



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION 1  
101 MARIETTA STREET, N. W.  
ATLANTA, GEORGIA 30325

Report Nos.: 50-424/90-30 and 50-425/90-30

Licensee: Georgia Power Company  
P.O. Box 1295  
Birmingham, AL 35201

Docket Nos.: 50-424 and 50-425

License Nos.: NPF-68 and NPF-81

Facility Name: Vogtle Nuclear Station Units 1 and 2

Inspection Conducted: November 24 - December 21, 1990

Inspectors:

B. R. Bonser  
B. R. Bonser, Senior Resident Inspector

1-15-91  
Date Signed

R. D. Starkey  
R. D. Starkey, Resident Inspector

1-15-91  
Date Signed

Accompanied By: P. A. Balmain, Resident Inspector

Approved By:

K. E. Brockman  
K. E. Brockman, Section Chief  
Division of Reactor Projects

1/16/91  
Date Signed

#### SUMMARY

Scope: This routine on-site inspection involved inspection in the following areas: plant operations, engineered safety feature system walkdown, maintenance, surveillance, review of licensee event reports, and followup on previous findings.

Results: One violation was identified for failing to fully implement corrective actions following the identification of control room drawing legibility problems in November, 1989. This resulted in continued control room drawing problems as exemplified by wrong revisions, missing as built notices, and drawings which were superseded but still on file - (paragraph 2.g).

Two non-cited violations were identified:

- Failure to follow procedure resulted in violation of TS 4.1.3.2 special condition surveillance required when the rod position deviation monitor was inoperable - (paragraph 3.a).
- Personnel exceeded TS 6.2.2e working hour guidelines and failure to perform monthly review for excess overtime - (paragraph 2.d).

## DETAILS

### 1. Persons Contacted

#### Licensee Employees

- S. Chesnut, Manager - Technical Support
- \*C. Christiansen, Safety Audit and Engineering Group Supervisor
- C. Coursey, Maintenance Superintendent
- \*T. Green, Assistant General Manager - Plant Support
- \*H. Handrager, Manager - Maintenance
- \*K. Holmes, Manager - Training and Emergency Preparedness
- W. Kitchens, Assistant General Manager - Plant Operations
- R. LeGrand, Manager - Health Physics and Chemistry
- G. McCarley, Independent Safety Engineering Group Supervisor
- \*R. Odom, Nuclear Safety and Compliance Supervisor
- W. Shipman, Acting General Manager - Nuclear Plant
- \*J. Swartzwelder, Manager - Operations

Other licensee employees contacted included technicians, supervisors, engineers, operators, maintenance personnel, quality control inspectors, and office personnel.

#### NRC Resident Inspectors:

- \*B. Bonser
- D. Starkey
- \*P. Balmain

#### \*Attended Exit Interview

An alphabetical list of acronyms and initialisms is located in the last paragraph of the inspection report.

### 2. Plant Operations - (71707)

The inspection staff reviewed plant operations throughout the reporting period to verify conformance with regulatory requirements, Technical Specifications, and administrative controls. Control logs, shift supervisors' logs, shift relief records, LCO status logs, night orders and standing orders, lifted wires and jumper logs, and clearance logs were routinely reviewed. Discussions were conducted with plant operations, maintenance, chemistry, health physics, engineering support and technical support personnel. Daily plant status meetings were routinely attended.

Activities within the control room were monitored during shifts and shift changes. Actions observed were conducted as required by the licensee's procedures. The complement of licensed personnel on each shift met or exceeded the minimum required by Technical Specifications. Direct observations were conducted of control room panels, instrumentation and recorder traces important to safety. Operating parameters were observed to verify that they were within Technical Specification limits. The inspectors also reviewed Deficiency Cards to determine whether the licensee was appropriately documenting problems and implementing corrective actions.

Plant tours were taken during the reporting period on a routine basis. They included, but were not limited to, the turbine building, the auxiliary building, electrical equipment rooms, cable spreading rooms, NSCW towers, diesel buildings, AFW buildings, and the low voltage switchyard.

The inspectors observed fire drills conducted on December 4 and December 11. The fire team members responded promptly, and appropriately, to both drills.

During plant tours, housekeeping, security, equipment status and radiation control practices were observed. Findings were brought to the attention of the Operations Superintendent and promptly corrected.

The inspectors verified that the licensee's health physics policies and procedures were followed. This included observation of HP practices and review of area surveys, radiation work permits, postings, and instrument calibration.

The inspectors verified that the security organization was properly manned and security personnel were capable of performing their assigned functions, persons and packages were checked prior to entry into the PA, vehicles were properly authorized, searched, and escorted with the PA, persons within the PA displayed photo identification badges, and personnel in vital areas were authorized.

The inspectors witnessed cold pistol qualification testing of two randomly selected security officers. Both officers scored well above passing on the pistol range.

a. Unit 1 Summary

Unit 1 began the inspection period in Mode 1 at approximately 100% power. On November 27, power was reduced to 90% for repair of the HDT-B normal level control valve. On November 30, the HDT-B level control valve was returned to service and power was increased to 100%. On December 5, the unit began to experience an increase in RCS unidentified leakage. The licensee was unable to confirm the source

of the leakage and, subsequently, entered Mode 4 on December 8 to identify and repair the leakage source - (paragraph 2.c). The unit remained in Mode 4 through December 12 while repairs were completed and then entered Mode 3 on December 13. The unit entered Mode 2, achieved criticality and entered Mode 1 on December 14. Reactor power was held at 75% power on December 15 to resolve feedwater heater level control problems. On December 16, power was increased and held at 90% to repair the HDT-A high level dump valve. On December 17, the unit reached 100% power. The unit was manually tripped on December 18, (paragraph 2.e), due to a transformer failure which caused the loss of speed control to the B feedwater pump and a subsequent decrease in SG level. The unit remained in Mode 3 until December 20 when it again achieved criticality and was tied to the grid.

b. Unit 2 Summary

Unit 2 began the inspection period at 100% power. On November 26, reactor power was reduced to approximately 70% to perform repairs to the B main feed pump. Power was returned to 100% on November 27. On November 30, power was reduced to approximately 25% for main turbine torsional testing which was successfully completed on December 2. The main generator was tied to the grid on December 3 and operated at full power from December 4 through the end of the inspection period.

c. Unit 1 RCS Leakage

On December 4, Unit 1 received an alarm on 1RE2562A, Containment Atmosphere Radiation Monitor, and began to experience an increase in unidentified RCS leakage from approximately 0.1 to 0.6 gpm, and a corresponding decrease in identified RCS leakage from approximately 3.3 to 2.6 gpm. The licensee made several containment entries to perform leakage inspections and did not identify any significant leakage from accessible valves outside of the biological shield. The licensee's initial evaluation determined that a probable leakage path was through the RCDT vent valve or the RCDT relief valve. The vent valve was repaired on December 5. The leak rate calculation was performed on December 6, and showed a considerable decrease in unidentified leakage. On December 7, the calculated leak rate increased to approximately 0.8 gpm and, based on this increase and inconsistencies with the previous leak rate calculation results, the licensee initiated a plant shutdown to identify and repair RCS leakage. On December 8, Unit 1 was manually tripped from approximately 23% reactor power per the normal shutdown procedure.

The licensee discovered a significant leak on the A-train RHR Suction Isolation Valve, 1HV8701B. While Unit 1 was shutdown for repair of 1HV8701B, it was discovered that 1HV8702B, the B-train RHR Suction Isolation Valve, had leakage via the valve stem and packing. These two valves are located inside the biological shield. The effort to



repack 1HV8702B identified that the lantern ring could not be removed in order to repack the entire stuffing box. Therefore, an alternative corrective action was undertaken which called for packing to be installed above the lantern ring and to seal the leakoff line to prevent packing material from entering the RCDT. This temporary modification was approved via TMR No. 1-90-032 and will permit reinstallation of the leakage line during the next refueling outage. Any leakage from 1HV8702B will be counted as unidentified leakage until reinstallation of the valve leakoff line to the RCDT. The inspectors reviewed TMR No. 1-90-032 and the associated 10 CFR 50.59 safety evaluation and found them to be acceptable.

d. Review of Overtime Records

The inspectors reviewed a sample of time sheets for personnel in the operations, maintenance, and health physics departments to verify compliance with TS 6.2.2.e guidelines for working hours of plant staff members. No instances were identified in this sample of any TS violation of overtime guidelines; however, the review indicated that the 60 hour administrative limit during 2R1 was routinely exceeded.

The licensee's SAER group also performed an audit of maintenance activities associated with 2R1 and identified personnel who exceeded the time restrictions of the TS and procedure 00005-C without appropriate management approval. Two individuals in maintenance engineering had worked more than 16 hours straight, two individuals from maintenance engineering had worked more than 24 hours in a 48 hour period and one individual from maintenance had worked more than 72 hours in a 7 day period. The SAER audit noted that several of these instances of excessive overtime would not violate the TS if the documented turnover times of 4.5 and 7 hours were accepted; however, these turnover times appeared to be excessive. The SAER group also identified that there had been no monthly review by the General Manager or his designee, as required by TS and procedure 00005-C, Overtime Authorization, to assure that excessive hours were authorized and that they did not become routine.

These examples of excessive overtime and failure to perform a monthly review of excess overtime will be identified as non cited violation 50-424,425/90-30-02: Personnel Exceeded TS Working Hour Guidelines And Failure To Perform Required Monthly Review For Excess Overtime. This licensee identified violation is not being cited because criteria in Section V.G.1 of the Enforcement Policy were satisfied. The resident inspectors will continue to monitor the licensee's use of overtime and will continue to followup on the resolution to this finding.

## e. Unit 1 Reactor Trip

On December 18, control room operators manually tripped Unit 1 from approximately 100% power due to SG levels approaching the low-low reactor trip setpoint as a result of losing speed control of the B main feed pump. A failure of transformer 1NB10X in the 1NB10, 4160 volt, non-1E 4160 volt bus, caused the loss of this bus and the loss of control power to the B main feed pump speed controller circuitry. A similar non-1E transformer failure on July 23, 1990 also caused a reactor trip. The corrective action implemented at that time was to protect the transformer by installing surge arresters to limit potentially damaging external voltage transients. The licensee believes, however, that this failure of 1NB10X was due to the insulation rating being lower than desired. The licensee is developing a list of critical transformers which will establish a priority of the non-1E transformer replacements to upgraded transformers. During this event, two non safety-related components failed to perform as expected. 1NA04, 4160 volt bus, failed to swap over as expected and had to be manually swapped, and a dc supply did not energize its associated inverters due to a mispositioned breaker. The cause for the 1NA04 failure to transfer is still under investigation by the licensee.

## f. Trip of Both Unit 1 Heater Drain Pumps

On November 27, 1990, with Unit 1 at 90% power, both heater drain pumps tripped due to low levels in the A and B heater drain tanks. The pumps tripped after breaker 1NYN107 was opened. This caused the normal level control valves for 5A and 5B feedwater heaters and the MSR drain tanks to close. This resulted in a loss of A and B HDT levels due to reduced inflow, and a subsequent trip of both heater drain pumps on HDT low level.

Breaker 1NYN107 had been authorized to be opened to repair a solenoid. The control room had incorrectly determined that opening this breaker would only deenergize a heater drain panel, thereby deenergizing the solenoid. Opening the breaker also caused the normal level control valves for 5A and 5B feedwater heaters and the MSR drain tanks to close.

On the trip of the HDTs, operators promptly started the standby condensate pump, reduced turbine load and inserted control rods to stabilize the plant. Due to the prompt operator action no engineered safety features or reactor protection systems were challenged or activated.

## g. Control Room Drawings

In November 1989, (Inspection Report 50-424/89-33 and 50-425/89-38) the resident inspectors identified legibility problems in control room drawings, some of which were severe enough to restrict their use by control room personnel. This finding resulted in a violation being identified for failure to implement procedures concerning legibility of control room drawings. The corrective steps in the licensee's reply to the Notice of Violation included establishing performance based personnel accountability for posting Control Room and Clearance and Tagging drawing revisions and ABNs, continuing monthly audits of Control room and C&T drawings, and procuring improved reproduction equipment capable of producing high quality resolution drawings.

The licensee's corrective actions were not fully implemented. The inspectors made this finding following a licensee QA audit of controlled drawings. The licensee audit again found problems in control room and C&T drawings. The problems included wrong revisions, missing ABNs, missing drawings, and drawings which were superseded but on file.

The licensee's investigation into the drawing problems identified that in mid-1990, the drawing distribution method for the control room and C&T changed from being the responsibility of site Document Control to Southern Company Services. The change was made to improve the legibility of drawings used by operators. The new distribution method, however, violated licensee administrative requirements which required that site Document Control receive and process all drawings and changes. It was found that the distribution of drawings to the control room and C&T was performed outside the control of these administrative requirements. Two other items were also identified which were not in accordance with the corrective actions for the previous control room drawings violation. The high quality reproduction equipment procured to improve drawing legibility was not being used, and the monthly audits of control room and C&T drawings were not being implemented. Monthly audits had been discontinued in April 1990.

The inspectors concluded that had the corrective actions been fully implemented, the licensee would have discovered the continuing problems with the drawings. This is identified as Violation 50-424,425/90-30-01: Violation of 10CFR50 Appendix B, Criterion XVI, Corrective Action - Failure To Fully Implement Corrective Actions On CR Drawings.

One violation and one non-cited violation were identified.

### 3. Surveillance Observation (61726)

Surveillance tests were reviewed by the inspectors to verify procedural and performance adequacy. The completed tests reviewed were examined for necessary test prerequisites, instructions, acceptance criteria, technical content, data collection, independent verification where required, handling of deficiencies noted, and review of completed work. The tests witnessed, in whole or in part, were inspected to determine that approved procedures were available, equipment was calibrated, prerequisites were met, tests were conducted according to procedure, test results were acceptable and systems restoration was completed.

Listed below are surveillances which were either reviewed or witnessed:

<u>Surveillance No.</u>	<u>Title</u>
14850-1, Rev. 15	Cold Shutdown Valve Inservice Test (1HV8702B)
24528-202-28957	Pressurizer Protection Channel IV 2P-458 ACOT And Channel Calibration
24813-202-28958	Monthly Delta T/TAVG Loop 4 Protection Channel 2T-441 ACOT And Channel Calibration

#### a. Failure to Perform Special Condition Surveillance

On December 2, the Unit 1 Proteus computer, which displays the status of various plant systems, became inoperable. When the computer was re-initialized, the "Rod Deviation/Radial Tilt" annunciator alarmed for control rods H10, B08 and P08. Proteus was checked and the alarm was found to be invalid. Rod position indication for the three affected rods was changed and then reset to the original settings.

On December 3, the system engineer was reviewing the computer status when he found that the position indication for the three rods had not been updated by the scanning function of Proteus. This meant that the values being displayed were the ones entered the previous day when the rod deviation monitor for these three rods was rendered inoperable. The control rod monitoring points were promptly restored to the scanning function and normal monitoring of their positions resumed.

For approximately thirteen hours, the unit had failed to comply with the TS 4.1.3.2 special condition surveillance which is applicable when the rod position deviation monitor is inoperable. This surveillance requires that the Demand Position Indication System and the Digital Rod Position Indication System be compared at least once per 4 hours.



The cause of this event was the failure of the USS to follow procedure 13504-C, Proteus Computer, when resetting the rod position values into the Proteus Computer. The affect of this omission was that the scan function for the three control rods involved was not put back into service. Contributing to this event was a lack of detailed understanding of the Proteus computer operation by Operations personnel. A review by the licensee following the event indicated that no abnormal rod position occurred during the period the rod position deviation monitor was inoperable.

This event is identified as non-cited violation, NCV 50-424/90-30-03: Failure To Follow Procedure Results In Violation Of TS 4.1.3.2 Special Condition Surveillance. This licensee identified violation is not being cited because criteria in Section V.G.1 of the NRC Enforcement Policy were satisfied. The licensee is issuing an LER (50-424/90-21) on this event. The residents will follow the licensee's corrective actions through the LER.

One non-cited violation was identified.

#### 4. Maintenance Observation (62703)

The inspectors observed maintenance activities, interviewed personnel, and reviewed records to verify that work was conducted in accordance with approved procedures, Technical Specifications, and applicable industry codes and standards. The inspectors also verified that redundant components were operable, administrative controls were followed, clearances were adequate, personnel were qualified, correct replacement parts were used, radiological controls were proper, fire protection was adequate, quality control hold points were adequate and observed, adequate post-maintenance testing was performed, and independent verification requirements were implemented. The inspectors independently verified that selected equipment was properly returned to service.

Outstanding work requests were reviewed to ensure that the licensee gave priority to safety-related maintenance activities.

The inspectors witnessed or reviewed the following maintenance activities:

MWO No.	Work Description
29005441	2B Diesel Generator Air Dryer, K01, K02 Dewpoint Check Receiver 2
19004737	Repair packing leak on 1HV8702B
19004782	Implement Temp. Mod. 1-90-032 to 1HV8702B
19004732	Repair packing leak on 1HV8701B

29005712

Install new supports on tubing supply to  
PT-6161, 6162 and 6163 (DCR 90-V2NC097)

## a. Installation of EHC Pressure Transmitter Supports

The inspectors observed the preparations for the installation of pipe supports for EHC pressure transmitters and their associated tubing located on the Unit 2 main turbine control valves. A support had failed on December 11, due to the normal vibration associated with the control valves. An additional design change is planned to move these sensors and tubing from the control valves.

## b. MWO Trending Program

On December 13, the Maintenance Engineering Supervisor discussed the MWO Trending Program with the resident inspectors. This trending program is described in the VEGP Trending Manual and was implemented within the last year. The program identifies those items on which an MWO was written 4 or more times within the last 6 months. Items are identified by an equipment tag number. Maintenance personnel review the list of repetitive MWOs and attempt to determine a common "root cause" and describe their proposed corrective action on a MWO Trending Form. Maintenance Engineering then assigns the required corrective action which could include writing a MWO, issuing a RER to Engineering for additional review, adding a PM, or voiding the MWO Trending Form. A Trending Evaluation Report is issued every six months.

This MWO Trending Program has the potential of being very beneficial to the licensee and is an aggressive approach to reducing repetitive equipment problems. The resident inspectors will continue to monitor the program's effectiveness.

No violations or deviations were identified.

## 5. Engineered Safety Feature System Walkdown (71710)

The inspectors performed a detailed walkdown of portions of the Control Room Emergency Filtration System to verify its operability. Specifically, the inspectors reviewed system lineup procedures 11301-1, Rev. 4 and 11301-2, Rev. 2, CBCR HVAC and Emergency Filtration System Alignment, and walked down the Unit 2, Train B, CBCR emergency filtration system using drawing AX4DB206-1, Rev. 25. The inspectors verified that the system lineup procedures matched plant drawings and the as-built configuration. No equipment conditions were identified that would degrade plant performance. Several minor discrepancies were noted in the system lineup procedures which did not agree with equipment tags and equipment tags which did not agree with the lineup procedures. The inspectors identified

these discrepancies to the licensee and action was taken to initiate procedure changes. The licensee is also implementing a long term retagging program which is discussed in NRC Inspection Report Nos. 50-424/89-14 and 50-425/89-15.

No violations or deviations were identified.

#### 6. NRR Special Inspection Activities

On December 17-18, inspectors from NRR were onsite to obtain information to assess and resolve questions raised regarding reliability of the DG HJWt trip during a postulated control room fire. Details of the inspection were given in an NRR affidavit before the Atomic Safety & Licensing Board (ALSBP No. 90-617-03-OLA) on January 11, 1991. Based on this review, the licensee committed to actions as documented in a letter from the Senior Vice President - Nuclear Operations, to the NRC, dated January 10, 1991. These actions are summarized below, and will be tracked as indicated:

IFI 424/90-30-04 425/90-30-03	Revision of Alarm Response Procedures for HJWt Alarms. This revision will include appropriate alarms and operator responses as jacket water temperature reaches 200 degrees Fahrenheit.
IFI 424/90-30-05 425/90-30-04	Review Licensee Improvements to HJWt Trip Bypass. This improvement changes the manner of bypassing the HJWt trip by implementing an automatic bypass on emergency DG starts instead of the current method which requires that the instrument sensing line isolation valves be closed.
IFI 424/90-30-06 425/90-30-05	Review Results of Licensee Review of Overall DG Control and Instrumentation System. The review will include the method for implementing the automatic bypass of the HJWt trip and the schedule for its implementation, as well as an overall control/instrumentation system review. The review will be developed and available for NRC examination by May 15, 1991.

#### 7. Review of Licensee Reports (90712)(92700)

The below listed Licensee Event Reports (LER) were reviewed to determine if the information provided met NRC requirements. The determination included adequacy of description, verification of compliance with Technical Specifications and regulatory requirements, corrective action taken, existence of potential generic problems, reporting requirements satisfied, and the relative safety significance of each event.

- a. (Closed) 50-424/90-14, Rev. 0, "Painting Activity Results In Inoperable Diesel Generator."

The 1A diesel generator was restored to operable status and all painting within the 1A DG room temporarily stopped. The MWO for painting the 1A DG was reclassified as a critical component MWO. An interim painting walkdown checklist was developed to ensure operability concerns were identified and addressed prior to allowing the application of tape, masking material, or paint to plant equipment. Procedure 29402-C, WPG Work Request Processing, Rev. 11 was revised to require the painting walkdown checklist to be made part of the MWO package.

- b. (Closed) 50-424/90-15, Rev. 0, "Failure To Calibrate Computer Points Prior To Precision Heat Balance Flow Measurement."

Upon the discovery of the uncalibrated computer points, the licensee reperformed the heat balance calculations for Units 1 and 2 using conservatively estimated values for feedwater temperatures. Procedure 88075-C, Precision Heat Balance, was revised to require the calibration of the feedwater temperature computer points within 7 days prior to the performance of the precision heat balance.

- c. (Open) 50-424/90-16, Rev. 0, "Failed Transformer Leads To Main Feedpump Trip And Reactor Trip."

The failed transformer was replaced. Vogtle 4KV Switching Surge Study speculated that the cause for the transformer failure was a switching transient. Based on similar past failures of this type on non-1E transformers, a program was begun to install surge arresters on the transformers. Although there have been no similar failures of 1E transformers, the licensee is evaluating the feasibility of replacing the existing surge arresters on 1E transformers. That evaluation is not yet completed. Another transformer failure occurred on December 18, 1990, also resulting in a reactor trip. This LER will remain open until the root cause of this most recent failure is determined.

- d. (Closed) 50-424/90-17, Rev. 0 "Inadequate Procedure Leads To Inadequate Surveillance Testing."

The individual who performed the procedure review was counseled regarding the importance of accuracy in reviews related to TS surveillance requirements. Procedure 00404-C, Surveillance Test Program, was revised to provide specific guidance when utilizing surveillances from another department to satisfy TS requirements.



The system engineer completed his review of ESFAS test procedure 54065-2 with no other inadequate surveillance test found. Similar ESFAS testing procedures were reviewed and no related discrepancies were found. The Unit 2 ESFAS testing procedures were reviewed to include appropriate testing prior to their use in 2R1. The Unit 1 ESFAS testing procedures will be revised prior to their use in 1R3.

- e. (Closed) 50-424/90-18, Rev. 0, "Inadequate Verification Of Operability Of Nuclear Service Cooling Water Check Valves."

Procedures 14830-1 and 2, Quarterly Check Valve Inservice Test, were revised to change the acceptance criteria for verification of operability of the check valves from 45% to 53%. Procedure 14830-1 was reperformed to reverify the operability of check valve 1-1202-U4-469. A licensee review was performed which determined a more accurate flow measurement could be made by using system flow gauges other than those previously used during this IST. Procedures 14830-1 and 2 were revised to incorporated the proper flow instruments to be used.

- f. (Closed) 50-424/90-19, Rev. 0, "Program Inadequacy Results In Not Reperforming A Leak Rate Test After A Valve Inspection."

The cause of this event was a procedural deficiency which allowed the removal of valve components, subsequent to the completion of a LLRT, without a retest. Procedure 28716-C, "Westinghouse Style B Check Valves ISI Surveillance," was revised to include LLRT requirements following disassembly for ISI inspection. A review was performed to ensure that no other such failure to test, following ISI inspections, has occurred. Also, a review of other test procedure was conducted to ensure LLRT requirements are appropriately addressed.

- g. (Closed) 50-425/90-10, Rev. 0, "Personnel Error Leads To Missed Surveillance Task."

The Chemistry Foreman, who did not update the status board and log to ensure that the grab samples were obtained and analyzed, was counseled on the importance of complying with TS requirements. Additionally, the Manager - Operations issued a Night Order to his staff emphasizing the need for communicating active LCO status at Shift Turnover Meetings.

- h. (Closed) 50-425/90-13, Rev. 0, "Removing Power To Plant Vent Monitor Leads To Technical Specification Violation."

A Night Order was written to advise control room personnel that 2RE-12444 is made inoperable when the 2ABC Motor Control Center is deactivated. A request for a change to the affected electrical

drawing was submitted. ABNs were issued until the electrical drawings are revised. Finally, electrical load lists, which state both 1E and non-1E electrical components powered by each load center, have been received onsite and are available for use.

- i. (Closed) 50-425/90-14, Rev. 0, "Valving Out Radiation Monitor Leads To Unmonitored Liquid Release."

The Shift Supervisor who failed to adequately identify the LCO requirement for 2RE-0021 was counseled regarding the proper reviews to ensure TS compliance prior to removing equipment from service. Procedures 13601-1 and 2, Steam Generator and Main Steam System Operation, were revised to require that personnel either ensure 2RE-0021 is in service or provide the TS required release monitoring by utilizing grab samples.

No violations or deviations were identified.

#### 8. Meetings

An NRC/GPC interface meeting was held onsite on December 5, to discuss items of mutual interest and to coordinate licensing activities for both Plant Vogtle and Plant Hatch. Corporate and site management for both GPC facilities attended. The meeting was beneficial and should serve to enhance effective lines of communications with the NRC.

On December 18, a public meeting was held on site with the licensee to discuss the results of the SALP (50-424,425/90-23) issued on December 10, 1990.

#### 9. Followup On Previous Inspections Findings (92701,92702)

(Closed) URI 50-424/89-27-01 and 50-425/89-31-01, "Resolve Issue Of TS 3.6.1.7 Mini-Purge Valve Operation During 1988."

While the licensee's practice of purging containment almost continuously via the 14-inch containment mini-purge supply and exhaust isolation valves in 1988 may have displayed a weak operational practice, the inspector concluded a violation of TS did not occur. In November 1989, the licensee established a management policy for operation of the containment mini-purge system. The policy stated that the mini-purge valves shall be maintained closed except when, in the opinion of the Unit Shift Supervisor or Operations Superintendent, they need to be opened for pressure control, for ALARA and repairable air quality considerations for personnel entry and for surveillance tests that require the valve(s) to be open. The inspector was satisfied that the licensee has taken positive action to monitor and control operation of the mini-purge system to provide a greater margin of safety with regard to the TS requirements.

## 10. Waiver of Compliance

On December 13, 1990, the licensee requested and received a waiver of compliance from the requirements of TS 4.7.7.d.4 which requires once per 18 months the verification of heater capacity ( $80 \pm 4$  kw) on the Piping Penetration Area Filtration and Exhaust Systems. The basis for heater operation is to limit the relative humidity of the airstream through the filters to 70 percent, thereby maintaining filter efficiency by protecting the filters from moisture buildup. As a result of a licensee audit of TS surveillances, it was determined that heater output had not been properly corrected for voltage. When the correction was made the heater output for one train on Unit 2 and both trains on Unit 1 was found to be less than the minimum allowable value of 76 kw. Consequently, TS 3.0.3 was entered on Unit 1 and TS 3.7.7 Action statement was entered on Unit 2.

Following a licensee review, it was determined that heater capacity exceeded that which was required to limit the relative humidity of the airstream through the filters to a value of 70 percent or less. This finding formed the basis for the Waiver of Compliance request. The licensee has submitted a request to revise TS 4.7.7.d.4. The temporary Waiver of Compliance will be in effect while the NRC staff completes the processing of an emergency TS change request.

## 11. Exit Meeting

The inspection scope and findings were summarized on December 21, 1990, with those persons indicated in paragraph 1. The inspector described the areas inspected and discussed in detail the inspection findings listed below. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspectors during this inspection.

<u>Item Number</u>	<u>Description and Reference</u>
VIO 424,425/90-30-01	Violation of 10CFR50 Appendix B, Criterion XVI, Corrective Action - Failure To Fully Implement Corrective Actions On CR Drawings
NCV 424,425/90-30-02	Personnel Exceeded TS Working Hour Guidelines and Failure To Perform Required Monthly Review For Excess Overtime
NCV 424/90-30-03	Failure To Follow Procedure Results In Violation Of TS 4.1.3.2 Special Condition Surveillance
IFI 424/90-30-04 425/90-30-03	Revision of Alarm Response Procedures for HJWT Alarms.
IFI 424/90-30-05 425/90-30-04	Review Licensee Improvements to HJWT Trip Bypass.
IFI 424/90-30-06 425/90-30-05	Review Results of Licensee Review of Overall DG Control and Instrumentation System.

## 12. Acronyms And Initialisms

ABN	As Built Notice
ACOT	Analog Channel Operability Test
AFW	Auxiliary Feedwater System
ALARA	As Low As Reasonably Achievable
CFR	Code of Federal Regulations
CR	Control Room
DC	Deficiency Cards
dc	Direct Current
DCR	Design Change Request
DG	Diesel Generator
EHC	Electro-Hydraulic Control
ESFAS	Engineering Safety Features Actuation System
GPC	Georgia Power Company
GPM	Gallons Per Minute
HDT	Heater Drain Tank
HJWT	High Jacket Water Temperature
HP	Health Physics
HV	High Voltage
HVAC	Heating, Ventilation and Air Conditioning
ISI	Inservice Inspection
IST	Inservice Testing
KW	Kilowatt
LCO	Limiting Conditions for Operations
LER	Licensee Event Reports
LLRT	Local Leak Rate Test
MSR	Moisture Separator Reheater
MWO	Maintenance Work Order
NCV	Non-cited Violation
NPF	Nuclear Power Facility
NRC	Nuclear Regulatory Commission
NSCW	Nuclear Service Cooling Water System
PA	Protected Area
PM	Planned Maintenance
QA	Quality Assurance
RCDT	Reactor Coolant Drain Tank
RCS	Reactor Coolant System
RER	Request for Engineering Review
Rev	Revision
SAER	Safety Audit And Engineering Review
SALP	Systematic Assessment of Licensee Performance
SG	Steam Generator
TDAFW	Turbine Driven AFW Pump
TS	Technical Specification
URI	Unresolved Item
USS	Unit Shift Supervisor
VEGP	Vogtle Electric Generating Plant
VIO	Violation
WPG	Work Planning Group