U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-321, 50-366
License Nos: DPR-57 and NPF-5

Report No: 50-321/96-11, 50-366/96-11

Licensee: Georgia Power Company (GPC)

Facility: E. I. Hatch Units 1 & 2

Location: P. O. Box 439
Baxley, Georgia 31513

Dates: August 4 - September 14, 1996

Inspectors: B. Holbrook, Senior Resident Inspector
J. Moorman, Senior Resident Inspector (Acting)
E. Christnot, Resident Inspector
G. Salyers, Emergency Preparedness Specialist (Sections P2, P3, P5, P6, P7, P8)
J. Canady, Resident Inspector

Approved by: P. Skinner, Chief, Projects Branch 2
Division of Reactor Projects

Enclosure 2

EXECUTIVE SUMMARY

Plant Hatch, Units 1 and 2
NRC Inspection Report 50-321/96-11, 50-366/96-11

This integrated inspection included aspects of licensee operations, engineering, maintenance, and plant support. The report covers a 6-week period of resident inspection; in addition, it includes the results of an announced inspection by a regional emergency preparedness specialist.

Operations

- The inspector concluded that operator response to the Reactor recirculation pump trip on August 20, was excellent. Actions taken were prompt, deliberate, and in accordance with plant procedures. The immediate observations by the Shift Technical Advisor to assist the operators in use of the power/flow operating map was excellent (Section O1.2).

- The inspector reviewed a special report dated July 30, 1996, involving an inoperable reactor vessel water level flood-up range instrument. The report did not clearly indicate how to compensate for the lack of monitoring capability above +60 inches should this be required during post accident conditions. However, the lack of clarity was not considered significant. The licensee is considering a TS amendment to address this issue (Section O2.1).

- The license conditions required for the Technical Specification Improvement Program (TSIP) implementation for Unit 1 and Unit 2 are complete with the exception of the ten-year surveillance requirements for the emergency diesel generators (Section O3.1).

- A Safety Review Board (SRB) meeting was attended on September 12. The inspectors concluded that the meeting met the applicable requirements and that the SRB is providing adequate review and auditing functions (Section O7.1).

- The licensee activities involving the river conditions demonstrated a pro-active attitude on the part of plant management and is considered a strength (Section O1.1).

- Operation and Maintenance Department personnel routinely use a risk matrix to perform an assessment of the total plant equipment out of service to determine the overall effect on performance of safety functions per 10 CFR 50.65(a)(3), "Requirements for monitoring the effectiveness of maintenance at nuclear power plants" (Section O1.1).

Maintenance

- Maintenance and surveillance activities were performed thoroughly and professionally. The inspectors observed that personnel were knowledgeable in the assigned task; procedures were in use; activities were well documented; and administrative controls were implemented.

Engineering

- VIO 50-321/96-11-02: Failure to Perform an ASME Code-Required VT-3 Inspection on High Pressure Coolant Injection (HPCI) Valve 1E41-F006, was identified. The failure to perform an American Society of Mechanical Engineers (ASME) Code-required VT-3 inspection on a safety related component was considered significant (Section E2.2).

- The inspectors conducted followup inspections on licensee activities with respect to the Unit 2 Station Service battery. No immediate operability concerns were identified. Onsite engineering was taking appropriate pre-installation measures to ensure replacement battery cells remained in the proper condition (Section E7.1).

Plant Support

- A Non-Cited Violation (NCV), 50-366/96-11-03, for failure to follow valve line-up procedures when performing a torus water sample was identified (Section R1.2).

- Poor sampling technique was the most likely cause for the stored fuel oil analysis results that were out of specification on August 8. Attention to detail during the sample analysis collection process may prevent similar problems. This was identified as an area for improvement in the chemistry sampling process (Section R4.1).

- The Emergency Preparedness (EP) facilities and equipment were at a satisfactory level for operational readiness; Emergency Operating Facility (EOF) ventilation was tested and maintained adequately; and the tone alert radio system was reliable, tested and maintained (Section P2).

- The licensee's review process for EP procedures and documents was satisfactory and met the requirements of 10 CFR 50.54(q). The declaration of the Notification Of Unusual Event (NOUE) on March 20, 1996, was properly classified and the applicable Emergency Implementing Procedures (EIP) were implemented (Section P3).

- The licensee maintained a satisfactory EP training program and satisfactorily met their drill requirements (Section P5).

- No significant personnel changes were made since the last inspection (April, 1995) that would effect the performance or maintenance of the EP program (Section P6).

- An audit was not conducted in accordance with the Audit Planning Matrix, however, the aggregate of the audit elements satisfied 10 CFR 50.54(t) (Section P7).

- Quality Assurance (QA) auditors were qualified and EP issues were satisfactorily tracked and resolved in a timely manner (Section P7).

- The inspectors' review of the status of plant security facilities and equipment did not identify any deficiencies (Section S2).

Report Details

Summary of Plant Status

Unit 1 began the report period at 100% rated thermal power (RTP). On August 20, power was reduced to about 30% RTP due to a trip of a reactor recirculation pump motor generator (MG) set and a subsequent runback. The trip occurred when the air high temperature switch was bumped during housekeeping activities and the runback was due to the quick opening of a reactor feed pump minimum flow valve (paragraph O1.2). Power was returned to RTP and the unit operated at 100% RTP for the remainder of the report period except for routine testing activities.

Unit 2 operated at 100% RTP throughout the report period except for routine testing activities.

I. Operations

O1 Conduct of Operations

O1.1 General Comments

a. Inspection Scope (71707)

Daily reviews of plant operation were conducted using Inspection Procedure 71707, Plant Operations. The conduct of operations was generally professional and safety-conscious. Specific events and noteworthy observations are detailed in the section below.

b. Observations and Findings

The inspectors discussed the electrical harmonics observed on the Units 1 and 2 Emergency Diesel Generator (EDG) 4160 volt (V) switchgear (Reference paragraph E2.1) with licensee personnel. The inspectors reviewed the EDG surveillance procedures. The operators are instructed by the procedures to quickly load the EDGs once they are in parallel with the grid. The inspectors observed that there was no discussion in the procedure about the harmonics and the possible effect on the reverse power trip. The inspectors also observed that there was no discussion about the possibility of a reverse power trip while unloading the EDGs in preparation for removal from the grid. The inspectors were informed that the Engineering Department was performing a review of the effects of the electrical harmonics.

The inspectors monitored the licensee's activities involved with the river water level, temperature, and the debris being pulled into the cooling water systems. The licensee contracted to have the area in front of the intake structure dredged. Divers were also contracted to clean sediment and debris from the bottom of the intake water bays. The inspectors were informed that algae and floating moss were clogging various chiller systems and cooling water heat exchangers. The inspector attended meetings at which these problems were discussed. The licensee developed an action plan to better cope with the algae and the floating moss. Parts of the plan called for closer monitoring of chiller systems and cooling water heat exchanger performance.

One portion of the maintenance rule, 10CFR50.65(a)(3), states, in part, "an assessment of the total plant equipment that is out-of-service should be taken into account to determine the overall effect on performance of safety functions." On several occasions the inspectors observed licensed operators using a matrix governed by Procedure 90AC-OAP-002-OS, Scheduling Maintenance. The matrix provides Technical Specification (TS) and risk-informed guidance to be used when removing combinations of equipment from service. The matrix indicated that if a Control Rod Drive (CRD) pump was out-of-service it would be a medium risk to take the HPCI out-of-service and it would be a low risk to take out a loop of core spray. The matrix also indicated that if the HPCI was out-of-service, it would be a high risk to remove a loop of Low Pressure Coolant Injection (LPCI) from service and a medium risk to remove a Residual Heat Removal Service Water (RHRSW) pump. The instructions on the matrix indicated the following:

- For a high risk removal from service (Required Action Statement (RAS) 12 hours or less, or Risk Achievement Worth (RAW) equal to or greater than 10), a risk evaluation was required, and approval by the operations manager was required.

- For a medium risk (Limiting Condition for Operation (LCO) less then 7 days, or RAW more than 5 but less then 10) the approval by the operations manager was required.

- For a low risk (LCO equal to or more then 7 days, or RAW less then or equal to 5) the approval by the Superintendent On Shift (SOS) was required.

Two laminated copies of the matrix were available in the Control Room.

c. Conclusions on General Comments

The inspectors considered the EDG harmonic item to be a potential for possible erroneous reverse power trips, which could lead to operator confusion.

The licensee activities involving the river conditions demonstrated a pro-active attitude on the part of plant management and is considered a strength.

Use of the matrix to evaluate risk associated with removing various combinations of equipment from service is consistent with the maintenance rule. This and other aspects of the licensee's implementation of the maintenance rule will be inspected further in the near future.

O1.2 Transient Due to Recirculation Pump Trip and Runback (Unit 1)

a. Inspection Scope (71707)

At 9:12 a.m. on August 20, with Unit 1 operating at 100% RTP, the 1A Reactor Recirculation (RR) Pump tripped. An inspector responded to the control room to assess operator actions and unit response. The inspector observed operator monitoring of annunciators and parameter trends. Communications, supervisory control, and the use of procedures were also observed. Among the procedures used by the operators were:

- 34AB-C51-001-1S: Reactor Power Instabilities, Rev. 3
- 34SV-SUV-023-1S: Jet Pump and Recirculation Flow Mismatch Operability, Rev. 6, Edition 1
- 34SO-B21-001-1S: Reactor Recirculation System, Rev. 4, Attachment 6, Power Versus Flow Map
- 34GO-OPS-065-1S: Control Rod Movement, Rev. 14
- 34GO-OPS-055-OS: Power Changes, Rev. 18

b. Observations and Findings

The operators immediately implemented and appropriately used applicable procedures in response to the transient. At about 9:16 a.m. the Shift Technical Advisor (STA) identified and reported to the crew that the unit was within the region of potential instability. Reactor power had decreased to 69% RTP with 49.8% core flow. At STA and Shift Supervisor (SS) direction, flow was increased slightly on the 1B RR pump. At 9:21 a.m. the STA informed the shift that the region of potential instability had been exited.

In preparation to start the tripped pump, control rods were inserted to get below the 55% load line, as required by procedure. As operators prepared to place the 1A Reactor Feed Pump Turbine (RFPT) in standby, a runback on the 1B RR pump occurred due to low reactor water level. The operators noted that the runback occurred in conjunction with the 1A Reactor Feedwater Pump (RFP) minimum flow valve opening. The region of potential instability was again entered.

Control rods were inserted and the region was exited in about eight minutes.

The licensee determined that the 1A RR pump trip was caused by a painter performing work in the recirculation pump Motor Generator (MG) set room. A high MG set air temperature switch was bumped and caused a trip of the MG set. Maintenance personnel tested the switch to verify proper operation and no deficiencies were observed.

Systems were placed in service and unit RTP was reached at about 7:45 p.m.

c. Conclusions

The inspector concluded that operator response to the transient was excellent. Actions taken were prompt, deliberate, and in accordance with plant procedures. The immediate observations by the on-shift STA to recognize the reactor was in the area of potential instability was excellent. The RFP minimum flow valve problem continues to contribute to unplanned plant transients. The inspectors will review additional information on the minimum flow valves.

O2 Operational Status of Facilities and Equipment

O2.1 Inoperable Reactor Flood-Up Range Reactor Water Level Instrument Unit 1

a. Inspection Scope (92901)

The inspector reviewed a special report dated July 30, 1996, involving the reactor vessel water level flood-up range instrument, 1B21-R605.

b. Observations and Findings

On July 21, 30 days had elapsed since flood-up range reactor vessel water level instrument 1B21-R605 was declared inoperable. The inspectors reviewed the licensee's special report dated July 30, 1996, submitted to meet Technical Specification (TS) requirements. The TS required that a report be submitted within the following 14 days. The inspectors found from this review that the report was submitted within the time frame of the specifications. The TS further states that the report shall outline the preplanned, alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the function to operable status.

The inspectors observed that the report stated the cause of the inoperability appeared to be the result of a reduction in the instrument reference leg water level. This was due to a packing leak on the equalizing valve for the transmitter of instrument 1B21-R605. The leak was repaired and the condensation in the reference leg condensing pot was expected to refill the leg. This did not occur and proper instrument function was not restored.

The licensee did not determine why the condensing pot failed to refill the reference leg. The report further stated that to refill the reference leg by injecting demineralized water would impose a risk to the instrumentation that could cause a plant transient.

The report contained plans and a schedule for restoring the instrument channel to operable status.

The inspectors found that the report did not directly address the preplanned alternate method of monitoring. The report stated that the flood-up instrument was indicating 29 to 30 inches higher than actual level as measured by other instruments. The method discussed in the report involved other instrumentation that only indicate up to +60 inches. This indicated to the inspector that for post accident monitoring purposes, water level can only be monitored up +60 inches. The report did not clearly state that between +60 inches and +400 inches no alternate method of monitoring was available.

The inspectors discussed the report with licensee personnel. The inspector observed that the licensee issued a temporary change to the Unit 1 scram procedure, 34AB-C71-001-1S, Revision 6, that reduced the required Main Steam Isolation Valve (MSIV) closure on high level from +100 inches to +60 inches. This would help protect Emergency Core Cooling Systems (ECCS) steam-driven turbines.

The licensee informed the inspectors that, even though the instrument was listed as a TS post accident monitoring instrument, the non-redundant instrument was not intended to be used during post accident conditions. The instrument was to be used only during refueling conditions when water level is raised to flood the refueling cavity. The inspectors reviewed licensee-supplied documentation that supported the intended use of the instrument. The licensee was evaluating this problem for a TS amendment.

c. Conclusions

The inspectors concluded that the report did not clearly indicate the lack of monitoring capability during post accident conditions above +60 inches. However, the lack of clarity was not considered to be significant. The inspectors viewed a proposed TS amendment as appropriate. The revision to the scram procedure was also appropriate.

O3 Operations Procedures and Documentation

O3.1 License Conditions for TSIP Implementation Units 1 and 2

a. Inspection Scope (92901)

License condition 2.C.(2) for Units 1 and 2 states, in part: The Surveillance Requirements (SRs) listed are not required to be performed immediately upon implementation of Amendments No. 195 for Unit 1 and No. 135 for Unit 2. The SRs listed shall be successfully demonstrated prior to the time and condition specified for each.

b. Observations and Findings

The inspector observed that license condition 2.C.(2)a) stated that the listed SRs shall be successfully demonstrated prior to entering MODE 2 on the first plant startup following the sixteenth refueling outage for Unit 1 and the twelfth refueling outage for Unit 2. The license condition listed the SRs for both units, Unit 1 only and Unit 2 only as follows:

Listed for both units:

- 3.3.2.2.2 Perform channel calibration for the Feedwater and Main Turbine Trip High Level Instrumentation.
- 3.3.2.2.3 Perform logic system functional test for the Feedwater and Main Trip High Level Instrumentation.
- 3.3.3.2.2 Verify each required control circuit and transfer switch is capable of performing the intended function for the Remote Shutdown System.
- 3.3.8.1.4 Perform logic system functional test for Loss of Power Instrumentation.
- 3.7.7.2 Perform a system functional test for the Main Turbine Bypass System.
- 3.7.7.3 Verify the Main Turbine Bypass System response time is within limits.

Listed for Unit 1 only:

- 3.3.1.1.15 Perform logic system functional test for Reactor Protective System Instrumentation.

- 3.3.1.1.16 (Function 9) Verify the RPS response time is within limits for the turbine control valve fast closure, trip oil pressure - low.

- 3.3.6.1.6 (Function 1.f) Perform logic system functional test for Turbine Building Area Temperature - High.

Listed for Unit 2 only:

- 3.6.2.4.2 Verify each spray nozzle is unobstructed for the Residual Heat Removal (RHR) Suppression Pool Spray System.

License condition 2.C.(2)b) stated that the listed SRs shall be successfully demonstrated at their next regularly scheduled performance. The license condition listed the SRs for both units and Unit 2 only as follows:

Listed for both units:

- 3.8.1.8 Verify each EDG operating at or less than a specific power factor and does not trip and adequate voltage is maintained following a load reject of a specified kilowatt (kw) load.

- 3.8.1.10 Verify on an actual or simulated ECCS initiation signal that each EDG auto-starts from the standby condition and in a specified time after auto-start achieves adequate voltage and, after steady state conditions are reached, maintains an acceptable voltage; in the same time after auto-start achieves adequate frequency and after steady state conditions are reached, maintains an acceptable frequency; and operates for at least 5 minutes.

- 3.8.1.12 Verify each EDG operating at a specified power factor for at least 24 hours; for at least 2 hours loaded at a high kw; for the remaining hours of the test loaded at lower kw.

- 3.8.1.13 Verify that each EDG starts and achieves, in equal to or less than 12 seconds, voltage equal to or greater to 3740 V and frequency equal to or greater than 58.8 hertz (Hz); and after steady state conditions are reached, maintains voltage between 3740 V and 4243 V and frequency between 58.8 Hz and 61.2 Hz.

- 3.8.1.18 Verify, when started simultaneously from standby condition, that all of the Unit 1 and all of the Unit 2 EDGs achieve, in less than or equal to 12 seconds, voltage greater than or equal to 3740 V and frequency greater than or equal to 58.8 Hz.

Listed for Unit 2 only:

- 3.8.1.9 (for EDG 2C) Verify on an actual or simulated loss of offsite power signal: De-energization of emergency busses; load shedding from emergency buses; the EDG auto-starts from standby condition and; energizes permanently connected loads in a specified time, energizes auto-connected emergency loads through automatic load sequence timing devices, achieves adequate steady state voltage, achieves adequate steady state frequency, and supplies permanently connected and auto-connected emergency loads for at least 5 minutes.

- 3.8.1.17 (for EDG 2C) Verify that on an actual or simulated loss of offsite power signal in conjunction with an actual or simulated ECCS initiation signal that the EDG meets the same requirements as that of the above listed SR 3.8.1.9.

License condition 2.C.(2) c) stated that the listed SRs will be met at implementation for the secondary containment configuration in effect at that time. The SRs shall be successfully demonstrated for the other secondary containment configurations prior to the plant entering the LCO applicability for that configuration. The license condition listed the SRs for both units as follows:

- 3.6.4.1.3 Verify required Standby Gas Treatment (SGT) subsystem(s) will draw down the secondary containment to greater than or equal to 0.20 inches of vacuum water gauge in less than or equal to 120 seconds.

- 3.6.4.1.4 Verify required SGT subsystem(s) can maintain a greater than or equal to 0.20 inches of vacuum water gauge in the containment for 1 hour at a flow rate greater than or equal to 4000 cubic feet per minute (cfm) for each subsystem.

The inspectors observed that the license conditions for both units covered a total of 32 SRs. To determine the compliance to the license conditions 2.C.(2) a) and b) the inspectors were provided information in the form of two matrices, one for each unit. The matrices listed the TS surveillance requirement, commitment number, responsible group, procedure(s) performed to meet the requirement (due by plant condition, such as prior to Mode 2), date completed and any comments. For license condition 2.C.(2) c), which involved the secondary containment, the inspectors were provided with dates on which the applicable surveillances were performed.

The inspectors reviewed the matrices and observed that the surveillance requirements for license conditions 2.C.(2) a) and b) corresponded to the applicable plant procedures. The requirements for Unit 1 were performed during spring 1996 refueling outage and for Unit 2 during the fall 1995 refueling outage. The inspectors observed that the completed procedures were the applicable procedures for the license conditions. However, SR 3.8.1.18, a simultaneous start of all the respective EDGs for both units was not performed. This SR has a frequency of 10 years. The due date for Unit 1 is March 1, 2003 and for Unit 2 is February 1, 1997. The inspectors observed that the required surveillance for the license condition 2.C.(2)c) were also performed as required for both units.

The inspectors documented SR activities associated with the TSIP and sections of the license conditions in IRs 50-321, 366/95-08, 95-22, and 95-23.

c. Conclusions

The inspectors concluded that license conditions 2.C.(2).a) and c) are fully closed for both units. License condition 2.C.(2) b) will be fully closed when SR 3.8.1.18 is performed for the respective units.

O7 Quality Assurance in Operations

O7.1 Licensee Self-Assessment Activities (40500)

On September 12, the Hatch SRB convened meeting H96-03 at Plant Hatch. The meeting was conducted in accordance with the requirements of the Hatch Final Safety Analysis Report (FSAR) and QA Manual. The board discussed the status of previously-opened items and determined which items should be closed. Much of the discussion centered on the past problems experienced by the Operations and Engineering Departments and their solutions. New issues were identified and assigned to the appropriate manager for resolution. There was some discussion involving the quality of contractor work, particularly that of the plant's Nuclear Steam Supply System (NSSS) vendor. Various problems were discussed, along with solutions and ways of avoiding future problems. The inspectors concluded that licensee efforts in this area for self-assessment were effective.

O8 Miscellaneous Operations Issues (92901)

O8.1 (Closed) Unresolved Item (URI) 50-321,366/96-07-01: Determine Safety Significance and Testing Requirements for Unit 1 and Unit 2 Containment Isolation Status Panel.

The inspector reviewed Abnormal Operating Procedure, 34AB-C71-001-1S and 2S, Scram Procedure, Revision 6, for both units. The procedures made a general reference that isolation status could be found on Panel 1/2-H11-P601 vertical display. The procedures also listed other locations, such as the Safety Parameter Display System (SPDS) where system isolation indications could be located.

The inspectors reviewed both the Unit 1 and 2 UFSARs to determine the isolation panels description and use. Unit 1 FSAR Section 5.2.3.5.2 states in part, "A mimic display board for only isolation valves provides indication of isolation valve position. When isolation has occurred, all energized lights of the display are green".

The UFSAR for Unit 2, Section 7.3.2.2, System Description - Primary Containment and Reactor Pressure Vessel Isolation Control System; Subsection 7.3.2.2.7, Testability, states, in part, "Isolation valves can be tested to ensure that they are capable of closing by operating manual switches in the Main Control Room (MCR) and observing the position lights and any associated process effects". The subsection directs the reader to "See also figure 7.3-2 (Nuclear Boiler System - Functional Control Diagrams)." The inspector reviewed the figure and observed that it contained 12 sheets of logic diagrams with control switch and indicating light MCR panel locations. The diagrams for the isolation valves clearly showed indication lights for both the opened and closed positions on the graphic display located on MCR panel 2H11-P601.

From reviews, observations, and discussions with licensee personnel, the inspectors found that the isolation status panels were used by the operators to verify isolation status; are being maintained current with plant design changes; and are referenced in plant procedures and the UFSARs for both units.

The inspectors did not locate any procedure that required testing or verification that the isolation panel indications correctly reflected system status or isolation condition.

The inspectors frequently observed operators monitoring the isolation panel during normal panel observations. The inspectors also observed that Design Changes (DCs) were initiated when required to properly maintain the panels. The inspectors were not aware of any discrepancy between the isolation panel indications and plant systems.

The inspectors observed that Operations management issued an operating order instructing control room operators to observe and record light indications that could be monitored from the isolation status panel for all valves that were cycled. Also, plant procedures were to be revised to include verification of indication response for valves located on the isolation status panel. Most of the checks will be conducted during unit cold shutdown conditions.

The inspectors determined that although the failure to test or verify the isolation valve indications on the isolation status panels was an oversight, no regulatory violation had occurred. Based upon this review URI 50-321, 366/96-07-01 is closed.

b. Conclusions

Systems that are used by the operators to verify the status of safety-related systems and are discussed in the UFSAR should be tested or verified periodically.

O8.2 (Closed) Licensee Event Report (LER) 50-321/96-011: Inadequate Procedure Results in Missed Technical Specifications Surveillances. This problem was discussed in Inspection Report (IR) 50-321, 366/96-10. No new issues were revealed by the LER.

O8.3 (Closed) Violation (VIO) 50-321/95-23-01: Operators' Failure to Follow Procedure While Transferring Diesel Fuel Oil. This violation was identified when operators were receiving new fuel oil from a tanker truck. Due to a valve lineup, not in accordance with procedure, 300 gallons of fuel overflowed a day tank. The inspector reviewed the licensee's response, dated January 2, 1996. The response indicated that administrative personnel action was taken and that procedure changes were being considered. The inspectors reviewed the EDG procedure 34SO-R43-001-1S, Revision 18, and observed procedure changes. These changes included a simplified drawing of the fuel oil system piping and valves. This drawing was to aid personnel in determining the correct valve line up for the activity to be performed.

O8.4 (Closed) VIO 50-366/95-26-01: Inability to Safely Shutdown Unit 2 from the Remote Shutdown Panel in the Event of a Fire in the Main Control Room. This violation was identified when operators attempted to perform a surveillance on the Unit 2 Remote Shutdown Panel (RSDP). The surveillance was being performed for the first time because of the TSIP. Prior to the implementation of the TSIP, testing of the RSDP was not required. The inspectors reviewed the licensee's response, dated February 12, 1996. The response indicated that failure to perform periodic testing, as well as inadequate design and design change functional testing, contributed to the violation. This item was initially documented in IR 321,366/95-23. Subsequent licensee and inspector activities were documented in IRs 321,366/95-26 and 95-27. These activities included observed licensee corrective actions involving system testing, maintenance and modification work. The inspectors concluded that the licensee's corrective actions had been appropriate.

O8.5 (Closed) VIO 50-321,366/95-18-02: Failure to Follow Procedure, Second Example. This example was identified when operators failed to follow a procedure while performing hydrogen water chemistry flow changes. This resulted in unnecessary exposure to personnel performing maintenance in the condenser bay. The inspectors reviewed the licensee's response dated October 26, 1995. The response indicated that a less-than-adequate operating procedure and less-than-adequate training contributed to the violation. The response stated that personnel were counseled regarding their actions, training material would be revised, and procedure changes would be made. The inspectors reviewed the revised material and procedure changes and concluded that the licensee's corrective actions had been appropriate.

II. Maintenance

M1 Conduct of Maintenance

M1.1 General Comments

a. Inspection Scope (62703) (62707)

The inspectors observed all or portions of the following work activities:

- MWO 2-96-2492: Replace seal on 2B Plant Service Water (PSW) Pump
- MWO 2-96-2586: Insulation inspection of Reactor Protection System (RPS) MG Set 2A
- MWO 2-96-2131: RPS MG Set Minor Design Change (MDC) 95-5037 Implementation

b. Observations and Findings

The inspectors found that the work was performed with the work packages present and being actively used. The inspectors observed that during the implementation of the MDC the system engineer was present at the job site. Appropriate post-modification and maintenance tests were performed. These tests consisted of operating the equipment following the completion of work activities.

c. Conclusions on Conduct of Maintenance

Maintenance activities were generally completed in a thorough and professional manner. No deficiencies were identified.

M3 Maintenance Procedures and Documentation

M3.1 Surveillance Observations

a. Inspection Scope (61726)

The inspectors observed all or portions of the following Unit 1 and Unit 2 surveillance activities:

- 34SV-R43-004-1S: Diesel Generator 1A semi-annual test
- 34SV-E41-002-2S: HPCI Pump operability

b. Observations and Findings

The HPCI surveillance observed was the three-month operability test to meet TS and AMSE Code In-Service Testing requirements. Data was collected on system valve stroke times and pump operating characteristics. A pre-evolution briefing was conducted by the licensed operator performing the surveillance. All personnel involved were in attendance.

The diesel surveillance was performed without problem and all parameters were within specification.

c. Conclusions

For both surveillances, all data was within the required range and the equipment was determined to pass the surveillance. The performance of the operators and crews conducting the surveillances was generally professional and competent. No deficiencies were identified.

M8 Miscellaneous Maintenance Issues (92700) (92902)

M8.1 (Closed) LER 50-366/96-03: High Pressure Coolant Injection System Temporarily Inoperable Following Engineering Safety Feature Actuation. The cause of this problem was a physical "slip" that occurred when a technician was manipulating a piece of test equipment during surveillance testing activities. The system responded as expected. As part of the corrective actions, management discussed the problem with the technician and stressed the importance of caution when performing test activities. The system was realigned to the operable (standby) condition.

M8.2 (Closed) VIO 50-321,366/95-18-02: Failure to Follow Procedure, First Example. This example was identified when divers entered the intake structure pump pit area to perform inspection activities without the use of a procedure. A service water pump was declared inoperable when a section of the diver's life, air and communication line entered the suction of the pump. The inspector reviewed the licensee's response dated October 26, 1995. The response indicated that miscommunications among personnel regarding the use and applicability of a procedure contributed to the violation. The response stated that administrative personnel action was taken, procedure changes would be made and signs would be posted. The inspectors reviewed the procedure changes and observed the posted signs. The inspectors concluded that the licensee's corrective actions had been appropriate.

III. Engineering

E2 Engineering Support of Facilities and Equipment

E2.1 Harmonics on Safety Related EDG 4160 V Switchgear

a. Inspection Scope (92903)

The inspectors performed followup activities involved with electrical harmonics discussed in IR 50-321, 366/96-06.

b. Observations and Findings

The inspectors observed electrical data supplied by licensee personnel. The data clearly indicated the presence of harmonics on both Unit 1 and Unit 2 EDG 4160V switchgear. The harmonics appeared to be identical on all safety-related 4160V switchgear on both units.

The inspectors discussed the harmonics with licensee personnel. The inspectors were informed that the harmonics could possibly cause reverse power trips of the EDGs when they were in parallel with the grid and operating at low power. The inspectors were also informed that the manner in which the switchgear was instrumented, on what phases the voltage and current were sensed, could be changed to help prevent unnecessary reverse power trips. Under current conditions the CR operators could possibly have erroneous indication on an EDG and due to the harmonics get a reverse power trip.

c. Conclusions

The engineering group was actively pursuing a solution to the effects of the harmonics on EDG operation and testing. At the end of this report period, the inspectors concluded that the information about the effects of the harmonics had not been forwarded to the Operations Department. Recommendations to assist the operators in mitigating the harmonic effects on EDG operation had also not been forwarded. EDG reverse power trips during surveillance testing has been a problem at the site. Some of the reverse power trips were due to personnel error and inattention to detail while the root cause of others was inconclusive. The inspectors were informed that the potential harmonic effects on EDG operations was being reviewed by the Engineering

Department. The results of the review will be forwarded to the Operations Department. This is identified as Inspector Followup Item (IFI) 321, 366/96-11-01: Review of Engineering Report on the Effects of Harmonics on EDG Operation.

E2.2 ASME Code Inspection Not Performed

a. Inspection Scope (92903)

The inspectors followed up the licensee activities involving a missed ASME code-required inspection of Unit 1 HPCI injection valve, 1E41-F006.

b. Observations and Findings

The inspectors identified a violation in IR 50-321, 366/96-06 involving activities associated with missed VT-3 inspections for three valves. The VT-3 inspections were required by procedure but only the HPCI valve required a VT-3 inspection in accordance with the ASME code.

During the inspectors' initial review of the problem, the inspectors were informed that a VT-3 inspection was performed on HPCI valve 1E41-F006, in conjunction with a cleanliness inspection conducted by contract personnel. The inspectors reviewed licensee-supplied documents and agreed with the licensee's assessment that an adequate VT-3 inspection had been performed.

On August 12, the licensee informed the inspectors that new information had been received from the contract personnel who performed the cleanliness inspection. This led site personnel to conclude that an adequate VT-3 inspection had not been completed. As a result, an ASME code-required post maintenance VT-3 inspection was not performed.

The inspectors reviewed the licensee's testing of the valve and the valve's performance since the completion of the maintenance activities and the missed VT-3 inspection. No deficiencies were identified. Cognizant licensee personnel stated that they planned to disassemble and complete a VT-3 inspection of the valve during the next scheduled refueling outage.

The licensee provided the inspectors with information which indicated that the root cause of the missed VT-3 inspection was an inadequate resolution to the Quality Control Inspection Report (QCIR) that identified the original problem. The QCIR did not specify that a VT-3 inspection should be performed after completion of maintenance.

As a result of this problem, the inspectors conducted a review of maintenance and engineering activities that occurred during the last two refueling outages to determine if other code-required VT-3 inspections were missed. The inspectors review included Safety Audit and Engineering Review (SAER) audits, Design Change Requests (DCRs), DCs, Maintenance Work Orders (MWOs), SORs, work records, Quality Control (QC) documents, and discussions with licensee management personnel. The inspectors did not identify other examples of missed code-required VT-3 inspections. The inspectors also reviewed the licensee evaluation, dated August 12, 1996, which concluded that there was no valve operability concern.

The failure to perform an ASME code-required VT-3 inspection on a safety related component was considered significant. Lack of thoroughness in determining post-maintenance testing requirements contributed to this problem. The failure to complete a code-required VT-3 inspection was identified as VIO 50-321/96-11-02, Failure to Perform an ASME Code-Required VT-3 Inspection on HPCI Valve 1E41-F006.

c. Conclusions

The inspectors concluded that an operability concern did not exist for the HPCI injection valve. The inspectors did not identify other examples of missed code-required VT-3 inspections and concluded this was not a recurring problem.

E7 Quality Assurance in Engineering Activities

E7.1 Unit 2 Station Service Batteries

a. Inspection Scope (92903)

The inspectors continued to monitor the licensee activities involved with the sediment in the Unit 2 Station Service (SS) Battery cells. Previous inspector observations are documented in IR 50-321,366/96-07. The inspectors were informed that 52 of 120 cells had sediment in the bottom of their jars.

b. Observations and Findings

The inspectors observed the preparation of a new battery receiving and storage area in an onsite warehouse. This area was constructed so that replacement batteries received on site could be stored in an area that has battery charging capability as well as temperature and cleanliness controls. The new cells can be maintained fully charged for replacement when required.

c. Conclusions

At the end of this report period, the inservice SS battery capacity exceeded TS requirements. Increased battery monitoring and testing continued and no immediate operability concerns were identified. Onsite engineering was taking appropriate pre-installation measures to ensure adequate replacement battery cell condition.

E8 Miscellaneous Engineering Issues (92700) (92903)

E8.1 (Closed) VIO 50-321/95-16-01: Contract Personnel Failure to Follow Procedure While Performing Maintenance on Valve 1E41-F003. This violation was identified after contract personnel performed GL 89-10 activities on valve 1E41-F003, HPCI Steam Isolation Valve. The contractors were under the control of site engineering personnel. The inspector reviewed the response from the licensee dated September 28, 1995. The valve was repaired. The licensee counseled site contractor representatives on the importance of following procedures. The inspectors reviewed records which indicated that all contractor valve technicians received procedure training. The inspectors concluded that the licensee's corrective actions were appropriate.

IV. Plant Support

R1 Radiological Protection and Chemistry Controls

R1.1 Observation of Routine Radiological Controls

a. Inspection Scope (71750)

General Health Physics (HP) activities were observed during the report period. This included locked high radiation area doors, proper radiological postings, and personnel frisking upon exiting the Radiologically-Controlled Area (RCA). The inspectors made frequent tours of the RCA and discussed radiological controls with HP technicians and HP management. No deficiencies were identified.

R1.2 Misaligned Suppression Pool Sample Valve

a. Inspection Scope (71750)

The inspectors discovered Suppression Pool Sample Valve 2P33-F364 to be open on August 14. The valve is located on Sample Panel 2P33-P101 in the Reactor Building.

b. Observations and Findings

During a routine tour of the Reactor Building, the inspectors observed a steady stream of water flowing from the Suppression Pool Sample Valve, 2P33-F364.

The inspectors reviewed the applicable plant procedure, 64CH-SAM-004-OS, "General Chemistry Sampling," Rev.5, Ed. 1, dated November 7, 1995, and Piping and Instrumentation

Diagram (P&ID) which indicated that the normal position of the valve was closed. FSAR section 9.3.2, Process Sampling System, did not specifically indicate the normal position of the valve but stated that the sampling valve is for drawing process fluid into a closed sample container.

The inspectors discussed the problem with chemistry personnel. The inspectors were informed that sampling flow through this sample valve and the corresponding valve on Unit 1 was, as a matter of routine, left running because of problems encountered with sample line blockage due to sediment buildup. The inspectors were not able to find any procedural guidance that allowed the continuous flow of sampling streams to prevent line blockage for these valves.

The licensee took immediate corrective action by returning the valve to its normal position as specified by procedure. The licensee stated they would monitor the buildup of sediment in the sample lines. In the future, if conditions warrant, a procedural change will be initiated prior to leaving any sample valves open to prevent line blockage. The inspectors verified that the corresponding suppression pool sample valve on Unit 1 was in the closed position.

c. Conclusions

This NRC-identified failure to follow procedure is being treated as an NCV consistent with Section IV of the NRC Enforcement Policy. NCV 50-366/96-11-03, Failure to Follow Procedure for Sample Valve Lineup, was identified.

R4 Staff Knowledge and Performance

R4.1 Sampling Analysis Collection Techniques (71750)

On August 8, Chemistry Department personnel informed the Operations Department that fuel oil samples collected on EDG 1A and 1B fuel oil tanks and the diesel-driven fire pump fuel oil tank were not within specifications. Analysis indicated particulate at 16 milligrams per liter (mg/l) and 11 mg/l for the 1A and 1B EDG, respectfully. The fire pump fuel oil analysis indicated particulate at 55 mg/l. TS 3.8.3.D for stored fuel oil requires total particulate to be less that or equal to 10 mg/l. The Operations Department immediately entered the appropriate TS LCO for the systems.

The out-of-specification tanks were immediately re-sampled and the samples sent offsite for analysis. On August 9, the re-analysis indicated satisfactory results. Chemistry personnel investigated the problem to determine the root cause for the discrepancy and identified areas for improvement in the collection techniques. Licensee representatives stated that they believed personnel collecting the samples stirred up the bottom of the tanks resulting in non- representative samples. Poor collection techniques were also suspected as a problem during subsequent backup sample collections.

Personnel who collected the samples were qualified in collection techniques but had not recently performed the task. As part of the corrective actions, management cautioned personnel of the importance of obtaining representative samples and the impact and consequences of poor sampling techniques.

The inspectors reviewed and discussed the problem with licensee management, reviewed applicable sampling procedures and the licensees corrective actions. The inspectors concluded that poor sampling techniques were probably the root cause of the problem. More attention to detail during the sample collection process may prevent similar problems. This was identified as an area for improvement in the chemistry sampling process.

P2 Status of EP Facilities, Equipment, and Resources

P2.1 Facility Inspection

a. Inspection Scope (82701)

The inspectors toured the facilities to determine whether key facilities and equipment were adequately maintained in accordance with the site Emergency Plan.

b. Observations and Findings

The inspectors toured the Technical Support Center (TSC) Emergency Operations Facility (EOF), and Operational Support Center (OSC). The inspectors witnessed the testing of selected telephones, fax machines, Safety Parameter Display System (SPDS), Non-Regulated Emergency Response Data System (ERDS), Dose Assessment Computer, and the Emergency Notification Network (ENN) phone. The equipment operated properly. No significant changes had been made to the facilities.

The inspectors reviewed documentation that indicated surveillance of emergency equipment and verification of communications capability were performed at the frequencies specified in 73EP-TET-001-OS, Control And Testing Of Emergency Communication Equipment, Revision 4 Ed. 1, Effective Date June 9, 1994. The inspectors noted that deficiencies were resolved in a timely manner.

The inspectors reviewed documentation that indicated facility supplies were being inventoried and maintained in accordance with the requirement in 73EP-INS-001-OS, Emergency Equipment Inventory, Revision 1, Effective Date April 27, 1996. The inspectors randomly selected facility cabinets and audited emergency supplies and tested equipment. No discrepancies were identified by the inspectors.

c. Conclusion

The inspectors concluded that the licensee maintained the facilities and equipment at a satisfactory level of operational readiness.

P2.2 Emergency Response Dose Assessment Capabilities

a. Inspection Scope (82701)

Dose assessment capabilities were inspected to verify that the licensee maintained continuous dose assessment capabilities which used real time meteorological and radiological data. Also, the inspectors reviewed the licensee's computerized dose assessment system to evaluate the training required to operate the system, the capability of the system, and verify that the licensee's system had been compared to Radiological Assessment System for Consequence Analysis (RASCAL).

b. Observations and Findings

The licensee's Meteorological Information and Dose Assessment System (MIDAS) program was installed on designated personal computers in the TSC and EOF and if needed, the program could be loaded on other personal computers. Real time radiological and meteorological data was input to the computer. The program used default values from WASH 1400 for the source terms and did not have the capability of using actual isotopic analysis data from a Post Accident Sampling System (PASS) sample. MIDAS had the capability to use field team radiological data to back calculate a source term.

The inspectors observed the licensee perform several dose assessment calculations using MIDAS. The inspectors observed that the computer dose assessment system was user friendly and did not require extensive training to obtain a dose assessment.

The Senior Reactor Operators (SROs) and Reactor Operators (ROs) were trained to do on-shift dose assessment using the "Prompt offsite dose assessment" version of MIDAS. This was a simplified version of MIDAS which used some default values. The operators received MIDAS training as part of licensed operator training.

The inspectors verified that the licensee had compared dose assessment calculations from MIDAS to calculations from NRC's RASCAL and that the results were comparable.

c. Conclusion

The inspectors concluded that licensee personnel were capable of performing on-shift dose assessments using real time meteorology. The licensee's MIDAS dose assessment calculation program was user friendly and results were comparable to those from RASCAL.

P2.3 Emergency Operations Facility - Emergency Ventilation System

a. Inspection Scope (82701)

The inspectors reviewed the EOF Emergency Ventilation System and its testing to determine if the licensee was maintaining the system in accordance with Emergency Plan requirements.

b. Observations and Findings

The EOF was not designed as a hardened facility and the licensee maintained a fully equipped backup EOF. The EOF's Emergency Ventilation System was a zero pressure system with High-Efficiency Particulate Air (HEPA) Filters and no carbon filter. In the emergency mode of operation, the Emergency Ventilation System isolated outside air and recirculated air in the EOF through HEPA filters. The inspectors interviewed the system engineer responsible for the system, performed a walkdown of the system, and observed an operational demonstration of the system. All components (dampers) and instrumentation worked properly.

c. Conclusion

The inspectors concluded that the licensee was testing and maintaining the EOF Emergency Ventilation System adequately.

P2.4 Tone Alert Radios, Public Alert And Notification Capabilities

a. Inspection Scope (82701)

This area was inspected to determine if the licensee's method of notifying the public in the event of an emergency was in accordance with the site Emergency Plan. In addition, the inspectors reviewed the system's procedures, configuration, and reliability.

b. Observations and Findings

The inspectors reviewed licensee's documentation and discussed with the licensee, their public alert and notification process. The licensee's system for alerting and notifying the public used approximately 2900 Tone Alert Radios located within about a ten mile radius of the plant. The licensee maintained accountability of local business and residence within the ten-mile Emergency Preparedness Zone (EPZ) that needed Tone Alert Radios with the aid of the local electrical power companies. When a local business or resident changed their electrical power services, the utility notified the licensee.

In September 1995, Plant Hatch's National Oceanographic & Atmospheric Administration (NOAA) service was discontinued from the Savannah, Georgia weather station and service was updated and switched to the National Weather Service (NWS) in Jacksonville, Florida. The primary communication was from Jacksonville and utilized a leased line from Jacksonville to the Brunswick micro-wave tower, then the Georgia Power Company (GPC) micro-wave system to the site. A secondary line was a leased land line from Jacksonville to Plant Hatch. The radios were operationally tested each Wednesday when the NWS station generated a tone which was transmitted from the Plant Hatch NWS transmitter to activate the tone alert radios. In addition to the testing, there were numerous instances in 1995 and 1996 in which the system was activated for severe weather conditions. The inspectors reviewed the 1995 annual report for the Tone Alert Radios. The report and supporting data indicated a 99 percent availability factor for 1995. There were two instances of minor losses of services during the year, one for 50 minutes and another for 22 minutes.

c. Conclusion

The inspectors concluded that the Tone Alert Radio system had been demonstrated to be reliable through testing and actual actuation, and the system was being adequately maintained.

P3 EP Procedures and Documentation

P3.1 Maintenance of the Emergency Plan and Procedures

a. Inspection Scope (82701)

The inspectors reviewed the licensee's process for making changes to the Emergency Plan and Emergency Implementing Procedures (EIPs). The inspectors reviewed changes to the EIPs and verified that changes to the EIPs were in agreement with and implemented the Emergency Plan.

b. Observations and Findings

Procedures were revised in accordance with administrative procedure 10AC-MGR-003-OS, Preparation and Control of Procedures. Proposed changes to the Emergency Plan and EIPs received a 50.59 evaluation and a review by the Plant Review Board. The inspector reviewed the licensee's documentation for four EIP changes. The inspectors reviewed the changes to evaluate the licensee's evaluation of the changes, and to independently evaluate the changes for the intent of the change and to verify that the change continued to implemented the plan. A review of licensee records indicated that the revisions to the EIPs were satisfactory and were submitted to the NRC within 30 days of the implementation date, as required.

Controlled copies of the EIPs in the EOF and TSC were reviewed and determined to be maintained up to date.

c. Conclusion

The inspectors concluded that the licensee's review process was satisfactory and met the requirements of 10 CFR 50.54(q).

P3.2 Use Of The Emergency Implementing Procedures

a. Inspection Scope (82701)

The inspectors reviewed the licensee's event declaration to verify that the event was properly classified and the Emergency Implementing Procedures were properly implemented.

b. Observations and Findings

The inspectors reviewed the licensee's one event declaration since the last inspection conducted in April 1995.

On March 20, 1996, a NOUE was declared due to a contaminated, injured individual being transferred off-site to a local hospital.

c. Conclusion

The inspectors concluded that the event was properly classified, the notification was made in a timely manner, and the applicable EIP was implemented.

P5 Staff Training and Qualification in EP

P5.1 Training of Emergency Response Personnel

a. Inspection Scope (82701)

The inspectors reviewed the Emergency Response Training Program and verified that emergency response personnel were initially trained and retrained annually to maintain their training current.

b. Observations and Findings

The inspectors reviewed Plant E.I. Hatch System Master Plan for Emergency Preparedness Training. The Master Plan described the program, position, qualification requirements, required job performance task, and initial and continuing training requirements. Emergency Response Organization (ERO) training consisted of completing job task, classroom training, and self study. The inspectors selected two lesson plans and their associated exams from the Master Plan for review. The inspectors concluded from the review that the lesson plans satisfactorily covered the information necessary for the position; the lesson plans were organized and contained the appropriate depth of material; and the exams were challenging.

The inspector selected six individuals within the ERO from the current revision of the Emergency Response Position Matrix and reviewed their training records against their required training. All of the individual qualifications reviewed by the inspectors were up-to-date.

c. Conclusion

The inspectors concluded that the licensee maintained a satisfactory Emergency Preparedness training program.

P5.2 Emergency Planning Drills

a. Inspection Scope (82701)

The inspectors compared the licensee drill commitments to the actual drills performed, and evaluated the quality of those drills.

b. Observations and Findings

The inspectors reviewed and compared the licensee's drill documentation to Section N, Exercises and Drills of their Emergency Plan, and the requirement in 73EP-ADM-001-OS, Maintaining Emergency Preparedness, Revision 3, Effective Date April 9, 1996. The inspectors found the licensee's documentation to be well-organized. The licensee's drill scenarios were satisfactory, the critiques were objective, and the drill comments or action items were well-documented and tracked.

c. Conclusion

The licensee satisfactorily met their its drill commitments.

P6 EP Organization and Administration

a. Inspection Scope (82701)

The inspectors reviewed this area to determine if any changes in management or personnel had occurred which would affect the efficiency or performance of the ERO.

b. Observations and Findings

The inspectors reviewed the licensee ERO structure and discussed the current ERO with the Emergency Preparedness Coordinator.

c. Conclusion

The inspectors concluded that since the last inspection in April 1995, no onsite management or significant personnel changes had occurred which would affect the performance or maintenance of the Emergency Preparedness Program.

P7 Quality Assurance in EP Activities

P7.1 Required 10 CFR 50.54(t) Audit Of Emergency Preparedness Program

a. Inspection Scope (82701)

The inspectors reviewed this area to assess the quality of the required audit, the qualifications of the auditors, and verify that the audit met the requirements of 10 CFR 50.54(t).

b. Observations and Findings

The inspector reviewed SAER-07, "Hatch Project Safety Audit And Engineering Review Procedure For SAER Audits", Revision 8, dated December 12, 1995. The procedure required an "Audit Planning Matrix" to be prepared once per year for the upcoming year and the final revision to be distributed to the SRB. The Audit Planning Matrix was to list the Audit Area Titles and a breakdown of the Audit Elements. Lead Auditors were to use the Audit Planning Matrix to prepare an audit plan and checklist.

The inspectors reviewed the Audit Planning Matrix for the Emergency Plan. The matrix listed fifteen areas which corresponded to the titles of each chapter in the Emergency Plan.

The inspector reviewed Audit 95-EP-2, which was a three-person audit conducted between November 13, and December 13, 1995. The audit was considered by the licensee to be the annual Emergency Preparedness Audit required by 10 CFR 50.54(t). The cover letter stated that the audit was based upon completing the fifteen elements specified in the Audit Planning Matrix. The inspectors reviewed each auditor's checklists and noted that the audit was not based upon or conducted in accordance with the Planning Matrix or as specified in the report cover letter. The actual audit was performed using the guidance in an Institute of Nuclear Power Operations (INPO) document, 85-014, "Generic Guidance For Emergency Preparedness Review." The auditors' checklist and notes mirrored the elements, A through G, and the elements breakdown in the INPO document. The audit contained 118 element breakdowns. In reviewing the auditors' notes, the inspectors noted that, for some issues, the auditors relied on discussions with EP staff but did not independently verify their results.

One element breakdown questioned whether the EIPs provided a space for a check mark or initial to indicate that the step had been complete. The audit result indicated that the procedures did provide a space. The inspectors independently reviewed approximately five different EIP's and did not observe any such provision in the EIPs.

There were no issues identified by the licensee in the Audit report.

The inspector reviewed the audit to verify that the elements identified in 10 CFR 50.54(t) were addressed. The inspectors noted that Audit 95-EP-2 did not address the requirement in 10 CFR 50.54(t) for "Adequacy of interface with State and local governments." After discussions with the licensee, it was determined that the element was covered in an independent Corporate audit, Audit Report No. 96-3.

The inspectors reviewed the qualification requirements for an auditor and lead auditor and concluded that the program qualification requirements were in accordance with American National Standards Institute, Inc. (ANSI)-N45.2.23. The inspectors reviewed each auditor's qualification card and noted that their qualifications were satisfactorily completed and up-to-date.

c. Conclusion

The inspectors concluded that the audit performed did not independently verify some conclusions and at least one audit finding was incorrect. Although the audit was not conducted in accordance with the Audit Planning Matrix, the aggregate of the audit elements satisfied the 10 CFR 50.54(t) requirement for an annual independent audit of the EP program. The inspectors concluded that the auditors qualification program was satisfactory and the auditors were qualified.

P7.2 Licensee's Corrective Action Program For Drill Comments and Issues

a. Inspection Scope (82701)

The area was inspected to evaluate the licensee's corrective actions to comments and issues identified in their drills.

b. Observations and Findings

The inspectors reviewed the licensee's drill documentation and verified that significant critique comments were being tracked and resolved. Emergency Preparedness issues were tracked on the licensee's Action Item Tracking (AIT) system. For each issue, the AIT gave a description of the issue, identified the responsible group and person, and indicated its status and estimated completion date. Individuals maintained a file on the issues assigned to them, and when the AIT was updated, the individual was responsible to review the status of their issues. The inspectors noted from the review of the AIT that there were few issues older than one year old.

c. Conclusion

The inspectors' review concluded that the emergency preparedness issues were satisfactorily tracked and resolved in a timely manner. The licensee's resolution of items tracked was adequate.

P8 Miscellaneous EP Issues

P8.1 (Closed) Follow-up Item 50-321,366/95-09-01: Correction of discrepancies between the Plan and EIPs regarding follow-up notifications to the State and counties at the Alert level and above. The inspector reviewed and verified that procedures 73EP-EIP-004-OS, Duties Of Emergency Director, Revision 5, Effective Date July 26, 1995 and 73EP-EIP-073-OS, Offsite Emergency Notifications, Revision 11, Effective Date July 19, 1995, had been revised to correct discrepancies regarding follow-up notifications to State and local officials during declared emergencies.

The applicable emergency preparedness training material was revised to reflect the changes to the procedures. Both procedures had been changed to require follow-up notifications to be performed "periodically."

P8.2 Conclusion/Assessment

The licensee Emergency Preparedness Program plan and procedures, training equipment, and response facilities were being satisfactorily maintained. The licensee properly classified an event and made the necessary notifications in a timely manner. Licensee personnel were capable of performing on-shift dose assessments. The tone alert radio system was reliable and adequately maintained. Licensee drill comments were satisfactorily resolved in a timely manner.

S2 Status of Security Facilities and Equipment

The inspectors toured the protected area and observed that the perimeter fence was intact and not compromised by erosion nor disrepair. The fence fabric was secured and barbed wire was angled as required by the licensee's Plant Security Plan (PSP). Isolation zones were maintained on both sides of the barrier and were free of objects which could shield or conceal an individual. The inspectors observed that personnel and packages entering the protected area were searched either by special purpose detectors or by a physical search for firearms, explosives and contraband. Badge issuance was observed, as was the processing and escorting of visitors. Vehicles were searched, escorted, and secured as described in the PSP. The inspectors verified that the security procedures addressed suspension of safeguards during emergencies in accordance with 10 CFR 50.54(x) and 50.54(y).

The inspectors concluded that the areas of the PSP inspected met the PSP requirements.

V. Management Meetings

X. Review of UFSAR Commitments

A recent discovery of a licensee operating its facility in a manner contrary to the Updated Final Safety Analysis Report (UFSAR) description highlighted the need for a special focused review that compares plant practices, procedures and/or parameters to the UFSAR description. While performing the inspections discussed in this report, the inspectors reviewed the applicable portions of the UFSAR that related to the areas inspected. The inspectors verified that the UFSAR wording was consistent with the observed plant practices, procedures, and/or parameters.

X.1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on September 20, 1996. The license acknowledged the findings presented. An interim exit was conducted on August 30, 1996.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

X.2 Other NRC Personnel On Site

On August 19-20, 1996, Mr. P.H. Skinner, Chief Reactor Projects Branch 2, visited the site. He met with the resident inspector staff and discussed plant issues, licensee performance, and generic issues. He also attended licensee management meetings and met with licensee management to discuss licensee performance and regulatory issues.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

Anderson, J., Unit Superintendent
Betsill, J., Operations Manager
Coggin, C., Engineering Support Manager
Curtis, S., Operations Support Superintendent
Davis, D., Plant Administration Manager
Fornel, P., Performance Team Manager
Fraser, O., Safety Audit and Engineering Review Supervisor
Hammonds, J., Regulatory Compliance Supervisor
Kirkley, W., Health Physics and Chemistry Manager
Lewis, J., Training and Emergency Preparedness Manager
Moore, C., Assistant General Manager - Plant Support
Reddick, R., Site Emergency Preparedness Coordinator
Roberts, P., Outages and Planning Manager
Sumner, H., General Manager - Nuclear Plant
Thompson, J., Nuclear Security Manager
Tipps, S., Nuclear Safety and Compliance Manager
Wells, P., Assistant General Manager - Operations

INSPECTION PROCEDURES USED

IP 37551: Onsite Engineering
IP 40500: Effectiveness of Licensee Controls in Identifying, Resolving, and Preventing Problems
IP 61726: Surveillance Observations
IP 62703: Maintenance Observation
IP 62707: Maintenance Observation
IP 71707: Plant Operations
IP 71750: Plant Support Activities

IP 82701: Operational Status Of The Emergency Preparedness Program
IP 92700: Onsite Follow-up of Written Reports of Nonroutine Events at Power Reactor Facilities
IP 92901: Followup - Operations
IP 92902: Followup - Maintenance/Surveillance
IP 92903: Followup - Followup Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-321,366/96-11-01	IFI	Review of Engineering Report on the Effects of Harmonics on EDG Operation (Section E2.1).
50-321/96-11-02	VIO	Failure to Perform an ASME Code Required VT-3 Inspection on HPCI Valve 1E41-F006, was identified (Section E2.2).

Closed

50-321,366/95-09-01	IFI	Correction of discrepancies between the Plan and EIPs regarding follow-up notifications to the State and counties at the Alert level and above (Section P8.1).
50-321/95-16-01	VIO	Contract personnel failure to follow procedure while performing maintenance on valve 1E41-F003 (Section E8.1).
50-321,366/95-18-02	VIO	Failure to follow Procedure. First example (Section M8.2). Second example (Section O8.5).
50-366/95-26-01	VIO	Inability to safely shutdown Unit 2 from Remote Shutdown Panel in the event of a fire in the Main Control Room (Section O8.4).
50-321/95-23-01	VIO	Operators' failure to follow procedure while transferring diesel fuel oil (Section O8.3).

50-366/96-03	LER	High Pressure Coolant Injection System Temporarily Inoperable Following Engineering Safety Feature Actuation (Section M8.1).
50-321,366/96-07-01	URI	Determine Safety Significance and Testing Requirements for Unit 1 and Unit 2 Containment Isolation Status Panel (Section O8.1).
50-321/96-11	LER	Inadequate Procedure Results in Missed Technical Specifications Surveillances (Section O8.2).
50-321,366/96-11-01	NCV	Failure to Test or Verify the Function as Described in USFAR of the Isolation Valve Indication on the Containment Isolation Status Panels (Section O8.1).
50-366/96-11-03	NCV	Failure to Follow Procedure for Sample Valve Lineup (Section R1.2).

LIST OF ACRONYMS USED

AIT - Action Item Tracking
ASME - American Society of Mechanical Engineers
cfm - cubic feet per minute
CFR - Code of Federal Regulations
CR - Control Room
CRD - Control Rod Drive
DC - Design Change
DCR - Design Change Request
ECCS - Emergency Core Cooling Systems
EDG - Emergency Diesel Generator
EHC - Electro Hydraulic Control
EIP - Emergency Implementing Procedures
ENN - Emergency Notification Network
EOF - Emergency Operating Facility
EP - Emergency Preparedness
EPZ - Emergency Preparedness Zone
ERDS - Emergency Response Data System
ERO - Emergency Response Organization
FSAR - Final Safety Analysis Report
GPC - Georgia Power Company
HEPA - High-Efficiency Particulate Air Filters
HP - Health Physics
HPCI - High Pressure Coolant Injection

Hz - hertz
IFI - Inspector Followup Item
INPO - Institute of Nuclear Power Operations
IR - Inspection Report
kw - kilowatt
l - liter
LCO - Limiting Condition of Operation
LER - Licensee Event Report
LPCI - Low Pressure Coolant Injection
MCR - Main Control Room
MDC - Minor Design Change
mg - milligram
MG - Motor-Generator
MIDAS- Meteorological Information and Dose Assessment System
MSIV - Main Steam Isolation Valve
MWO - Maintenance Work Order
NCV - Non-Cited Violation
NOAA - National Oceanographic & Atmospheric Administration
NOUE - Notice of Unusual Event
NRC - Nuclear Regulatory Commission
NRR - Nuclear Reactor Regulation
NSSS - Nuclear Steam Supply System
NWS - National Weather Service
OSC - Operations Support Center
P&ID - Piping and Instrumentation Diagram
PASS - Post Accident Sample System
PDR - Public Document Room
PSP - Plant Security Plan
PSW - Plant Service Water System
QA - Quality Assurance
QC - Quality Control
QCIR - Quality Control Inspection Report
RAS - Required Action Statement
RASCAL- Radiological Assessment System for Consequence Analysis
RAW - Risk Achievement Worth
RCA - Radiological Controlled Area
RFP - Reactor Feedwater Pump
RFPT - Reactor Feedwater Pump Turbine
RHR - Residual Heat Removal
RPS - Reactor Protection System
RR - Reactor Recirculation
RTP - Rated Thermal Power
SAE - Site Area Emergency
SAER - Safety Audit and Engineering Review
SGT - Standby Gas Treatment
SOS - Superintendent On Shift
SPDS - Safety Parameter Display System
SR - Surveillance Requirement
SRO - Senior Reactor Operator
SS - Station Service
TS - Technical Specifications
TSC - Technical Support Center

TSIP - Technical Specification Improvement Program
UFSAR- Updated Final Safety Analysis Report
URI - Unresolved Item
VIO - Violation