

Georgia Power Company  
40 Inverness Center Parkway  
Post Office Box 1295  
Birmingham, Alabama 35201  
Telephone 205 877-7122

C. K. McCoy  
Vice President, Nuclear  
Vogtle Project



July 18, 1994

LCV-0406

Docket Nos. 50-424  
50-425

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555

Ladies and Gentlemen:

**VOGTLE ELECTRIC GENERATING PLANT  
REPLY TO A NOTICE OF VIOLATION**

Pursuant to 10 CFR 2.201, Vogtle Electric Generating Plant (VEGP) submits the enclosed information in response to a violation identified in Inspection Reports 50-424,425/94-10 concerning an inspection conducted from April 24 - May 28, 1994.

Should you have any questions, please contact this office.

Sincerely,

*C.K. McCoy*  
C. K. McCoy

CKM/AFS

Enclosure: Reply to a NOV 50-424,425/94-10

xc: Georgia Power Company  
Mr. J. B. Beasley  
Mr. M. Sheibani  
NORMS

U. S. Nuclear Regulatory Commission  
Mr. S. D. Ebner, Regional Administrator  
Mr. D. S. Hood, Licensing Project Manager, NRR  
Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

220000  
9407220076 940718  
PDR ADDCK 05000424  
PDR

JED

## ENCLOSURE 1

### VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 & 2 REPLY TO A NOTICE OF VIOLATION NRC INSPECTION REPORTS 50-424;425/94-10

The following is a transcription of the violation as cited in the Notice of Violation (NOV):

"Technical Specification (TS) 6.7.1a and 6.7.1f requires that written procedures be established, implemented, and maintained covering activities delineated in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, and covering activities implementing the Offsite Dose Calculation Manual (ODCM)

Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, delineates the types of safety-related activities that should be covered by written procedures for startup, operation, shutdown, and procedures for performing maintenance.

Procedure 17037-2, Annunciator Response Procedures for ALB 37 on EAB Panel - Window B02, requires in Step 4.0, Subsequent Operator Actions 2, an operator to be dispatched to the Unit 2 switchgear 2BB16.

Procedure 13715-2, Component Cooling Water System, Step 4.3.2.2, requires an operator to simultaneously stop both running Component Cooling Water (CCW) pumps.

Procedure 35110-C, Chemistry Control of the Reactor Coolant System (RCS), implements, in part, the ODCM. Steps 4.5.5.3.a and 4.5.5.3.c of Procedure 35110-C require sampling and analysis of plant vent and containment purge effluent for tritium and principal gamma emitters, following a unit startup or shutdown, when the RCS Dose Equivalent Iodine-131 (DEI-131) has increased by more than a factor of 3.

Procedure 24552-1, Containment Hydrogen Monitor Train B 1A-12980 Analog Channel Operational Test and Channel Calibration, Steps 4.3.8.2 and 4.3.8.5, require the disconnection of leads from TBQ terminal 84 and TBR3 terminals 30 and 31. Steps 4.3.8.2 and 4.3.8.5 also require independent verification that these leads are disconnected.

Contrary to the above, written procedures were not implemented in that:

1. On April 28, 1994, during performance of Procedure 17037-2, step 4.0 was not completed. A Control Room Operator failed to respond to the Unit 2 switchgear 2BB16, and instead, incorrectly responded to the Unit 1 switchgear 1BB16.
2. On April 29 1994, during performance of Procedure 13715-2, step 4.3.2.2 was not completed. A Control Room Operator failed to simultaneously stop both running CCW pumps. The operator incorrectly simultaneously stopped Nuclear Service Cooling Water Pumps 2 and 4.

## ENCLOSURE 1 (CONTINUED)

### VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 & 2 REPLY TO A NOTICE OF VIOLATION NRC INSPECTION REPORTS 50-424;425/94-10

3. On May 19, 1994, during performance of Procedure 35110-C, step 4.5.5.3.c was not completed. Chemistry technicians failed to sample and analyze the containment purge for tritium and principal gamma emitters following the Unit 2 shutdown, when the RCS DEI-131 had increased by more than a factor of 3.
4. On May 20, 1994, during performance of Procedure 35110-C, steps 4.5.5.3.a and 4.5.5.3.c were not completed. Chemistry technicians failed to sample and analyze the plant vent and containment purge effluent for tritium and principal gamma emitters following the Unit 2 startup, when RCS DEI-131 had increased by more than a factor of 3.
5. On May 23, 1994, during performance of Procedure 24552-1, steps 4.3.8.2 and 4.3.8.5 were not completed. An Instrumentation and Controls Maintenance technician failed to disconnect the leads from TBQ terminal 84 and TBR3 terminals 30 and 31. This technician incorrectly disconnected the leads from TBQ terminal 84 and TBR3 terminals 30 and 31 (the A train hydrogen monitor). This error was then incorrectly independently verified.

This is a Severity Level IV violation (Supplement 1)."

### RESPONSE TO VIOLATION (50-424;425/94-10-01)

*(Example 1)*

#### Admission or Denial of the Violation (Example 1):

This example of the violation occurred as stated in the notice of violation.

#### Reason for the Violation (Example 1):

GPC has concluded that this example of the violation was caused by personnel failing to utilize the appropriate procedure for performing the required action, and utilization of inadequate verbal communication. Contributing to this example was the failure to follow procedure 13150-2 when attempting to stop the #2 fan on "B" Train NSCW tower. If the involved individual had held the stop switch for the required three seconds, the fan would have stopped as designed and it would have then been unnecessary to send an operator to the switchgear to reset the fan breaker for 2BB16. However, when the operator was

## ENCLOSURE 1 (CONTINUED)

### VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 & 2 REPLY TO A NOTICE OF VIOLATION NRC INSPECTION REPORTS 50-424;425/94-10

dispatched to the breaker for 2BB16, communications between the operator at the breaker and the control room operator were inadequate in that they verbally referred to BB16 not 2BB16, thereby setting up the possibility of inadvertently resetting the wrong unit's breaker. If 2BB16 versus BB16 had been utilized in all verbal communications, this event could have probably been averted.

#### Corrective Steps Which Have Been Taken and the Results Achieved (Example 1):

The involved individuals have been counseled on procedure adherence and reminded of management's expectations relating to procedure compliance and utilization of closed-looped verbal communications.

A shift briefing item has been issued to inform operations shift personnel of this event, its significance and the importance of utilizing the appropriate verbal communications with unit identification.

A summary of this event has been placed in the Operation's Reading Book (ORB) for the operators to review the causes and consequences of failure to follow procedures and inadequate verbal communications.

#### Corrective Steps Which Will Be Taken to Avoid Further Violations (Example 1):

All corrective actions for this example have been completed and no further action is warranted at this time.

#### Date When Full Compliance Will Be Achieved (Example 1):

Full compliance was achieved on April 28, 1994 when the Unit 1 switchgear 1BB16 was returned to service thereby restoring one train of Unit 1's ultimate heat sink which had been lost momentarily. Subsequently, switchgear 2BB16 was properly reset.

*(Example 2:)*

#### Admission or Denial of the Violation (Example 2):

This example of the violation occurred as stated in the notice of violation.

## ENCLOSURE 1 (CONTINUED)

### VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 & 2 REPLY TO A NOTICE OF VIOLATION NRC INSPECTION REPORTS 50-424;425/94-10

#### Reason for the Violation (Example 2):

GPC has concluded that this example of the violation was due to a cognitive personnel error by the involved individual due to inadequate self-checking prior to stopping the NSCW pumps #2 and #4. The operator was performing a functional test on CCW pump #4 and as part of the evolution, CCW pumps #2 and #4 were started. After a successful functional test of the CCW pumps, the operator was preparing to shutdown the CCW pumps and place them in standby. The operator inadvertently stopped the NSCW pumps #2 and #4 instead of the intended CCW pumps #2 and #4. The standby NSCW pump #6 auto started on low header pressure thereby allowing some system flow to be maintained. Subsequently, when NSCW pumps #2 and #4 discharge valves closed, the pumps auto started thereby restoring full system flow.

#### Corrective Steps Which Will Be Taken and the Results Achieved (Example 2):

The involved operator has been counseled on management's expectations relating to self-checking. Additionally, summary of this event was placed in the ORB to ensure all operators are fully aware of the causes and consequences of inadequate self-verification.

#### Corrective Steps Which Will Be Taken to Avoid Further Violations (Example 2):

All corrective actions for this example have been completed and no further action is warranted at this time.

#### Date When Full Compliance Will Be Achieved (Example 2):

Full compliance was achieved on April 29, 1994, when the Unit 2 Train 'B' NSCW pumps auto started after the pumps discharge valves closed and CCW pumps #2 and #4 were stopped as required by procedure.

*(Example 3 & 4)*

#### Admission or Denial of the Violation (Example 3 & 4):

These examples of the violation occurred as stated in the notice of violation.



ENCLOSURE 1 (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 & 2  
REPLY TO A NOTICE OF VIOLATION  
NRC INSPECTION REPORTS 50-424;425/94-10

Reason for the Violation (Example 3 & 4):

GPC has concluded that these examples of the violation were caused by personnel failing to follow procedures, inadequate shift turnover, less than adequate verbal/written communications and a lack of questioning attitude by the involved personnel. Data Sheet 5 of procedure 35110-C was reviewed by the Chemistry foreman prior to all data being collected.

Corrective Steps Which Have Been Taken and the Results Achieved (Example 3 & 4):

The involved individuals have been counseled about the importance of using clear, concise communications, use of procedures during task performance, verifying of procedure pre-requisites, and exhibiting a questioning attitude to ensure required actions are fully understood.

Corrective Steps Which Will Be Taken to Avoid Further Violations (Example 3 & 4):

Procedure 35110-C will be revised by August 15, 1994 to require the collection of all data prior to completion of Data Sheet 5.

Date When Full Compliance Will Be Achieved (Example 3 & 4):

Full compliance was achieved on May 21, 1994, when plant vent effluent was sampled and analyzed for tritium and principal gamma emitters, and containment purge was verified to be closed.

*(Example 5)*

Admission or Denial of the Violation (Example 5):

This example of the violation occurred as stated in the notice of violation.

## ENCLOSURE 1 (CONTINUED)

### VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 & 2 REPLY TO A NOTICE OF VIOLATION NRC INSPECTION REPORTS 50-424;425/94-10

#### Reason for the Violation (Example 5):

GPC has concluded that this example of the violation was due to a cognitive personnel error by the involved individuals due to inadequate self-checking and independent verification prior to performing a channel calibration on Train B Containment Hydrogen Monitor. Contributing to this was inadequate labeling of the Hydrogen Monitor cabinets. The cabinets are clearly labeled on the front, however, when performing the channel calibration, the technician is required to enter the cabinets from the back. The cabinets are not clearly labeled on the back to denote Train A or Train B and when the technician went to the back of the cabinet to perform calibration, he opened the door to Train A instead of Train B. When the leads were lifted, an alarm annunciated in the Main Control Room (MCR) for the Train A monitor. The Operations Shift Supervisor acknowledged the alarm and instructed the technicians to stop the work they were performing. The technicians immediately relanded the leads thereby restoring Train A Hydrogen Monitor to service.

#### Corrective Steps Which Have Been Taken and the Results Achieved (Example 5):

The involved technicians have been counseled on management's expectations relating to self-checking and independent verification.

#### Corrective Steps Which Will Be Taken to Avoid Further Violations (Example 5):

Instrumentation & Controls technicians will be briefed by July 31, 1994, on this event and its causes and consequences.

The involved technicians will re-review the STAR interactive video to re-enforce the concepts of self-checking when performing any maintenance activities. This is expected to be completed by July 31, 1994.

A summary of this event will be added to the I & C Continuing Training program by July 31, 1994 to ensure all I & C technicians are fully aware of its causes and consequences and of management's expectations for adequate self-checking and independent verification.

Labels will be added to the rear cabinet doors of both Unit 1 and Unit 2 Hydrogen Monitor panels to more clearly denote Train A and Train B monitors, by July 31, 1994.

ENCLOSURE 1 (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 & 2  
REPLY TO A NOTICE OF VIOLATION  
NRC INSPECTION REPORTS 50-424;425/94-10

Date When Full Compliance Will Be Achieved (Example 5):

Full compliance was achieved on May 23, 1994, when the leads for Train A Hydrogen Monitor were relanded, a satisfactory channel check was performed, and the monitor returned to service.

Summary

Georgia Power Company (GPC) is carefully reviewing these incidents to improve our human performance and to reduce errors caused by procedure noncompliance or inattention to detail. Additional initiatives are being pursued by GPC with the intent of improving human performance and reducing procedure violations such as those examples in this Notice of Violation. The self-checking (STAR) program is being emphasized and monitored to ensure that its practices are being implemented and endorsed throughout the plant. Specifically emphasized was the identification of problems and deficiencies caused by human performance errors in order to allow for its earlier review, implementation of corrective action, and trending.