

official file

AUG 15 1988

Docket No. 50-424
License No. NPF-68

Georgia Power Company
ATTN: W. G. Hairston, III
Senior Vice President -
Nuclear Operations
P. O. Box 4545
Atlanta, GA 30302

Gentlemen:

SUBJECT: NOTICE OF VIOLATION
(NRC INSPECTION REPORT NO. 50-424/88-31)

This refers to the Nuclear Regulatory Commission (NRC) inspection conducted by Messrs. J. F. Rogge, and C. W. Burger on July 2 - August 2, 1988. The inspection included a review of activities authorized for your Vogtle facility. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

The inspection findings indicate that certain activities violated NRC requirements. The violation, references to pertinent requirements, and elements to be included in your response are presented in the enclosed Notice of Violation.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC Public Document Room.

The response directed by this letter and the enclosures are not subject to the clearance procedures of the Office of Management and Budget issued under the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,

ORIGINAL SIGNED BY
VIRGIL L. BROWNLEE

Virgil L. Brownlee, Chief
Reactor Projects Branch 3
Division of Reactor Projects

Enclosures: (See page 2)

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Enclosures:

- 1. Notice of Violation
- 2. Inspection Report

cc w/encls:

- R. P. McDonald, Executive Vice President, Nuclear Operations
- P. D. Rice, Vice President, Project Director
- C. W. Hayes, Vogtle Quality Assurance Manager
- G. Bockhold, Jr., General Manager, Nuclear Operations
- J. P. Kane, Manager, Nuclear Licensing and Engineering
- J. A. Bailey, Project Licensing Manager
- B. W. Churchill, Esq., Shaw, Pittman, Potts and Trowbridge
- D. Kirkland, III, Counsel, Office of the Consumer's Utility Council
- D. Feig, Georgians Against Nuclear Energy

bcc w/encl:

- E. Reis, OGC
- J. Hopkins, NRR
- M. Sinkule, RII
- DRS, Technical Assistant
- NRC Resident Inspector
- Document Control Desk
- State of Georgia

RII

RII

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CPatterson:

MSinkule

VBrownlee

08/12/88

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ENCLOSURE 1

NOTICE OF VIOLATION

Georgia Power Company
Vogtle 1

Docket No. 50-424
License No. NPF-68

During the Nuclear Regulatory Commission (NRC) inspection conducted on July 2 - August 2 a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below.

Technical Specification 6.7.1a. requires, in part, that written procedures shall be implemented as applicable from Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33 requires maintenance procedures for the performance of work to be implemented.

Contrary to the above, on July 26, Maintenance Work Order 18803134 was not fully implemented in that specific instructions requiring personnel and equipment to be present and able to immediately reseal an open electrical floor penetration was not implemented. This requirement was established in the Maintenance Work Order to ensure flood protection features would be restorable if necessary.

This is a Severity Level V violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Georgia Power Company is hereby required to submit a written statement or explanation to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector, Vogtle, within 30 days of the date of the letter transmitting this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) admission or denial of the violation, (2) the reason for the violation if admitted, (3) the corrective steps which have been taken and the results achieved, (4) the corrective steps which will be taken to avoid further violations, and (5) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time. If an adequate reply is not received within the

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Georgia Power Company
Vogtle 1

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time specified in this Notice, an order may be issued to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY
VIRGIL L. BROWNLEE

Virgil L. Brownlee, Chief
Reactor Projects Branch 3
Division of Reactor Projects

Dated at Atlanta, Georgia
this 15 day of Aug. 1988



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

Report No.: 50-424/88-31

Licensee: Georgia Power Company
 P.O. Box 4545
 Atlanta, GA 30302

Docket No.: 50-424

License No.: NPF-68

Facility Name: Vogtle 1

Inspection Conducted: July 2 - August 2, 1988

Inspectors:	<u>C. W. Burger</u>	<u>8/12/88</u>
	J. F. Rogge, Senior Resident Inspector	Date Signed
	<u>C. W. Burger</u>	<u>8/12/88</u>
	C. W. Burger, Resident Inspector	Date Signed

Accompanied by: R. F. Aiello, Resident Inspector
 R. Musser, Resident Inspector, Hatch

Approved By:	<u>M. V. Sinkule</u>	<u>8/12/88</u>
	M. V. Sinkule, Section Chief Division of Reactor Projects	Date Signed

SUMMARY

Scope: This routine, unannounced inspection entailed resident inspection in the following areas: plant operations, radiological controls, maintenance, surveillance, fire protection, security, and quality programs and administrative controls affecting quality.

Results: Three violations were identified. For two of the three identified violations, no notice was issued (one violation in the area of surveillance - failure to perform source check prior to release; two violations in the area of maintenance - failure to provide adequate work instruction for the radiation monitors and failure to implement maintenance work instructions regarding flood protection).

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *G. Bockhold, Jr., General Manager Nuclear Operations
- *R. M. Bellamy, Plant Manager
 - T. V. Greene, Plant Support Manager
- *J. E. Swartzwelder, Nuclear Safety & Compliance Manager
- *W. F. Kitchens, Manager Operations
 - W. N. Marsh, Deputy Operations Manager
 - M. A. Griffis, Maintenance Superintendent
 - C. C. Echert, Manager Chemistry and Health Physics
 - A. L. Mosbaugh, Assistant Plant Support Manager
 - H. M. Handfinger, Assistant Plant Support Manager
 - F. R. Timmons, Nuclear Security Manager
 - R. E. Lide, Engineering Support Supervisor
 - E. M. Dannemiller, Technical Assistant to General Manager
- *G. R. Frederick, Quality Assurance Site Manager - Operations
 - W. E. Mundy, Quality Assurance Audit Supervisor
 - R. M. Odom, Plant Engineering Supervisor
- *K. Pointer, Regulatory Specialist

Other licensee employees contacted included craftsmen, technicians, supervision, engineers, operations, maintenance, chemistry, QC inspectors, and office personnel.

*Attended Exit Interview

2. Licensee Action on Previous Enforcement Matters - (92702)

- a. (Closed) Violation 50-424/86-77-01 "Failure To Document Usage And Control Of Measuring And Test Equipment." This violation related to failure to document usage and control of the gold track automatic welders. The licensee's letter of response dated October 26, 1986, has been reviewed and determined to be acceptable by Region II. The corrective actions involved modifying the Pullman power products procedures X-10 and XII-2 and retraining the appropriate personnel to prevent recurrence of the discrepancies. However, the licensee has no plans to use the gold track automatic welders for the remaining construction work at the Vogtle Unit 2. The inspector verified that the corrective actions had been implemented and completed.
- b. (Closed) Violation 50-424/88-17-01 "Failure To Establish Adequate Procedure For The The Alignment And Operation Of Annunciator Inverters." The inspector reviewed the corrective actions as stated in the licensee response dated June 13, 1988. Procedure 11432-1, Rev 4 "120V AC No.- IE Instrument Distribution System Alignment was reviewed for incorporation of the six breakers utilized for backup

power to the inverter. In addition, Procedure 11432-2, Rev 1 was checked to verify that similar changes had been implemented on Unit 2. The inspector verified that the corrective actions had been implemented and completed.

3. Operational Safety Verification - (71707)(93702)

The plant began this inspection period in Power Operation (Mode 1) near 100% power until July 14 when the unit tripped from a turbine trip. On July 15, the unit entered startup (Mode 2) operation and returned to Mode 1 on July 16 following repair of the main turbine protection circuitry. On July 30, the unit tripped from a turbine trip following failure of an insulator on the A phase of the main step up transformer disconnect. On July 31, the unit returned to power operation. On July 31, with the unit at 16% power, power was lost to the control rods due to a lightning strike. On August 1, the unit restarted and returned to Mode 1 operation.

During the reactor startup on July 31, the inspector noted that alarm ALB17 A1 was illuminated indicating that steam formation in the feedwater nozzle had occurred. The response procedure directs the operators to maintain the main feed isolation valves shut. During the startup sequence, these same valves are opened to ensure that they are functional. Power ascent procedures reviewed indicated that no specific actions are specified for controlling feedwater flow. The plant operations manager informed the inspector during the startup, that this alarm and the temperature indications were planned for removal. The inspector requested that the design be reviewed with the inspector as soon as engineering can support the request. The following is identified to track this item.

Inspector Followup Item 50-424/88-31-02 "Review Engineering Design And Operator Actions For ALB17 A1 - High Feedwater Nozzle Temperature."

a. Control Room Activities

Control Room tours and observations were performed to verify that facility operations were being safely conducted within regulatory requirements. These inspections consisted of one or more of the following attributes as appropriate at the time of the inspection.

- Proper Control Room staffing
- Control Room access and operator behavior
- Adherence to approved procedures for activities in progress
- Adherence to Technical Specification (TS) Limiting Conditions for Operations (LCO)
- Observance of instruments and recorder traces of safety related and important to safety systems for abnormalities
- Review of annunciators alarmed and action in progress to correct
- Control Board walkdowns

- Safety parameter display and the plant safety monitoring system operability status
- Discussions and interviews with the On-Shift Operations Supervisor, Shift Supervisor (when stationed), Reactor Operators, and the Shift Technical Advisor to determine the plant status, plans and to assess operator knowledge
- Review of the operator logs, unit log and shift turnover sheets

No violations or deviations were identified.

b. Facility Activities

Facility tours and observations were performed to assess the effectiveness of the administrative controls established by direct observation of plant activities, interviews and discussions with licensee personnel, independent verification of safety systems status and LCOs, licensee meetings and facility records. During these inspections the following objectives are achieved:

- (1) Safety System Status (71710) - Confirmation of system operability was obtained by verification that flowpath valve alignment, control and power supply alignments, component conditions, and support systems for the accessible portions of the ESF trains were proper. The inaccessible portions are confirmed as availability permits. Additional indepth inspection of the residual heat removal system was performed to review the system lineup procedure with the plant drawings and as-built configurations, compare valve remote and local indications, walkdowns were expanded to include hangers and supports, and electrical equipment interiors. The inspector verified that the lineup was in accordance with license requirements for system operability.
- (2) Plant Housekeeping Conditions - Storage of material and components and cleanliness conditions of various areas throughout the facility were observed to determine whether safety and/or fire hazards existed.
- (3) Fire Protection - Fire protection activities, staffing and equipment were observed to verify that fire brigade staffing was appropriate and that fire alarms, extinguishing equipment, actuating controls, fire fighting equipment, emergency equipment, and fire barriers were operable.
- (4) Radiation Protection (71709) - Radiation protection activities, staffing and equipment were observed to verify proper program implementation. The inspection included review of the plant program effectiveness. Radiation work permits and personnel compliance were reviewed during the daily plant tours. Radiation Control Areas (RCAs) were observed to verify proper identification and implementation.

- (5) Security (71881) - Security controls were observed to verify that security barriers were intact, guard forces were on duty, and access to the Protected Area was controlled in accordance with the facility security plan. Personnel were observed to verify proper display of badges and that personnel requiring escort were properly escorted. Personnel within Vital Areas were observed to ensure proper authorization for the area. Equipment operability or proper compensatory activities were verified on a periodic basis.
- (6) Surveillance (61726)(61700) - Surveillance tests were observed to verify that approved procedures were being used; qualified personnel were conducting the tests; tests were adequate to verify equipment operability; calibrated equipment was utilized; and TS requirements were followed. The inspectors observed portions of the following surveillances and reviewed completed data against acceptance criteria:

<u>Surveillance No.</u>	<u>Title</u>
14445, Rev 1	Monthly Remove Shutdown Instrument Channel Check
14980, Rev 12T	Diesel Generator Operability Test
14495, Rev 2	MDAFW Pump "A" Flow Path Verification
14410, Rev 1	Control Rod Operability Test
14220, Rev 2	Main Turbine Valve Weekly Stroke Test
14830, Rev 4T	Quarterly Check Valve Inservice Test
14235, Rev 2	Onsite Power Distribution Operability Verification
14230, Rev 3	A.C. Source Verification
14400, Rev 3	Control Room Emergency Ventilation Actuation Logic Surveillance Test
14430, Rev 2	NSLW Cooling Power Fan Test
14515, Rev 3	Piping Penetration Area Filtration & Exhaust System Operability Test

<u>Surveillance No.</u>	<u>Title</u>
14510, Rev 4	Control Room Emergency Filter System Operability Test
14546, Rev 3	TD AFW Pump Operability Test
14485, Rev 1	CS System Flow Path Verification
14475, Rev 5	Containment Integrity Verification
54828, Rev 3	Time Response Test For NSCW Pump Actuation

- (7) Maintenance Activities (62703) - The inspector observed maintenance activities to verify that correct equipment clearances were in effect; work requests and fire prevention work permits, as required, were issued and being followed; quality control personnel were available for inspection activities as required; retesting and return of systems to service was prompt and correct; TS requirements were being followed. Maintenance Work Order (MWO) backlog was reviewed. Maintenance was observed and MWO packages were reviewed for the following maintenance activities:

<u>MWO No.</u>	<u>Work Description</u>
18805019	Adjust Course Gain Pot Setting On All NI Drawer 3's To Allow Calorimetric Adjustment
18802859	Investigate & Remote Mini Computer Communication Link That Feeds The Process Effluent & Radiation Monitoring System
18803124	Breach Penetration Seal 1-11-0128-3-004 To Support DCP 87VIE0157 Cable Pull
18805339	Repair Penetration Seal 1-11-0128-3 For DC 1-88-1987
18805467	Install New Power Supply In Rod Control

On July 26 at 7:20 EDT, the inspector identified that Penetration Seal 1-11-0128-3 had been removed and requested that the licensee justify how the seal could have been left in that condition regarding fire and flood protection requirements. This seal is located on the North wall of Control Building Room 317 at floor level. Flood analysis indicates that this room could experience approximately eight inches of water. Later discussions with craft personnel revealed that the seal work had been scheduled to complete the previous night; however, they had

been sent home when the job was stopped by a superintendent. MWO 18803124 was noted to contain flood protection step 4.1.14 from plant procedure 00432-C "Penetration Seal Control", which states that the seal shall be breached only when the cable(s) [are] at the seal ready to be pulled through and personnel and equipment are present to reseal immediately afterward.

The licensee review indicated that during the course of this work, the installed RTV silicone foam material was found to be unacceptable due to bad cell structure and color and DC 1-88-1987 was written. To correct this deficiency MWO 18805339 was issued to expand the scope of crew work. The estimated completion time for this work was 10:00 P.M. on July 25 and overtime had been approved. At approximately 6:30 P.M. on July 25, the ICMS project manager discovered that the maintenance crew was in the cafeteria and decided to terminate the job. This project manager contacted the OSOS to established compensatory measures but failed to inform him of the specific need for equipment and personnel to be able to reseal the penetration. The OSOS in turn verified that the seal had a fire watch assigned and gave this watch instructions to inform the Control Room immediately upon discovery of flooding.

On July 27, the licensee informed the inspector that at approximately 5:30 P.M. on July 26, the craft had walked off the job without completing the work GPC personnel replaced the crew with craft from Unit 2 and completed the seal work by 9:00 P.M.

Unit 1 plant access to ICMS craft and managers had been suspended until the management issues regarding craft and management can be resolved to ensure that the plant safety will not be jeopardized by these poor work practices. GPC informed the inspector that the job had been authorized to work until completion however, this time the craft walked off.

Failure to implement procedure provisions of MWO 18803124 on July 25 thru July 26 which mitigate the flooding hazard to the plant constitute a violation of TS 6.7.1a. This violation is identified for tracking purposes as:

Violation 50-424/88-31-01 "Failure To Implement MWO 18803134 Flooding Hazard Prevention Procedure Provisions."

- (8) Preparation For Refueling (60705) - An inspection was performed of the receipt, inspection and storage of the new fuel.

The inspectors observed the various activities involved with the receipt and subsequent storage of new fuel to ascertain the adequacy of the licensee's procedures, procedural compliance, administrative controls, HP radiation monitoring and

radiological control, QA/QC requirements, and control, and the adequacy of site management involvement.

The inspectors reviewed selected fuel receiving records to verify documentation of receipt and inspection of each shipment of new fuel, of each loaded new fuel container, and of each new fuel assembly and insert component received.

The containers, as received, were checked for external damage, cleanliness, radiation, and tripped accelerometers. The inside of the containers were thoroughly checked and the fuel assembly numbers were properly recorded. The surface of the fuel pins were inspected for debris, scratches, fingerprints, stains, etc. The fuel pin rows were visually checked for correct spacing and the fuel pins were visually verified straight. The other fuel assembly components were also visually inspected.

The new fuel assemblies were then placed in preselected new fuel storage rack locations.

The inspectors noted that the responsible engineering and health physics personnel exhibited good control over the receipt and storage of the new fuel as well as establishing good control of the fuel area regarding personnel access, housekeeping and cleanliness. It was also noted that site management made a conscientious effort to enter the radiation control zone and monitor these activities.

One violation was identified in paragraph 3.b.(7).

4. Review of Licensee Reports (90712)(90713)(92700)

a. In-Office Review of Periodic and Special Reports

This inspection consisted of reviewing the below listed report to determine whether the information reported by the licensee was technically adequate and consistent with the inspector knowledge of the material contained within the report. Selected material within the report was questioned randomly to verify accuracy and to provide a reasonable assurance that other NRC personnel have an appropriate document for their activities.

Monthly Operating Report - The report dated July 11, 1988 was reviewed. The inspector had no comments.

b. Licensee Event Reports and Deficiency Cards

Licensee Event Reports (LER) and Deficiency Cards (DC) were reviewed for potential generic impact, to detect trends, and to determine whether corrective actions appeared appropriate. Events which were reported pursuant to 10 CFR 50.72, were reviewed as they occurred to

determine if the technical specifications and other regulatory requirements were satisfied. In-office review of LERs may result in further followup to verify that the stated corrective actions have been completed, or to identify violations in addition to those described in the LER. Each LER is reviewed for enforcement action in accordance with 10 CFR Part 2, Appendix C. Review of DCs was performed to obtain a real-time status of deficiencies, determine regulatory compliance, follow the licensee corrective actions, and assist as a barrier for closure of the LER when reviewed. Due to the numerous DCs presented only those DCs which result in enforcement action or further inspector followup with the licensee at the end of the inspection are listed below. LERs and DCs denoted with an asterisk indicates that reactive inspection occurred at the time of the event prior to receipt of the written report.

(1) Deficiency Card reviews:

- *DC 1-88-1733 "Inadequate 18 Month Battery Surveillance" On July 12 the licensee identified during an engineering review that surveillance procedure 28910-C was inadequate in that the terminal resistance had not been specified in the procedure to be taken. The procedure did indicate an acceptance value but during the performance of the procedure plant personnel thought that this applied to the cell-to-cell data. The licensee declared all four 1E battery banks inoperable and performed the testing within 2 hours. The inspector reviewed the problem with the electrical engineering supervisor responsible for achieving corrective action. This item will be followed up when submitted as an LER.
- *DC 1-88-1785 "Reactor Trip From Blown Fuse In Turbine Protection Circuitry." On July 14, the unit tripped on a Turbine Trip Signal from 100% power. The inspector reviewed the reactor trip report, 1-88-05, and supporting computer printout. The inspector attended one post trip critique to ensure that adequate root cause identification was performed. The licensee determined that a short in the primary to secondary winding of a potential transformer had occurred which blew the fuse. Main Generator Voltage ramped higher until a volt per hertz protection relay actuated. On July 15, the unit returned to criticality awaiting corrective repairs to the turbine protection circuitry.
- *DC 1-88-2122 "Reactor Trip From Failure Of Phase A Main Transformer Disconnect Resulting In A Turbine Trip." On July 30, the unit tripped on a Turbine Trip Signal from 100% power. The inspector reviewed reactor trip report 1-88-06 and supporting computer printout. The main generator trip was caused by a failure of the phase A disconnect connection with the transmission line. The licensee determined that a faulty disconnect insulator condition developed causing excessive

current heating and subsequent line failure. The inspector observed reactor restart activity while repairs were in progress in the switchyard and verified technical specification compliance on July 31.

*DC 1-88-2125 "Reactor Trip On Loss Of Control Rod Power." On July 31, with the unit at 16% power, the unit tripped on a loss of control rod power. At the time of the trip, no power changes were in progress. The cause of the trip was related to a lightning strike. One observer of the strike reported that a bolt of lightning hit the containment building and seemed to spread to the other power block buildings like fingers while another observer saw lightning hit the low voltage switchyard. Both observers reported that they then heard the announcement of the reactor trip. The security, emergency response, and fire protection computers all failed and were subsequently restarted. Following the closure of the reactor trip breakers, the operators identified that an urgent failure of rod control was indicated. A special test was conducted which identified that the control rods would not move. Investigation of the rod control system determined that the 24 volt power supplies had tripped from lightning. Reactor restart activities were observed. Reactor Trip report 1-88-07 was reviewed.

DC 1-88-TBD On July 15, the Engineering Support Supervisor informed the inspector of a potential problem with the Containment Sump pH following a design basis LOCA. During the preoperational testing of Unit 2, the sodium hydroxide educator flow on train B containment spray was higher than the allowable range. Westinghouse evaluated that this was acceptable. During preoperational testing of Unit 2, both train A and B educators were found higher than allowable. During the review by Westinghouse for unit 2, it was determined that Unit 1 analyses contained possible errors. The higher flow rate causes excess sodium hydroxide to enter the spray flow into containment. The excess sodium hydroxide yields a pH 11.7 which exceeds the 10.5 upper limit on sump pH. In the long term (sump recirculation) the pH would end in range. Environmental qualification of electrical equipment included testing at the 10.7 pH level. On the basis that chemical attack was not the primary source of failure Westinghouse informed them that the higher pH was acceptable. Formal notification from Westinghouse is pending. Upon receipt of this notification, the licensee will initiate a DC if appropriate.

DC 1-88-NUMERIOUS "NRC Bulletin 88-05" The licensee has continued to keep the inspector apprised of the deficiencies found as a result of testing. As of July 29 the licensee has identified 1165 items which need testing. Of these 1165 items 752 have been tested with 732 reviewed. The reviews indicate that 492 are acceptable with 240 items unacceptable. These

items being tested were supplied by West Jersey manufacturing as ASME SA105 material. Minimum hardness for this type material is 137 HB. The findings indicate that the hardness is ten to fifteen percent below this value. Further followup on this item will be in response to the final licensee submittal to the Bulletin.

The inspector conferred with the Region II management regarding the difficulty the plant would have meeting the thirty day time frame of the Bulletin. Based on the extensive amount of testing and licensee promptness, to date, no testing and licensee action would be pursued.

- (2) The following LERs were reviewed and are ready for closure pending verification that the licensee's stated corrective actions have been completed.

(a) *50-424/88-16, Rev 0 "Water Leakage Into Control Room/ Potential Exists For A Safety Failure." On June 3, 1988, smoke from an electric duct heater actuated smoke detection alarms. Although sprinkler heads did not actuate, water from the preaction valve leakoff lines ran into the upper cable spreading room and seeped into the control room from the ceiling. Water entered some process panels and led to spurious equipment actuations in the Reactor Coolant System which were promptly addressed and corrected by control room personnel. On June 5, it was concluded that a condition existed which alone could have prevented the fulfillment of the safety function of a system needed to mitigate the consequences of an accident. The cause of this event is an inadequate design of the control room ceiling penetrations which are supposed to be watertight. Silicone sealant was placed to block the seepage path, several sprinkler systems were isolated, a continuous fire watch was established and a study is being performed to evaluate further modifications to ensure that the penetrations remain watertight under all design circumstances. The inspector examined a mockup of the new design and witness portions of the testing.

This issue was discussed at an enforcement conference on July 5, and violations are discussed in NRC Rpt. 50-424/88-24.

(b) 50-424/88-17, Rev 0 "Inadequate Procedure And Procedure Violation Leads To Missed Surveillance." On June 5, 1988 at approximately 03:20 p.m. it was discovered that a liquid release was being performed prior to completing a source check of the radiation monitor IRE-0018. The source check is a Technical Specification requirement prior to a release. The radwaste operator was notified and the

release was stopped at approximately 03:25 p.m. This event was caused by an inadequate procedure. The procedure which administratively controls the release of liquid radioactive waste did not require the source check to be performed. Two separate procedure violations, one by a chemistry technician and another by a radwaste operator, also contributed to the event. Corrective actions include a revision to the procedure to require a source check to be performed and counseling of the involved personnel on the importance of following the procedures.

This item represents a violation of NRC requirements which meets criteria for non citation. In order to track this item, the following is identified.

LIV 50-424/88-31-1 "Failure To Implement Procedures To Ensure A TS Source Check Is Performed Prior to A Liquid Release."

- (c) 50-424/88-18, Rev. 0 "Inadequate Work Instructions Lead To Technical Specification Violation." On June 6, 1988 at 09:59 a.m., it was determined that Unit 1 had been operated in a condition prohibited by the Technical Specifications (TS). On June 5, 1988 at approximately 03:30 p.m., work was performed on a particulate radiation monitor 1RE-2562A. Due to the system alignment, when the coverplate was removed from 1RE-2562A, the sample flow to monitor 1RE-2562C was such it was also rendered inoperable. On June 6, 1988 at approximately 12:28 a.m., the Containment Normal Sump Level was declared inoperable. At 09:54 a.m. on June 6, 1988, it was determined that 1RE-2562C should have been declared inoperable when the coverplate for the A channel was removed and a six hour Hot Standby action statement should have been initiated, when the Containment Normal Sump Level was inoperable. This event occurred because of inadequate work instructions to the maintenance crew. Work planning will contact chemistry for input to TS related work orders for Plant Effluent Radiation Monitor System, prior to being issued to the field. Maintenance will receive training and will contact the chemistry foreman prior to removing any monitor from service.
- (d) 50-424/88-19, Rev 0 "Inadequate Installation Leads To Containment Ventilation Isolations." On June 10, 1988 at 12:16 a.m., a Containment Ventilation Isolation (CVI) occurred due to an apparent power supply failure in radiation monitor 1RE-2565C. The appropriate dampers and valves actuated as designed. Control room personnel verified that no abnormal radiation condition existed. At 02:06 a.m., 1RE-2565C was bypassed and the CVI signal was reset. At 02:12 a.m. another CVI occurred, when plant

personnel removed IRE-2565C from bypass in order to reenter monitor setpoints. Again the proper dampers and valves actuated and control room personnel verified that no abnormal radiation condition existed. By 02:18 a.m., IRE-2565C was again placed in bypass and the CVI signal was reset. A licensee investigation demonstrated that the cause of the CVIs was an inadequate installation which left a flow transmitter shield wire exposed that electrically grounded, simulating a loss of power. Corrective action includes insulating the shield wire and providing new default parameters which incorporate the higher actual background values. The new default values should preclude a CVI each time a momentary power loss occurs. The new default values will be closer to the actual setpoint values.

This item represents a violation of NRC requirements which meets criteria for non citation. In order to track this item, the following is identified.

LI 50-424/88-31-2 "Failure To Provide Adequate Work Instruction For The Performance Of Maintenance On The Plant Effluent Monitor System."

5. Followup on Previous Inspection Items - (92701)

- a. (Closed) Unresolved Item 50-424/87-45-01, "Resolve License Condition And DG Action Statement Compliance." This item was established to resolve the applicability of footnotes of the action statement for the diesel generator. Guidance to resolve this item was issued on June 9, 1988 as a change to the NRC Inspection Manual, Part 9900. In summary, this guidance stated that as long as the diesel is inoperable, the plant is considered in the Action Statements of Technical Specifications 3.8.1.1, and any demonstrations of operability of the other diesel shall not be preceded or followed by air roll tests until the plant exits the Action Statement. If the inoperable diesel is declared operable prior to the performance of the testing required by the Action Statement, it is permissible to perform the Air Roll Tests prior to starting the second diesel, even though the plant is still in the Action Statement. The basis for this conclusion is the SER statement quoted above which states that the staff's intent was to prevent both diesels being inoperable at the same time. As long as one diesel is operable, the Air Roll Tests must be performed prior to any planned start per the license condition.

Since the licensee performance was consistent with the NRC intent, the inspector determined that no violation existed. Procedure 13145-1, Rev 11 was reviewed and the inspector noted that proper precautions exist to implement the guidance.

- b. (Closed) Inspector Followup Item 50-424/86-37-04, "Review Final Resolution Between NRR And Applicant Regarding Filter System Classifications For The Four ESF Systems." Section 6.5 of the FSAR was reviewed. This section was revised via Amendment #30 (dated 12/86) to reflect the recognition of three ESF filter systems. These systems are: (1) The control room heating, ventilation, and air conditioning system, (2) The fuel handling building post-accident exhaust system, and (3) The piping penetration filter exhaust system. These systems are each covered by their applicable portions of the plants technical specifications which require surveillance inspections of the system. A sample of the procedures applicable to these systems were also reviewed.
- c. (Closed) Inspector Followup Item 50-424/86-54-01, "Verification That Commitments Are Addressed In Later Modules." The licensee's response dated November 1, 1986, stated that certain commitments not found in Vogtle readiness review module No. 4 would be covered by later modules. The inspector held discussions with the licensee's responsible personnel and examined commitment documents. The inspector verified that commitments missing from module 4 were indeed assigned to later modules.
- d. (Closed) Unresolved Item 50-424/86-77-02, "Quality Assurance For Measuring And Test Equipment." This matter concerned the overall M&TE program involving construction and operation phases. The inspector held discussions with the licensee's responsible personnel and reviewed the construction and control of M&TE program. The inspector verified that the licensee's Quality Assurance for the overall M&TE program has been established and determined to be adequate. Procedure 00208-C, Revision 3, dated December 1, 1986 was reviewed. This procedure was revised to include the use of a M&TE Signout/Tracking Log. (See step 4.3.3 and figure 1). The GPC Reference Standard C-3454 was located on August 11, 1986 as stated GPC memo QCM-620 sated October 8, 1986.
- e. (Closed) Inspector Followup Item 50-424/86-78-03, "Inadequate Review Of Calculation For Steam Generator Main Steam Nozzle Loads." This item concerned that the readiness review team did not identify the incorrect reference and allowable loads used in calculation and noted that the discrepancies had been corrected and completed.

6. Employee Concerns

a. Allegation RII-88-A-0042

Concern

The Quality Concern Program informed the inspector of the status of an anonymous concern regarding railroad track grounding. The original concern was that the plant had failed to ground the railroad

tracks on both units. This concern later included the slowness of the licensee to correct the problem.

Discussion

As of July 15, the unit 2 grounding was complete to the turbine building with the exception of an Isolation Joint. An isolation joint is a section of track which is separately grounding and of sufficiently length to hold the longest expected train without jumpering the sections. This allows separations of the facility from the railroad network. This is expected to be completed by September 1.

Unit 1 grounding will be completed by December 31, 1988. Due to the failure to perform the grounding during construction the unit 1 tracks require modification with jumpers. The design is expected by August 1 with completion as stated above.

Conclusion

Based on this review the allegation is substantiated. Installation of the ground devices is for personnel safety from inadvertent lightning strikes or power lines falling onto the tracks. These faults would not impact the safety of the nuclear facility. The progress made by the licensee is considered to be acceptable considering the extent of engineering necessary for Unit 1 and the construction schedule for Unit 2.

b. Allegation RII-88-A-0044

Concern

NRC Region II received an allegation from an anonymous source that numerous personnel from the plant operations staff were working excessive overtime.

Discussion

The inspector discussed the subject of working excessive overtime with various licensee operations staff and operations management. The inspector found no one who had worked excessive overtime nor knew of anyone who had. The inspector then had the time cards pulled for the past eight consecutive weeks to include all Unit 1 and Unit 2 operations shift staff and supervision personnel (i.e., operators and shift supervisors) and covered shift positions (i.e., licensed plant operators, plant equipment operators and radwaste operators). Review of the time cards revealed two occasions where consecutive eight hour shifts had been worked by two individuals. The dates of these occurrences were June 4 and 18, 1988. In both instances, the personnel involved were plant equipment operators and had volunteered

to work the overtime. The review also verified that the requirements of the Technical Specifications were met regarding overtime.

Conclusion

Based on this review, the inspector could not substantiate the allegation. The inspector notes that the use of overtime in fact, appears to be quite infrequent during this phase of operation. Therefore, the inspector considers this item closed.

7. Inspection To Determine Compliance With ATWS Rule, 10 CFR 50.62 - (TI25020)

This inspection was to determine that ATWS mitigating systems that are not safety related comply with the 10 CFR 50.62 rule and that the effectiveness of the QA controls applied to major activities (design, procurement, installation, and testing), for ATWS equipment that is not safety related complies with Generic Letter 85-06, "QA Guidance For ATWS Equipment That is Not Safety Related," and to assess the operational readiness of ATWS equipment that is not safety related.

Georgia Power submitted on July 30, 1987 their proposal pursuant to the rule. This letter states that the system being installed was submitted to the NRC in WCAP-10858P-A, "AMSAC Generic Design Package" and was approved in an NRC Safety Evaluation Report dated July 7, 1986. The letter then provides the site specific information.

Georgia Power has selected and will implement an ATWS Mitigating Systems Actuation Circuitry (AMSAC) logic which detects a loss of heatsink by monitoring the feedwater flow to each of the steam generators. This actuation logic incorporates an automatic arming and block circuitry based upon turbine load by monitoring the first-stage turbine impulse chamber pressure. This signal, referred to as the C-20 signal, block AMSAC actuation at low power levels to prevent spurious trip during plant startups. The inspector reviewed the material purchase requisition PAVAR-10 dated September 23, 1987. This requisite specifies quality requirements of the order are subject to 10 CFR 50 Appendix B Quality Controls, ANSI N45.2.2 Level B storage requirements, and the AMSAC cabinet and subassemblies qualified to IEEE 344-1975.

The Unit 1 design change package 87-VIE0157 was reviewed and the inspector has no questions. Unit 1 installation has commenced and will be followed in a future inspection. The licensee is committed to have the installation complete following the first refueling. The Unit 2 installation has been completed and preoperational testing remains. The inspection included examination of the installed equipment and control panel alarms. Inspection of preoperational testing will be performed in a future inspection.

The inspector determined that NRR has not issued the safety evaluation report for Vogtle. Further inspection requirements may result when issued.

No violations or deviations were identified.

8. Exit Interviews - (30703)

The inspection scope and findings were summarized on August 2, 1988 with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection results. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection. Region based NRC exit interviews were attended during the inspection period by a resident inspector. This inspection closed two Violations, two Unresolved Items, and three Inspector. The items identified during this inspection were:

Violation 50-424/88-31-01 "Failure To Implement MWO 18803134 Flooding Hazard Prevention Procedure Provisions." - Paragraph 3.b.(7)

Inspector Followup Item 50-424/88-31-02 "Review Engineering Design And Operator Actions For ALB17 A1 - High Feedwater Nozzle Temperature." - Paragraph 3

LIV 50-424/88-31-1 "Failure To Implement Procedures To Ensure A TS Source Check Is Performed Prior to A Liquid Release." - Paragraph 4.b.(2)(b)

LIV 50-424/88-31-2 "Failure To Provide Adequate Work Instruction For The Performance Of Maintenance On The Plant Effluent Monitor System." - Paragraph 4.b.(2)(d)