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J. T. Beckham, Jr.
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HL-1599
001540

May 15, 1991

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

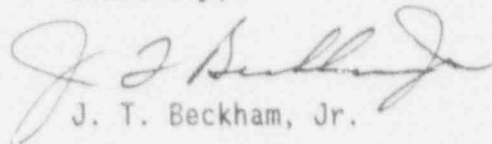
PLANT HATCH - UNITS 1, 2
NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
RESPONSE TO NOTICE OF VIOLATION
AND PROPOSED IMPOSITION OF CIVIL PENALTY

Gentlemen:

In response to your letter of April 15, 1991, and in accordance with the provisions of 10 CFR 2.201, Georgia Power Company is providing the enclosed response to the Notice of Violation associated with NRC Inspection Report 91-05. A copy of this response is being provided to NRC Region II for review. In the enclosure, a transcription of the NRC violation precedes GPC's response.

In addition to the enclosure, a check in the amount of Fifty Thousand Dollars (\$50,000) is enclosed in response to the civil penalty.

Sincerely,


J. T. Beckham, Jr.

JKB/cr

Enclosures

cc: (See next page.)

9105220125 910515
PDR ADOCK 05000321
Q PDR

IFIA w/ check
\$50,000
917625

U.S. Nuclear Regulatory Commission

May 15, 1991

Page Two

cc: Georgia Power Company

Mr. H. L. Sumner, General Manager - Nuclear Plant

Mr. J. D. Heidt, Manager Engineering and Licensing - Hatch
NORMS

U.S. Nuclear Regulatory Commission, Washington, D.C.

Mr. K. Jabbour, Licensing Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II

Mr. S. D. Ebnetter, Regional Administrator

Mr. L. D. Wert, Senior Resident Inspector - Hatch

ENCLOSURE 1

PLANT HATCH - UNITS 1 AND 2
NRC DOCKETS 50-321 AND 50-366
OPERATING LICENSES DPR-57 AND NPF-5
VIOLATION 91-05-01 AND GPC RESPONSE

VIOLATION 91-05-01

"Technical Specification 6.8.1 requires that written procedures shall be established, implemented, and maintained covering the activities referenced in the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Paragraph 1.b of Appendix A of Regulatory Guide 1.33 states that the licensee should have procedures that establish the authorities and responsibilities for safe operation. Licensee Administrative Control Procedure, Plant Operations, 30AC-OPS-003-OS, Revision 10, dated August 31, 1990, states in step 8.2.4 that no activity will be performed in the Main Control Room that might affect operations unless the Shift Supervisor and Operator approve such activities.

Contrary to the above requirements, on February 11, 1991, an individual operated the TIPs from the Main Control Room without the approval of the Shift Supervisor and Operator.

This is a Severity Level III violation (Supplements I and IV).
Civil Penalty - \$50,000"

Response to Violation 91-05-01

Admission or denial of violation:

GPC admits a procedure violation occurred. Specifically, procedure 42CC-ERP-015-OS, "OD-1 and OD-2 NUMAC TIP OPERATION," steps 7.2.1 and 7.2.2, were not performed correctly.

GPC maintains that the unauthorized traversing incore probe (TIP) operation, which occurred on February 11, 1991, did not create either a substantial exposure or the substantial potential for significant personnel exposure. The event was identified by GPC, thoroughly investigated by GPC, and evaluated and determined not to represent a reportable condition. As described in the Enforcement Conference, Health Physics (HP) personnel used approved and appropriate procedures to perform the decontamination surveys. Additionally, the HP personnel involved in this event had been trained to perform surveys by alternating dose rate readings and samples. Both personnel training and procedures provide necessary and sufficient barriers and protection to prevent a significant personnel exposure when considering hypothetical entries into the TIP room concurrent with unauthorized TIP operation.

ENCLOSURE 1 (Continued)

VIOLATION 91-05-01 AND GPC RESPONSE

GPC does not understand the basis for the NRC's determination that a substantial potential for overexposure existed. During the Enforcement Conference, the NRC stated that GPC's non-reportability determination of the event which concluded that no substantial potential existed was not in question. Further, the NRC's belief that personnel could have been performing work in the area and be exposed to very high dose rates, creating a substantial potential for overexposure, is based on an NRC inspector's observation of "a survey" performed by an HP Supervisor. However, the observation was not related to a survey and was, in fact, performed for a different purpose during a later time period in which the TIP machines were physically tagged out of service.

Based on GPC's investigations of the inspector's observations, the following is the situation that occurred. The subject survey was allegedly performed without the HP Supervisor having continuous access to the dose rate meter, thereby eliminating the capability to rapidly determine changing radiological conditions. The noted observation appears to refer to the activity wherein an HP supervisor, accompanied by an NRC inspector, was measuring distances from the TIP room door to various pieces of equipment for the purpose of verifying GPC's dose rate calculations. During this activity, no actual entry into the TIP room was made; however, the TIP room door was unlocked and opened in order to perform the measurements from the door frame. As stated, the purpose was to obtain measured distances, not to perform a room dose rate and contamination survey. The NRC inspector's observation actually refers to when the HP supervisor was removing the door key from his pocket in order to unlock the TIP room door in order to make the above stated measurements.

Inspection Report 91-05 references an NRC inspector's belief concerning the performance of a room survey without continuous access to a dose rate meter. This belief, which was based on an interview with the HP Technician who performed the predecontamination survey of the Unit 1 TIP room, is incorrect. The inspection report states, "... an NRC inspector observed a Health Physics Supervisor perform a radiation survey first and then perform a task after putting the meter down." The inspector apparently misunderstood the discussion with the HP Technician, because the survey was performed in a manner consistent with the approved method.

Compliance with approved procedures and training under various scenarios is additionally ensured given the high-radiation area access controls applicable to the TIP rooms. At Plant Hatch, a color-coded key is used to alert employees of the level of potential hazard to be encountered upon entering a specific area. Orange-tagged keys are used to indicate areas where very high radiation levels may exist and/or radiological conditions

ENCLOSURE 1 (Continued)

VIOLATION 91-05-01 AND GPC RESPONSE

may undergo significant, rapid change. Procedure 62RP-RAD-016-05 designates the Unit 1 and Unit 2 TIP rooms as orange-tagged key areas. The only other orange-tagged key area at Plant Hatch is the Clean-Up Phase Separator Tank room. Given the TIP room classification, it is reasonable to conclude personnel possess, at all times, a heightened awareness for compliance with approved methods and good radiological practices when entering the orange-tagged areas.

In a further attempt to validate the position that a substantial potential for overexposure did not exist, GPC developed a probabilistic evaluation that considered hypothetical overexposure scenarios. The analysis considered the following two assumptions:

1. Personnel are preparing to enter the TIP room with TIP movement in progress or about to commence.
2. Personnel are preparing to enter the TIP room with TIP movement in progress or about to commence, Main Control Room communications are failed, and the TIP is more likely to be stopped in the room outside the shield.

Additional assumptions regarding the failure to take dose rate readings prior to entry, and/or the failure to hear TIP or ball valve operation, were input into the evaluation. As discussed in the Enforcement Conference held on March 14, 1991, the results confirmed that no credible, substantial potential for overexposure existed.

Reason for violation:

The event involved two different work activities. In the first work activity, the individuals involved were in the process of troubleshooting an intermittent problem with TIP reading input to the process computer. The procedural notifications involving this work had been made earlier in the day. Prior to 11:00 CST on 2/11/91, work was temporarily suspended to begin an activity involving the Unit 2 rod worth minimizer (RWM). The vendor technician resumed work on the process computer interface problem incorrectly and assuming earlier procedural notifications were still in effect. This assumption was incorrect because the Reactor Engineer had informed Operations personnel that they were leaving for lunch and, consequently, TIP movement activities were suspended.

The second activity involved a predecontamination survey of the Unit 1 TIP room. This activity was unrelated to the TIP computer interface problem. The HP technician that was to perform the predecontamination survey correctly notified the Operations personnel in the control room. Operations personnel were aware that the Reactor Engineer and STA had not returned from lunch and, therefore, gave HP permission to perform the survey.

ENCLOSURE 1 (Continued)

VIOLATION 91-05-01 AND GPC RESPONSE

Operation of the TIP, without prior notification of the Shift Supervisor and Health Physics, was caused by cognitive personnel error on the part of the vendor technician. It should be noted that prior to the event, this individual successfully completed and passed the General Employee Training course which provided detailed instruction on the prohibition of equipment manipulations unless specifically instructed by Operations or appropriate GPC personnel to do so.

The individual operated the TIPs in violation of existing administrative controls. Procedure 42CC-ERP-015-OS, "OD-1 and OD-2 NUMAC TIP Operation," permits the shift technical advisor, or a reactor engineer, to operate the TIP. The technician did not meet these qualifications and, therefore, should not have independently operated the TIP. As a result, control of potential TIP room entry was not adequately coordinated with TIP movement.

A contributing cause for the inadequate communications between the involved parties was a less-than-adequate tagging and clearance mechanism for ensuring restricted TIP operation while personnel enter the TIP room.

Corrective steps which have been taken and results achieved:

1. The vendor technician has been disciplined regarding the significance of his actions and the requirements for strict procedural adherence.
2. In order to assure communications regarding restricted TIP operation during personnel access into the TIP room, an operating order has been issued to require the access doors be tagged with a clearance while TIPs are in operation. Alternatively, the TIP panel will be tagged with a clearance while the access doors are in use.
3. Appropriate procedures have been revised to require a separate Radiation Work Permit requiring digital alarming dosimeters for rooms with orange-tagged keys.

Corrective steps which will be taken to avoid further violations:

The appropriate Operations and Health Physics procedures will be revised to incorporate the requirements of the operating order. In addition, the Operations procedures governing operation of the Unit 1 and Unit 2 TIP systems will be revised to require that the keys needed to operate the TIPs be removed and the TIPs be placed in an inoperable condition when the TIPs are not in use (following a 24-hour decay time after use). The keys needed to operate the TIPs will be controlled such that Shift Supervisor approval will be necessary to obtain them.

ENCLOSURE 1 (Continued)

VIOLATION 91-05-01 AND GPC RESPONSE

Health Physics procedures governing high radiation area access control will be revised to require personnel requiring access to the TIP room go to the Main Control Room to verify a clearance has been placed on the applicable TIP system, obtain a subclearance on this clearance in order to prevent its being released before personnel exit the TIP room, and obtain the TIP keys from the Main Control Room with the permission of the Shift Supervisor. Personnel then will be required to exchange the TIP keys for the TIP room door keys controlled by Health Physics.

The necessary procedure revisions will be effective by 6/15/91. Until the revisions are effective, the operating order, previously described, will remain in place.

Date when full compliance will be achieved:

Plant Hatch is presently in full compliance with the applicable regulations and procedural requirements regarding the control of equipment manipulations in the control room.

ENCLOSURE 2

PLANT HATCH - UNITS 1 AND 2
NRC DOCKETS 50-321 AND 50-366
OPERATING LICENSES DPR-57 AND NPF-5
VIOLATION 91-05-02 AND GPC RESPONSE

VIOLATION 91-05-02

"Technical Specification 6.12.1 requires that in lieu of the "control device" or "alarm signal" required by "Paragraph 20.203(c)(2) of 10 CFR 20," each high radiation area in which the intensity of the radiation is greater than 100 mrem/hr but less than 1,000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). any individual or group of individuals permitted to enter each such areas shall be provided with or accompanied by one of the following:

1. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
2. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
3. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physics (HP) supervision in the RWP.

Contrary to the above, in the following examples, individuals entered a high radiation area without either a radiation monitoring device which continuously indicated the radiation dose rate, or a radiation monitoring device which continuously integrated the radiation dose rate in the area and alarmed when a preset dose rate was received, or an individual qualified in radiation protection procedures equipped with a radiation dose rate monitoring device:

- (a) On August 29, 1990, a maintenance mechanic and a carpenter entered the Unit 2, Fuel Pool Cooling Heat Exchanger Room.
- (b) On November 9, 1990, two maintenance workers entered the Unit 1 Reactor Building hallway near the Fuel Pool Heat Exchanger Demineralizer Panel.

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

ENCLOSURE 1 (continued)

VIOLATION 91-05-02 AND GPC RESPONSE

Response to Violation 91-05-02

Admission or denial of violation:

The violations occurred as described in the Notice of Violation.

Reason for violation:

The violations were caused by personnel error. In both events cited, personnel failed to obey the postings that: 1.) identify the areas as high-radiation areas, 2.) require HP personnel to be notified prior to entry, and 3.) prohibit entry without a HP escort.

Corrective steps which have been taken and results achieved:

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

1. Involved GPC personnel were disciplined in accordance with the GPC Positive Discipline Program regarding the need to follow HP postings. The contractor was disciplined through his management. All individuals were re-trained on procedural requirements regarding entry into posted high-radiation areas. In addition, special meetings were held with Maintenance Department personnel to emphasize their responsibility to read and adhere to HP postings.
2. By letter dated 11/12/90, the Manager of Maintenance issued a letter to Maintenance personnel restating the mandatory steps to be taken prior to entering a posted high-radiation area.
3. On 4/25/91, the Plant Hatch General Manager halted work in high-radiation areas until plant personnel could be retrained on the requirements governing entry into high-radiation areas. Before personnel were allowed to re-enter and continue work in a high-radiation area, they were required to attend special training sessions addressing entry requirements and the consequences of unauthorized entry into high-radiation areas.
4. Upon completion of the training sessions, each plant employee was required to sign a statement indicating he/she clearly understood the following:
 - a. Requirements governing entry into high-radiation areas.

ENCLOSURE 2 (Continued)

VIOLATION 91-05-02 AND GPC RESPONSE

- b. Consequences of failure to adhere to those requirements. Any individual who fails to comply will be subjected to disciplinary action.
5. HP personnel were instructed to deny a person access to a high-radiation area unless the individual had been retrained on the requirements governing entry into high-radiation areas.

Corrective steps which will be taken to avoid further violations:

1. To maintain the awareness of high-radiation area entry requirements and the consequences of failure to adhere to the subject requirements, personal responsibilities and accountabilities, similar to those in the previously described statement, will be incorporated into new and annual General Employee Training (GET). This action will ensure new employees are made aware, and present employees continue to be aware, of high-radiation area entry requirements and the consequences of failure to adhere to them. Unescorted plant access is not granted unless the employee attends and passes GET. Training programs will be revised as described by 6/14/91.
2. Although high-radiation areas have been and are currently posted in compliance with applicable regulatory requirements and good radiological practices, additional signs to serve as more conspicuous indicators of high-radiation areas will be obtained and placed at the barriers to high-radiation areas. The new signs will be obtained and posted, and applicable plant procedures governing high-radiation area posting requirements will be revised to include use of the signs. This action will become effective by 8/2/91. Prototype signs are being procured at this time.

Date when full compliance will be achieved:

GPC is presently in full compliance. The corrective actions implemented subsequent to the August 29, 1990 and November 9, 1990 events were considered satisfactory to preclude recurrence. However, management review of the effectiveness of the previous actions, along with subsequent occurrences on March 25, 1991; April 3, 1991; April 23, 1991; and April 24, 1991, determined further actions were required. Consequently, on 4/25/91, work in high-radiation areas was halted until plant personnel could be retrained on high-radiation area entry requirements and made aware of the consequences of not adhering to the requirements.

ENCLOSURE 3

PLANT HATCH - UNITS 1 AND 2
NRC DOCKETS 50-321 AND 50-366
OPERATING LICENSES DPR-57 AND NPF-5
VIOLATION 91-05-03 AND GPC RESPONSE

VIOLATION 91-05-03

"10 CFR 20.203(c)(2)(iii) requires that each access point to a high radiation area shall be maintained locked except during periods when access to the area is required, with positive control over each individual entry.

Contrary to the above, doors to high radiation areas were unlocked and unattended as evidenced by the following examples:

1. June 23, 1990, Unit 1 Condenser Bay North Door, IT-13, 130 foot elevation.
2. August 14, 1990, Unit 1 Reactor Water Cleanup Heat Exchanger Door, IR-32, 158 foot elevation.
3. August 14, 1990, Unit 1 Turbine Building Door, IT-29, 164 foot elevation.
4. December 9, 1990, Unit 1 Condenser Bay North Door, IT-13, 130 foot elevation.

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

Response to Violation 91-05-03

Admission or denial of violation:

GPC admits that the aforementioned doors may not have prevented unauthorized entry into the high-radiation areas. In each case, the door was not fully functional due to mechanical problems. It should be noted that the occurrences were identified by GPC's aggressive program for the inspection and surveillance of high-radiation area access doors.

The specific problem associated with each cited example was as follows:

1. Unit 1 Condenser Bay North Door: The door locking mechanism was deficient. The door would not secure when locked.
2. Unit 1 Reactor Water Cleanup Heat Exchanger Door: The door and door frame were out of alignment. The door required excessive force to close.

ENCLOSURE 3 (Continued)

VIOLATION 91-05-02 AND GPC RESPONSE

3. Unit 1 Turbine Building Door: The door and door frame were out of alignment. The door required excessive force to close.
4. Unit 1 Condenser Bay North Door: The hydraulic door closure mechanism was not pulling the door closed.

Upon identification, deficiency cards were issued and repairs were implemented in a timely manner. Significant occurrence reports were issued for all four occurrences to thoroughly investigate the occurrence, determine a root cause, and implement corrective actions. Inspection Report 91-05 concurs that repairs were performed in a timely manner.

As discussed in the Enforcement Conference, over 36,000 door checks have been performed since April, 1989 to find and correct problems. As a result of these 36,000 checks, four deficiencies were identified, investigated and corrected by GPC; and subsequently cited as violations by the NRC after the corrective actions were complete.

GPC considers the inspection and surveillance activities to be a proactive program. Each of the high-radiation access doors are checked daily and subject to detailed quarterly checks for material condition. The checks in place at the present time are:

1. Appearance of the door for mechanical ability to prevent entry without the use of a key.
2. Operation and tightness of the outer door knob.
3. Operation and tightness of the inner door knob.
4. Ensuring the door will unlock using the inner door knob.
5. Ensuring the door locking plungers move in and out freely with use of the inner door knob.
6. Ensuring the plunger plate and door jamb strike plate are secure and all screws are intact.
7. Ensuring the hydraulic door closing mechanism is functioning properly, if applicable.
8. Ensuring the door will lock without use of the key.

ENCLOSURE 3 (Continued)

VIOLATION 91-05-03 AND GPC RESPONSE

9. Ensuring the door does not bind with door frame when closing.
10. Ensuring the cover is in place covering plunger mechanism. Doors that open inward do not need a plunger cover if the door frame prevents tampering.
11. Ensuring the wire mesh type doors have upper and lower guard plates installed.

Reason for violation:

These events were caused by a failure of personnel to ensure the subject doors were properly closed and locked after unlocking the doors to perform their duties. As noted previously, mechanical problems with the doors have contributed to these events.

Corrective steps which have been taken and results achieved:

As a result of these events, Form HPX-0537, Key Sign Out Form, from procedure 62RP-RAD-016-05, "High Radiation Area Access Control," has been revised. A signature block and a note were added to the form. The signature block serves to document, by signature of the person receiving the key, that he/she has read and understands the following added note:

By signing out this High Radiation Area Key, I understand that I am responsible to ensure the door is locked each time I enter or exit the door. I understand IF the door or any door for the area is found unlocked and I was the last person to sign out the key then I will be held responsible for the 10 CFR 20 and Technical Specification High Radiation Area Control Violation.

By virtue of this form revision, HP technicians who sign out keys used to access high-radiation area doors are reminded continuously and immediately of their responsibility to ensure high-radiation area doors are locked and the consequences for failure to do so.

ENCLOSURE 3 (Continued)

VIOLATION 91-05-03 AND GPC RESPONSE

Corrective steps which will be taken to avoid further violations:

GPC is in the process of evaluating improvements to the material condition and/or design of the high-radiation area doors. Upgrades or replacements, i.e., improved locksets, frames, and doors, will be completed, as appropriate, by 12/31/92. This schedule is dependent upon delivery schedules for replacement components, as many of the doors are special orders.

Date when full compliance will be achieved:

Plant Hatch presently is in full compliance with applicable regulations and procedural requirements regarding the control of high radiation area doors.