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Georgia Power
the southern electric system

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ELV-03419
001137

Docket No. 50-424

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

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT
REPLY TO A NOTICE OF VIOLATION

Pursuant to 10 CFR 2.201, Georgia Power Company submits the enclosed response to the violations identified as a result of the special inspection conducted by the Augmented Inspection Team during the period of October 29 - November 1, 1991.

Should have have any questions, please contact this office.

Sincerely,

C. K. McCoy

CKM/NJS/gmb

Enclosure

xc: Georgia Power Company
Mr. W. B. Shipman
Mr. M. Sheibani
NORMS

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

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ENCLOSURE

VOGTLE ELECTRIC GENERATING PLANT - UNIT 1
REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION REPORTS 50-424/91-30 AND 50-425/91-30

The following is a transcription of the three violations as cited in the Notice of Violation:

A. "Technical Specification 6.7.1.a requires written procedures be established, implemented, and maintained covering activities referenced in Regulatory Guide 1.33, Appendix A, Revision 2, February 1978. Activities referenced include general plant operating procedures for refueling. Implicit in this TS is the requirement that the procedures contain adequate guidance to ensure those activities are conducted properly.

Contrary to the above, on October 26, 1991, procedures used for reducing reactor water level provided no instructions directing Operations to verify that a correct reactor water level indication lineup existed, and provided no instructions to ensure an adequate vent path was established.

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

B. 10 CFR 50, Appendix B, Criterion III, Design Control, requires that design control measures shall provide for verifying the adequacy of design, such as by performance of design reviews. In addition, design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design. Measures shall also be established for the identification and control of design interfaces and for coordination among participating design organizations.

Contrary to the above,

1. The licensee failed to verify the adequacy of the design for the reactor water level indicating system. The connection of a High Efficiency Particulate Absorber (HEPA) filter to the Unit 1 pressurizer vent point affected the visual and electronic water level instruments in a nonconservative manner during the October 26, 1991, reactor water level draindown. An analysis for connecting the HEPA filter to this safety related system was not performed. Thus, the effect of this design change was not adequately reviewed.

2. The licensee failed to establish control and coordination among participating design organizations for the Unit 1 reactor water level indicating sightglass. The sightglass modification had not been adjusted and functionally tested by the Maintenance department. Thus, the Control Room had not been notified in writing that the modification was complete and ready for use. During the October 26, 1991 event in which reactor water level was reduced, the Operations department used the reactor water level indicating sightglass as one method of water level indication.

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

C. 10 CFR 50.72(b)(2)(iii)(B) requires the licensee to notify the NRC within four hours of the occurrence of an event that could have prevented the fulfillment of the safety function of systems needed to remove residual heat.

Contrary to the above, on October 26, 1991, the licensee failed to notify the NRC within four hours when the "B" RHR pump was removed from service due to a cavitation problem. Had the "A" RHR pump been placed in operation under existing conditions, it would have experienced a similar cavitation problem. Thus, the RHR system could not have performed its safety function.

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

RESPONSE TO VIOLATION A

Admission or Denial of the Violation

The violation occurred as stated in the above notice and was reported to the NRC as Licensee Event Report 50-424/1991-009.

Reason for the Violation

Procedure 12000-C, "Post Refueling Operations (Mode 6 to Mode 5)," and Procedure 13011-1, "Residual Heat Removal System," were the procedures utilized on October 26, 1991, to lower the reactor cavity water level to allow the reinstallation of the reactor vessel head. As stated in the notice of violation, no procedural steps or cautions were provided in these procedures to verify the lineup for the reactor water level instrumentation to be used during the evolution or to verify the adequacy of vent path(s) prior to commencing the

draindown. The root cause for this lack of instruction was an oversight in the preparation of the procedures. Since other procedures which provide instructions for performing the initial reactor coolant system (RCS) draindown during refueling operations did provide sufficient controls to ensure the correct initial installation/lineup for the level instrumentation and the adequacy of vent path(s), the need to provide procedural controls to reverify these items for the subsequent draindown evolution had not been recognized prior to the occurrence of the event.

Corrective Steps Taken and Results Achieved

- Procedure 12000-C has been revised to include a step and a checklist to be completed to ensure the reactor water level indicating sightglass is correctly aligned prior to commencing the draindown for the reinstallation of the reactor vessel head. Also, a step has been added to verify that an adequate RCS vent path is open and unobstructed prior to commencing the draindown. The preferred vent path specified by the procedure is either the removal of the pressurizer manway or a pressurizer safety valve.

- Procedure 12007-C, "Refueling Operations (Mode 5 to Mode 6)," and Procedure 12008-C, "Mid-Loop Operations," have also been revised to include the above additional administrative controls.

Corrective Steps That Will Be Taken to Avoid Further Violations

Procedures providing instructions for draining the RCS will be enhanced by locating a set of comprehensive draining instructions in one procedure. This will further ensure that equivalent verifications of vent paths and level instrumentation occur for all draindown evolutions. Additional procedure enhancements are being considered to provide further assurance that accurate level instrumentation is available as appropriate for all stages of the refueling outage. Procedure changes, as appropriate, are expected to be implemented prior to the Unit 2 refueling outage which is currently scheduled to begin March 13, 1992. While some additional procedure enhancements are expected, the procedure revisions that have already been accomplished are considered adequate to prevent further events involving inadvertent excess lowering of RCS level.

Date When Full Compliance Will Be Achieved

Full compliance was achieved on December 2, 1991, when procedures 12000-C, 12007-C, and 12008-C were revised as discussed above.

ENCLOSURE (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT - UNIT 1
REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION REPORTS 50-424/91-30 AND 40-425/91-30

RESPONSE TO VIOLATION B

Admission or Denial of the Violation

The violation occurred as stated in the above notice. The improper installation of the HEPA filter, which resulted in a common mode failure for all available level instrumentation, and the inappropriate use of the reactor water level indicating sightglass was discussed in Licensee Event Report 50-424/1991-009.

Reason for the Violation

The root cause for the lack of an analysis or a work order for the installation of the HEPA filter was inadequate administrative controls. Procedure 47009-C, "Operation and Use of Portable Ventilation Units," did not contain a requirement to obtain an analysis or to initiate a work order prior to allowing the connection of a portable HEPA filter to safety-related equipment.

The root cause for the Operations Department's attempt to use the reactor water level indicating sightglass, which had not been functionally tested nor released for Operations' use, was a combination of a missing clearance tag which had been installed on the lower isolation valve of the sightglass but was not present at the time that the sightglass was placed in service, the involved personnel not maintaining adequate awareness of the modification status of the sightglass, and the fact that the modification status system itself was somewhat cumbersome.

Corrective Steps Taken and Results Achieved

Procedure 47009-C has been revised to prohibit the attachment of a portable HEPA filter's suction or discharge trunk to permanent plant equipment until a Request for Engineering Review (RER) has been dispositioned approving the specific application.

Shift personnel involved in the event were appropriately disciplined and counseled regarding the need for additional emphasis on maintaining awareness of plant configuration status and the need to fully investigate problems/inconsistencies noted during major evolutions.

Corrective Steps That Will Be Taken to Avoid Further Violations

An initial review has been completed to determine what procedure or hardware modifications could be completed to avoid the potential that a single failure or inappropriate action could result in a common mode failure of all available level instrumentation during draindown evolutions. For the upcoming Unit 2 refueling outage, we plan to vent the sightglass to the containment atmosphere to address this issue. Several other procedural and/or alignment alternatives

have also been identified which would help to avoid the potential common mode effects of a single vent path. These alternatives are presently being evaluated for future outages and, as appropriate, will be incorporated along with the additional procedure enhancements which were discussed in the response to Violation A.

A case study to emphasize the lessons learned from the October 26, 1991, event has been developed and is being presented to licensed operators during requalification training in January and February 1992. The need to be aware of plant configuration status will be emphasized.

To address the weaknesses noted in the modification status system, Procedure 50007-C, "Engineering Review of Design Change Packages," and Procedure 50008-C, "DCP Implementation and Closure," have been revised to increase the shift supervisor's awareness of modification status and to ensure that required procedure changes, drawing revisions, training, or other possible restraints are known prior to a system being "returned to service." Training of the Operations' staff with regard to these procedure changes is expected by March 13, 1992.

To further improve the operator's knowledge of plant configuration status, the clearance and tagging system is being revised to enhance the operator's ability to maintain awareness of clearances that are active. Proposed revisions include sorting clearances by system, instead of by number. In addition, although not directly related to this event, improvements in the administration and recording of limiting conditions for operation (LCOs) during outages will be made to ensure that LCOs are properly and clearly recorded and that plant status is more fully communicated at shift turnover.

Date When Full Compliance Will Be Achieved

Full compliance will be achieved by March 13, 1992, when the above actions to present the case study, to fully implement the changes to the modification status system, and to revise the clearance and tagging system are expected to be complete.

RESPONSE TO VIOLATION C

Admission or Denial of the Violation

The violation occurred as stated in the above notice. As a minor point of clarification, it is noted that a post-event review of available data determined that the "B" residual heat removal (RHR) pump experienced vortexing but did not experience cavitation. This was discussed in Licensee Event Report 50-424/1991-009. Also, it is noted that the "B" RHR pump was never completely "removed from service;" rather, its discharge valves were closed, which temporarily placed the pump on miniflow alignment.

ENCLOSURE (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT - UNIT 1
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Reason for the Violation

Following the event, the shift superintendent discussed the event with the Operations superintendent and the Operations manager. It was noted that no apparent degradation had occurred for either RHR pump. Also, at that time, it was believed that the "A" RHR pump had not experienced any air ingestion or vortexing. Therefore, the operability of the "A" RHR pump was believed to have been preserved throughout the event. Based on these observations, the shift superintendent made a determination on October 26, 1991, that the event did not represent a reportable condition pursuant to 10 CFR 50.72(b)(2)(iii). Subsequently, in performing a post-event review of computer data which were not available to the operators at the time of the event, it was determined that some air ingestion had probably started to occur for the "A" RHR pump shortly before its discharge valve was closed to stop the draindown. Based on this information from the post-event critique, it was recognized that the event could have prevented the fulfillment of the residual heat removal safety function of the RHR system and should have been reported pursuant to 10 CFR 50.72(b)(2)(iii).

Corrective Steps Taken and Results Achieved

An Event Notification pursuant to 10 CFR 50.72(b)(2)(iii) was made on November 6, 1991.

Corrective Steps That Will Be Taken to Avoid Further Violations

Training on the reporting criteria of 10 CFR 50.72(b)(2)(iii) will be provided to appropriate management personnel, shift supervisors, and shift superintendents. This training will emphasize that the basis for reportability should be whether an event "could have" prevented the fulfillment of a safety system function, not whether the event actually resulted in a loss of a safety function. Additionally, it will be stressed that, whenever possible, management should be consulted when making the reportability determination.

Date When Full Compliance Will Be Achieved

Compliance was achieved on November 6, 1991, when the event was reported pursuant to 10 CFR 50.72(b)(2)(iii).