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Georgia Power
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Docket No. 50-321 HL-4792

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

Edwin I. Hatch Nuclear Plant - Unit 1
Reply to a Notice of Violation

Gentlemen:

In response to your letter dated February 3, 1995, and according to the requirements of 10 CFR 2.201, Georgia Power Company (GPC) is providing the enclosed response to the Notice of Violation associated with Inspection Report 94-31. In the enclosure, a transcription of the NRC violation precedes GPC's response.

Sincerely,

J. T. Beckham, Jr.

OCV/eb

Enclosures:
1. Violation 94-31-01 and GPC Response
2. Violation 94-31-02 and GPC Response

cc: *Georgia Power Company*
Mr. H. L. Sumner, Jr., Nuclear Plant General Manager
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. Ebneter, Regional Administrator
Mr. B. L. Holbrook, Senior Resident Inspector - Hatch

IE01

Enclosure

Edwin I. Hatch Nuclear Plant
Violation 94-31-01 and GPC Response

VIOLATION 94-31-01

Criterion V, Appendix B of 10 CFR 50, Instructions, Procedures and Drawing, requires that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings. Instructions, procedures or drawings shall include appropriate qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above, on December 21, 1994, activities affecting quality were not adequately prescribed in that contract personnel assigned tc refuel floor activities fabricated seven rigging slings without documented licensee instructions, procedures, or drawings. A vendor instruction was referenced but was insufficient to ensure that the appropriate construction, testing, reviews, approvals, or training were completed. As a result of this inadequacy, the slings were not fabricated in accordance with the vendor instruction.

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

RESPONSE TO VIOLATION 94-31-01

Reason for the violation:

The seven rigging slings used on the Unit 1 shroud head bolts were not fabricated in accordance with the vendor instruction because of personnel error. The vendor instruction was sufficient to properly construct the rigging slings. Also, plant procedures 52IT-MLH-005-0S, "Rigging Inspection Procedure", and 52IT-MLH-004-0S "Inspection and Load Testing Equipment Prior to Fuel Handling," prescribe activities to ensure rigging slings are capable of lifting the intended load. However, personnel making the slings, a presumed "skill-of-the-craft" activity, failed to properly orient the sleeves in the crimping tool used to make the slings. The same personnel also failed to crimp the sleeves the number of times required by a table contained in the vendor instructions.

Corrective steps which have been taken and the results achieved:

As a result of this event, the plant General Manager, in a letter dated 1/24/95, prohibited the on-site fabricating of rigging slings for use on the refueling floor. In addition, the General Manager directed that refueling floor slings that were fabricated on site and the tools used to fabricate slings be tagged to prohibit their future use in rigging activities. The existing slings and tools will be removed from the refueling floor when practical.

Personnel who incorrectly fabricated the rigging slings are no longer employed at Plant Hatch; therefore, they could not be disciplined for their errors.

Corrective steps which will be taken to avoid further violations:

Tagging the existing slings and the associated tools will prevent their future use in rigging activities. Ten slings currently in use to suspend items in the Unit 2 Spent Fuel Pool will be removed when practical.

Should a need to fabricate slings arise in the future, they will be fabricated on site only after the permission of the General Manager has been obtained and the necessary procedures, training, and personnel qualification requirements have been implemented.

Date when full compliance will be achieved:

Full compliance was achieved on 1/24/95 when senior site management prohibited refueling floor rigging slings from being fabricated on site and the tools used to fabricate slings were tagged to prohibit their use for rigging.

Enclosure 2

Edwin I. Hatch Nuclear Plant
Violation 94-31-02 and GPC Response

VIOLATION 94-31-02

Hatch Unit 1 Technical Specification 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.

Regulatory Guide 1.33, Revision 2, February 1978, Appendix A, lists preparation for refueling and refueling equipment operation and refueling and core alterations as general plant operating procedures.

Procedure FP-OP-022-41604: Volume Reduction and Packaging of Irradiated Hardware and Miscellaneous Components in the Spent Fuel Pool at E. I. Hatch Nuclear Station using the CNSI 3-55 CASK and CNSI Equipment, Step 6.4.4, states in part, "to place all bearings in the storage container." Procedure FP-OP-011: Operating Procedure for the CNSI Stellite Bearing Punch, Section 6.3: Transfer of Cut Stellite Bearings to Storage Container, Step 6.3.1 also states in part, "transfer the stellite bearings to the designated storage container."

Procedure 52IT-MLH-005-0S: Rigging Inspection Procedure, Section 7.1 requires that all rigging shall be tested prior to acceptance for use at Plant Hatch and a certification of each test result should be kept on file; unmarked rigging devices shall not be used for rigging purposes; and all special lifting devices used on the refuel floor shall be marked to identify the intended use. Step 7.1.2 requires that all rigging devices should be marked with a legible serial number, safe working load and an annual inspection coded color.

Procedure 52IT-MLH-004-0S: Inspection and Load Testing Equipment Prior to Fuel Handling, Section 7.1, requires that personnel document the performance of each step identified with an asterisk in applicable signature blocks on Attachment 1. Section 7.4 and 7.5 delineated the applicable subsections to be documented on Attachment 1. Procedure 51GM-MLH-003-0S: Conduct of Crane Operators and Riggers, step 7.4.4.18 states in part, "if any doubt as to the safety of the rigging or load movement, stop the load movement and immediately notify the responsible supervisor. The load movement must not be restarted until after the safety concern has been evaluated and is resolved."

Contrary to the above:

1. On November 11, 1994, Procedure FP-OP-022-41604, Step 6.4.4 and Procedure FP-OP-011, step 6.3.1 were not implemented, in that the bearings were not placed in the designated storage container, but were placed in a designated open bucket, placed on the floor of the transfer canal, and transferred to a second open bucket during

which several balls were spilled onto the transfer canal floor. This resulted in an uncontrolled high radiation area occurring in the compartment adjacent to the bottom of the transfer canal.

2. On December 28, 1994, Procedure 52IT-MLH-005-0S, Section 7.1 and Step 7.1.2 were not implemented, in that rigging slings used to move the shroud head bolts in the spent fuel pool were not marked with its (sic) intended use and did not contain a legible serial number, safe working load, or an inspection color code.
3. On December 28, 1994, Procedure 52IT-MLH-004-0S, Sections 7.1, 7.4 and 7.5 were not implemented, in that documentation of inspections and load testing of the slings prior to use was not performed.
4. On December 28, 1994, Procedure 51GM-MLH-003-0S, Step 7.4.4.18 was not implemented, in that a contract foreman did not inform the responsible supervisor after a shroud head bolt dropped into the spent fuel pool. Load moves were continued after the bolt dropped without evaluating and resolving the safety concerns.

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

These violations are applicable to Unit 1 only.

RESPONSE TO VIOLATION 94-31-02

Reason for the violation:

For Example 1, the uncontrolled high radiation area in the compartment adjacent to the bottom of the transfer canal was caused by an inadequate design feature of the transfer canal. While the purpose of the transfer canal is to transport spent fuel assemblies and other highly radioactive material between the spent fuel pools and spent fuel shipping cask area, this event revealed that the transfer canal is not provided with sufficient shielding to prevent the occurrence of a high radiation area in the adjacent compartment in all cases.

The process of preparing the stellite bearings for removal required the bearings to be placed in a designated open bucket and transported through the transfer canal and ultimately to the storage/shipping container. Consequently, once the open bucket containing the stellite bearings was introduced into the transfer canal, a high radiation area in the adjacent compartment could result as standard practice is to perform the transport with the material as close to the floor of the transfer canal as possible.

Personnel error on the part of the involved individuals did occur as manipulations involving the transfer of stellite balls from one open bucket to another open bucket were performed since these manipulations were not contained in Procedures FP-OP-022-41604 and FP-OP-011.

Procedures FP-OP-022-41604 and FP-OP-011 required the stellite bearings removed from the control rod blades to be placed in a designated open bucket and then transported through the transfer canal to the area where the storage/shipping container was located. The storage container was not to be moved as part of this operation. The stellite balls would then be placed into the storage container. This process would be repeated until all intended control rod blades were processed and all applicable material was placed into the storage shipping container. On November 11, 1994, the day the uncontrolled high radiation area occurred, the involved personnel encountered difficulties with removing the lid from the storage container. Consequently, a decision was made to proceed with the transfer of the stellite balls, using the designated open bucket, and temporarily storing the stellite balls in another open bucket located on the floor of the transfer canal.

Ultimately, the stellite balls in the temporary collection bucket would be placed in the stationary storage container. As stated in Example 1, the stellite balls were spilled onto the transfer canal floor during this operation.

Upon occurrence of the spill, personnel handling the stellite balls assumed that the design of the transfer canal would have adequate shielding to accommodate the presence of the highly radioactive material, since they knew the transfer canal is used to transfer spent fuel assemblies and other highly radioactive materials. Further, they assumed that no immediate corrective actions were necessary. As a result of these incorrect assumptions, they failed to retrieve the stellite balls from the floor of the transfer canal in a timely manner and also failed to notify Health Physics personnel or the responsible GPC supervisor of the event.

Example 2 was the result of personnel error. Personnel who fabricated the seven rigging slings used on the Unit 1 shroud head bolts failed to tag all the slings with the information required by plant procedure 52IT-MLH-005-0S, "Rigging Inspection Procedure."

Example 3 was the result of personnel error. The slings were load tested prior to their use; however, the test load was not as large as required by plant procedure 52IT-MLH-004-0S, "Inspection and Load Testing Equipment Prior to Fuel Handling," nor was the load test documented. The test load was smaller than required due to a miscommunication between the foreman and the workers who performed the test. Consequently, the safe working load for the slings was not adequately established. Personnel incorrectly assumed that documentation of the load test was not required since the slings were to be used only once and then discarded with the Unit 1 shroud head bolts.

Example 4 was the result of personnel error. After the shroud head bolt was dropped, personnel on the refueling floor performed a cursory inspection for evidence of damage (bubbles, drop in pool water level) to the spent fuel pool liner. However, they did not notify the responsible supervisor of the event nor apparently did they attempt to determine why the sling failed prior to lifting the next bolt.

Corrective steps which have been taken and the results achieved:

Upon notification of the high dose rates on the 185-foot elevation of the Unit 1 Reactor Building in the area under the transfer canal, Health Physics personnel surveyed the area, determined it was a high radiation area, and posted a Health Physics technician outside the area to control access as required by plant procedures. After Health Physics personnel investigated and located the source of the radiation, refueling floor personnel removed the stellite bearings from the transfer canal and placed them in the spent fuel shipping cask area. Health Physics personnel re-surveyed the area under the transfer canal and found that dose rates had decreased significantly. Access to this area was restored.

Personnel involved in the movement of the stellite balls are no longer employed at Plant Hatch and thus could not be disciplined for their errors.

Plant procedure 52GM-T24-001-0S, "Fuel Transfer Canal Operation," has been revised to prevent the transfer canal from being placed into service until appropriate areas in the Unit 1 Reactor Building have first been posted by Health Physics personnel as high radiation areas.

The personnel who failed to mark the rigging slings, to perform a proper load test, and to document that load test are no longer employed at Plant Hatch; therefore, they could not be disciplined for their errors. As discussed in the response to Violation 321/94-31-01, however, the practice of manufacturing slings on site has been stopped at the direction of the General Manager. Should a need to fabricate slings arise in the future, they will be made on site only after the permission of the General Manager has been obtained and the necessary procedures, training, and personnel qualification requirements have been implemented.

The foreman who failed to inform his supervisor of the dropped shroud head bolt was counseled regarding his inappropriate actions and was reminded of the requirement to inform supervisory personnel when unusual or unexpected events occur.

Corrective steps which will be taken to avoid further violations:

The need for locked barriers in the appropriate areas in the Unit 1 Reactor Building will be evaluated.

Date when full compliance will be achieved:

For Example 1, full compliance was achieved on 11/12/94 when access to the high radiation area on the 185-foot elevation of the Unit 1 Reactor Building was controlled by Health Physics personnel as required by plant procedures.

For Examples 2 through 4, full compliance was achieved on 12/29/94 when the rigging slings used for the Unit 1 shroud head bolts were removed from service by disposing of them along with the shroud head bolts.