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U.S. Nuclear Regulatory Commission
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PLANT HATCH - UNITS 1, 2
NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
REVISION 1 TO RESPONSE TO INSPECTION REPORT 91-04

Gentlemen:

In response to your letter of May 9, 1991 and in accordance with the provisions of 10 CFR 2.201, Georgia Power Company (GPC) is providing the enclosed revision to the Notice of Violation associated with NRC Inspection Report 91-04. The changes to Enclosure 3, Violation 91-04-04, are designated by change bars in the left margin. A copy of this response is being provided to NRC Region II for review.

Should you have any questions in this regard, please contact this office.

Sincerely,

J. T. Beckham, Jr.

SRP/sp

Enclosures

cc: Georgia Power Company
Mr. H. L. Sumner, General Manager - Nuclear Plant
Mr. J. D. Heidt, Manager Engineering and Licensing - Hatch
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U.S. Nuclear Regulatory Commission, Washington, D.C.
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ENCLOSURE 1

PLANT HATCH - UNIT 2
NRC DOCKET 50-366
OPERATING LICENSE NPF-5
VIOLATION 91-04-01 AND GPC RESPONSE

VIOLATION 91-04-01

10 CFR 50 Appendix B Criterion III, Design Control, requires, in part, for measures to be established to assure that design basis requirements are correctly translated into procedures and instructions.

Contrary to the above, between February 1985 and February 1991, design basis requirements contained in engineering calculations were not correctly translated into procedures in that the High Pressure Core Injection (HPCI) Condensate Storage Tank (CST) level switch setpoints (level switches 2E41-N002 and 2E41-N003) were incorrectly set to ensure a successful transfer of the HPCI suction source to the torus on low CST water level.

This is a Severity Level IV Violation (Supplement I).

This violation is applicable to Unit 2 only.

RESPONSE TO VIOLATION 91-04-01

Admission or denial of violation:

The violation occurred as described in the Notice of Violation.

Reason for the violation:

The level switch setpoint changes calculated as part of DCR 84-138 for Condensate Storage Tank (CST) level switches 2E41-N002 and 2E41-N003 were not implemented in 1985 as a result of personnel error. Specifically, individuals involved in the development, review, and implementation of the level switch setpoint changes in 1985 apparently failed to attach the appropriate level of significance to the setpoint changes, in part, because the existing setpoints were in compliance with the literal wording of the Technical Specifications. A contributing cause was a design change process which did not require detailed documentation that would prominently identify deficient plant conditions.

Proposed new setpoints for CST level switches 2E41-N002 and 2E41-N003 were transmitted to Plant Hatch in April 1985 as part of Design Change Request (DCR) 84-138. This DCR was initiated as part of a program to establish an instrument setpoint index, establish consistency with the recommendations of Regulatory Guide 1.105, and implement setpoint changes calculated by the plant's Architect/Engineer (A/E). This DCR contained many setpoint changes covering numerous plant systems and components.

VIOLATION 91-04-01 AND GPC RESPONSE

The new setpoints for the level switches proposed by DCR 84-138 were approximately 22 inches higher than the existing setpoints. The information transmitted to the plant by the A/E stated the existing setpoints were "lower than the PSL (process safety limit)." However, it was not clear that the existing setpoints represented equipment operability or Technical Specifications compliance concerns. In fact, a review of the design modification transmittal packages associated with DCR 84-138 indicated a potential for a misunderstanding with regard to the necessity for implementing the higher setpoints.

An earlier setpoint index transmittal dated 9/11/84 noted the proposed setpoint changes did not constitute previous design deficiencies but were upgrades of the design philosophy to then present day standards (e.g., Regulatory Guide 1.105 recommendations). The proposed changes identified in the April 1985 transmittal were described as conservative than existing setpoints. It should be noted that existing level switch setpoints were in compliance with the literal meaning of the Technical Specifications, i.e., initiate suction source transfer with 10,000 gallons of water remaining in the CST, hence the identification of their change as "conservative". Finally, a subsequent transmittal stated the proposed setpoint changes constituted an improved design. Given this information, it appears that individuals involved in the development, review, and implementation of DCR 84-138 in 1985 failed to realize the significance of the setpoint changes to CST level switches 2E41-N002 and 2E41-N003. Consequently, the level switch setpoint changes were not implemented until their significance became clear in January 1991.

Corrective steps which have been taken and the results achieved:

As a result of this event, the following corrective actions have been taken:

1. Upon determination the setpoints for CST level switches 2E41-N002 and 2E41-N003 were incorrectly set, the level switches were declared inoperable. The High Pressure Coolant Injection (HPCI) system, at the time the CST level switches were declared inoperable, was already aligned to take suction from the Suppression Pool, its alternate suction source. The HPCI system was left with the Suppression Pool as its suction source until the CST level switch setpoints were changed.

2. DCR 2H91-023 was implemented to raise the CST level switch setpoints approximately 22 1/2 inches. A/E calculations show the HPCI system will have adequate flow and suction pressure throughout the entire suction source transfer sequence at the new, higher setpoints.

3. CST level switches 2E41-N002 and 2E41-N003 were functionally tested per plant procedures following implementation of DCR 2H91-023. They were declared operable on 2/8/91 at approximately 0400 CST. The HPCI system was aligned to take suction from the CST, its normal suction source.

4. The setpoints for the corresponding CST level switches for the Unit 1 HPCI system and the Unit 1 and Unit 2 Reactor Core Isolation Cooling systems were reviewed. These setpoints were determined to be correct.

5. A review of all the setpoint changes within the scope of DCR 84-138 was initiated to ensure all proposed changes either have been implemented or the unmodified setpoints do not present any safety concerns. The review of the proposed setpoint changes for both Unit 1 and Unit 2 safety-related instruments has been completed. No unmodified setpoints were found to present any safety concerns.

6. The existing design change process is substantially different from the one which existed in 1985. Specifically, present design change packages have more detailed narrative design summaries and safety evaluations than were typically prepared for DCRs in the 1985 time frame. These more detailed documents prominently identify unacceptable plant conditions and place more emphasis on the need to change them. Also, in general, multiple plant systems are no longer covered by a single DCR. This helps ensure safety significant changes are not masked by numerous other changes to a variety of plant systems.

7. Due to the elasped time since the personnel error occurred, counseling of involved individuals was not considered to be effective.

Corrective steps which will be taken to avoid further violations:

No further corrective actions are necessary to prevent recurrence.

Date when full compliance will be achieved:

Full compliance was achieved on 2/8/91 when the setpoints for CST level switches 2E41-N002 and 2E41-N003 were raised per DCR 2H91-023, and the level switches were functionally tested per plant procedures and declared operable.

ENCLOSURE 2

PLANT HATCH - UNIT 1
NRC DOCKET 50-321
OPERATING LICENSE DPR-57
VIOLATION 91-04-02 AND GPC RESPONSE

VIOLATION 91-04-02

Technical Specification (TS) 6.8.1.a requires that written procedures be established, implemented, and maintained as recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.

Section 6u of Appendix "A" of Regulatory Guide 1.33, recommends procedures for responding to a Reactor Trip.

Procedure 34AB-OPS-060-1S, Rev. 1, "Scram Procedure" provides written instructions for operator actions to be performed in the event of a reactor scram. This procedure specifies the insertion of Source Range Monitors (SRMs) and Intermediate Range Monitors (IRMs) as an initial operator action following a scram.

Contrary to the above, on February 12, 1991, the SRMs and IRMs were not inserted until approximately 25 minutes after the Unit 1 reactor scram.

This is a Severity Level IV Violation (Supplement I).

This violation is applicable to Unit 1 only.

RESPONSE TO VIOLATION 91-04-02

Admission or denial of violation:

The violation occurred as described in the Notice of Violation.

Reason for the violation:

The violation is the result of personnel error by licensed Operations personnel. The Operator responsible for inserting the Source Range Monitor and Intermediate Range Monitor detectors failed to ensure the detectors were inserted as required by procedure 34AB-OPS-060-1S, "Scram Procedure." In order to insert the detectors, they must be selected by depressing their respective select push buttons. The "drive in" push button then must be depressed. Apparently, the Operator depressed the "drive in" push button, but did not depress the four select push buttons for the Source Range Monitor detectors and the eight select push buttons for the Intermediate Range Monitor detectors. Consequently, the detectors did not move. The Operator also failed to verify detector movement by observing the "out" light for each detector extinguished and the "in" light illuminated.

VIOLATION 91-04-02 AND GPC RESPONSE

Corrective steps which have been taken and the results achieved:

As a result of this event, the involved Operator has been counseled regarding attention to detail and the need for self-checking of his actions.

Corrective steps which will be taken to avoid further violations:

The Operations Department will perform beginning of shift training which describes the event, the root cause of the event, and the importance for attention to detail and the need for self-checking of actions. This training will be complete 5/15/91.

Date when full compliance will be achieved:

Full compliance was achieved on 2/12/91 when the Source Range Monitor and Intermediate Range Monitor detectors were inserted as required by procedure 34AB-OPS-060-1S.

ENCLOSURE 3

PLANT HATCH - UNIT 1
NRC DOCKET 50-321
OPERATING LICENSE DPR-57
VIOLATION 91-04-04 AND GPC RESPONSE

VIOLATION 91-04-04

TS 6.8.1.c requires that written procedures be established, implemented and maintained for surveillance and test activities of safety related equipment. Plant administrative procedure 10AC-MGR-002-0S; "Preparation and Control of Procedures", contains the requirements for the "independent verification" process. The independent verification process is utilized throughout the surveillance testing program.

1. Step 7.5.19 of procedure 34SV-C71-005-1S, "Turbine Control Valve Fast Closure Instrument Functional Test," requires a jumper to be removed and independently verified as such from relay 1C71-K8C.

   Contrary to the above, on February 27, 1991, the jumper was not removed and the independent verification process was not properly performed. During a subsequent surveillance, on February 27, 1991, the Unit 1 reactor scrammed due to the failure to remove the jumper.

2. Steps 7.1.46.5 and 7.1.46.6 of procedure 57SV-D11-016-1S; "GE Numac Main Steam Line Logarithmic Radiation Monitor Functional Test", requires links DD-16 and DD-17 to be closed and independently verified as such. Additionally, step 4.3.4 of procedure 57SV-D11-016-1S requires the use of temporary modification tags in conjunction with the performance of the surveillance.

   Contrary to the above, on February 27, 1991, the links were not closed and the independent verification process was not properly performed. In addition, temporary modification tags were not utilized.

3. Procedure 57SV-SUV-011-1S, "ATTS Panel 1H11-P925 Channel Functional Test and Calibration" requires link BB-41 to be opened prior to simulating an isolation signal to prevent the RCIC outboard steam supply valve from automatically closing.

   Contrary to the above, on 2/25/91, during performance of the procedure, the link was not fully opened as required. Consequently, the control circuit was not open at the link and when the isolation signal was simulated, the RCIC outboard steam supply valve received an isolation signal and subsequently closed. (This event was reported in LER 50-321/91-06, dated 3/25/91, and was included in this revision to the Inspection Report response as requested by NRC Region II management in Inspection Report 91-08.)

VIOLATION 91-04-04 AND GPC RESPONSE

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

This violation is applicable to Unit 1 only.

RESPONSE TO VIOLATION 91-04-04

Admission or denial of violation:

The violations occurred as described in the Notice of Violation.

Reason for the violation:

The violations were caused by personnel error by Instrument and Control (I&C) technicians. In the events, I&C technicians failed to follow procedure requirements. In the first event, I&C technicians failed to remove a jumper and independently verify its removal, as required by procedure 34SV-C71-005-1S, "Turbine Control Valve Fast Closure Instrument Functional Test." In the second event, I&C technicians failed to close links and independently verify their closure, as required by procedure 57SV-D11-016-1S, "GE Numac Main Steam Line Logarithmic Radiation Monitor Functional Test." The technicians also failed to use temporary modification tags as required by the procedure. In the third event, an I&C technician failed to fully open link BB-41, as required by procedure 57SV-SUV-011-1S, "ATTS Panel 1H11-P925 Channel Functional Test and Calibration."

Corrective steps which have been taken and the results achieved:

As a result of the first two events, the following corrective actions have been taken:

1. The Unit 1 and Unit 2 Main Control Room panels were inspected for proper condition of relays and links. No similar conditions were found, although some deficiencies were identified and corrected.

2. Involved personnel were disciplined in accordance with GPC policy. They were suspended from their duties and their certification for performing safety related activities was revoked. The disciplinary action included personal interviews with the plant General Manager. They were retrained on quality activity performance requirements. The retraining included written exams and in-plant demonstrations.

ENCLOSURE 3

VIOLATION 91 04-04 and GPC RESPONSE

3. The General Manager directed that each department manager conduct meetings with every employee to emphasize the importance of these events. Specific areas which were stressed were, attention to detail, strict procedural compliance, the significance of personal signatures, and the personal accountability of individuals performing safety-related activities.

4. Within the Maintenance Department, the Manager of Maintenance directed that all personnel receive formal training with regard to the requirements for independent verification. This training has been completed. In addition, tool box meetings were conducted for all Maintenance personnel which involved detailed discussion of the causes and consequences of the five scrams as of March 1, .

5. As a direct result of the examples of inadequate independent verification, the Manager of Maintenance required, for a two week period, that for any activity which required independent verification, a third party "as left" inspector would confirm that both the activity and verification were performed in strict procedural compliance. No deficiencies were identified.

As a result of the third event, the involved technicians have been counseled concerning the event.

Corrective steps which will be taken to avoid further violations:

No further corrective actions are necessary to prevent recurrence.

Date when full compliance will be achieved:

Full compliance was achieved on 2/27/91 when the jumper was removed and the two links closed.