures. The inspector reviewed ASP-29, Rev. 0, Control of Construction Scaffolding, and AP-0103.11, revised December 21, 1986, a general housekeeping procedure. Neither of these procedures adequately addressed concerns communicated in the inspection report that opened this IFIs. Together, the procedures were conflicting, and made scaffold accountability difficult due to two separate controlling groups; i.e., operations and construction. While ASP-29 addressed many of the inspector's concerns, it was not complete in that it did not provide for a periodic review of scaffolding, nor were scaffold documents maintained as QA records. AP-0103.11 was a very general housekeeping procedure and contained little guidance on the erection and control of scaffolding in the plant. This procedure had been recently revised to reference ADM-012, Scaffold Control. Procedure ADM-012 revised December 9, 1986, satisfactorily addressed the inspectors concerns in a lack of control over scaffolding. This procedure was very specific in defining responsibilities. General requirements in this procedure were complete and simple. Scaffolding is inspected on a weekly basis and must be removed within 14 days of job completion. Scaffold request forms and scaffold inspection logs are maintained as QA records. Unfortunately, ADM-012 was not yet implemented as the controlling procedure for all plant scaffolding. This item will remain open pending the implementation of ADM-012 for scaffolding control.

6. Required Reading by Operations Personnel (41701)

The inspector reviewed the process by which both on and off-shift personnel are required to review procedure changes and other required reading. Procedures that are rewritten or revised are distributed to the licensee's Training Department where they are assembled into a package with a cover sheet, placed in a three ring binder and put on a shelf in the training library.

The cover sheet has a list of all personnel that are required to review the attached procedures and is to be initialed off when an individual completes the review. Each cover sheet contains an attachment at the bottom of the page requiring the review to be completed prior to 13 weeks from the distribution date. Administrative Procedure AP-301, Licensed Operator Requalification Program, contains a similar statement requiring the review to be completed within 13 weeks. Contrary to both of these statements it appears to be a common practice to review these packages after the required deadlines. The inspector reviewed cover sheets for several packages and in all cases noted that individuals had initialed the sheets after the deadline. The inspector reviewed several packages in one day. Some of the individuals consequently initialed that they had reviewed over 150 procedures in one day and in one case an individual reviewed over 300 procedures in under two hours. These records indicate that a less than adequate review of the procedure revisions may have been completed.

The volume of procedure revisions being issued by the Procedures Upgrade Program (PUP) appeared to be contributing to the less than adequate review and may be jeopardizing the effectiveness of the required reading program. NUREG-0737, Item I.C.5 requires that this type of information be screened to prevent obscuring priority information. At the time of this inspection, however, the licensee had not established a screening process, and all procedure revisions were being routed to plant personnel as required reading. This process lumped significant changes to emergency operating procedures with numerous administrative and typographical changes. The licensee committed to have the Training Department establish a screening process which would screen non-safety related or administrative type changes. In addition, the important changes would be synopsized to reduce the volume and to ensure that personnel would perform an adequate review within the required time frame. During a subsequent inspection conducted the week of February 16, 1987, it was noted that the licensee had implemented the screening program for all new procedure changes. This item will be an Unresolved Item (250, 251/87-07-02) pending resolution of the following additional concerns by the licensee:

- Review of essential procedure changes and required reading during the past 12 months to ensure that safety-related information was incorporated into licensee requalification training.

- Removal of volumes of procedural changes presently in the control room, the screening of safety-related changes contained therein, and the transmittal of the information to affected personnel through required reading or requalification training.

- Establishment of procedural controls over the administration of the revised required reading program.