



UNITED STATES
NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA ST., N.W.
 ATLANTA, GEORGIA 30323

SEP 28 1989

Report Nos.: 50-321/89-21 and 50-366/89-21

Licensee: Georgia Power Company
 P. O. Box 1295
 Birmingham, AL 35201

Docket Nos.: 50-321 and 50-366

License No.: DPR-57 and NPF-5

Facility Name: Hatch 1 and 2

Inspection Conducted: September 6-7, 1989

Inspector: *F. N. Wright*
 F. N. Wright

9/28/89
 Date Signed

Approved by: *J. P. Potter*
 J. P. Potter, Chief
 Facilities Radiation Protection Section
 Emergency Preparedness and Radiological
 Protection Branch
 Division of Radiation Safety and Safeguards

9/28/89
 Date Signed

SUMMARY

Scope:

This announced inspection of radiation protection activities included a review of personnel dosimetry records and allegation follow-up.

Results:

The licensee was maintaining personnel exposure records as required by 10 CFR Part 20. Two allegations concerning personnel exposure were reviewed and are discussed in Paragraph 3. No violations or deviations were identified.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *P. Fornel, Manager of Maintenance
- *W. Kirkley, Acting Manager, Health Physics & Chemistry
- M. Link, Supervisor, Health Physics & Chemistry
- *P. Moxley, Dosimetry Health Physics Foreman
- P. Moxley, ALARA Health Physics Specialist
- *H. Nix, General Plant Manager
- *S. Tipps, Manager, Nuclear Safety and Compliance

Other licensee employees contacted during this inspection included technicians, maintenance and office personnel.

*Attended exit interview

2. Personnel Dosimetry Records

10 CFR 20.101 specifies the applicable radiation dose standards. The inspector reviewed the computer printouts (NRC Form 5 equivalent) for the fourth quarter of 1988, and verified that the radiation doses recorded for plant personnel were well within the quarterly limits of 20.101(a).

10 CFR 20.101(b)(3) requires the licensee to determine an individual's accumulated occupational dose to the whole body on an NRC Form 4 or equivalent record prior to permitting the individual to exceed the limits of 20.101(a). The inspector reviewed selected occupational exposure histories for individuals who exceeded the values in 10 CFR 20.101(a). The exposure records were being completed and maintained as required by 10 CFR 20.102.

No violations or deviations were identified.

3. Allegation Follow-up (99014)

a. Allegation (RII-88-A-0072)

Vendor employees working at Hatch were directed by a vendor supervisor not to wear dosimetry in high radiation areas to minimize occupational radiation worker assigned dose.

Discussion

The allegation was received on October 27, 1988. The allegor reported that she was concerned about some of the things her husband had told her. She reported that on October 26, 1988, her husband's

superintendent had said that the workers could remove and hide their dosimetry in order that they could go into another area and health physics would not know.

On October 31, 1988, allegor contacted the NRC and reported that her husband had told her that his supervisor had approached the work crew and said, "I hope you guys know I was only joking when I told you to leave your TLDs."

The inspector determined that there was no supervisor having the name given by the allegor but that the allegor's husband had a supervisor with a similar name. The inspector asked the supervisor if he had ever told his workers to remove their personnel dosimetry before entering radiation areas. The supervisor reported that he had never directed his workers to do such a thing. However, the supervisor reported that he could have kidded with his workers about removing their dosimeters.

The allegor's husband was working in the Unit 1 drywell welding reactor water clean-up piping and pipe supports. Health physics representatives reported that personnel monitoring devices were checked prior to entering the drywell and that leaving the dosimetry in a low dose rate area would be difficult, but possible.

The inspector reviewed the licensee's dosimetry records and determined that the allegor's husband had been authorized to receive an occupational radiation exposure up to 2500 millirem for the fourth quarter of 1988 in accordance with regulatory and procedural requirements. The workers exposure was greater than 1250 millirem for the quarter but significantly below the authorized allowable limit.

Finding

The allegation was substantiated. It appears that a licensee's vendor supervisor did joke about removing personnel dosimetry before entering a radiation area. However, no violations of NRC requirements were discovered during the review.

b. Allegation (RII-88-A-0076)

- (1) Contractor forces workers to sign forms utilized for increasing occupational radiation exposure limits above the Hatch administrative exposure guidelines under duress.

Federal regulatory requirements in 10 CFR Part 20, Standards for Protection Against Radiation allow occupational radiation workers to receive whole body radiation exposures up to 3000 millirem per quarter provided the licensee has determined and documented the workers accumulated occupational dose to the

whole body and determined that the lifetime exposure limit will not be exceeded.

The licensee's radiation control procedures specify administrative exposure limits which are utilized by the licensee to control a worker's occupational radiation exposure and keep it below the federal radiation exposure limits. The licensee assigns an administrative whole body exposure limit of 1000 millirem per quarter to most workers and increases the personnel exposure administrative limit in 500 millirem increments up to the federal limit with escalating management approval.

The licensee utilizes a vendor to do some of the maintenance work. During the fall of 1988 the vendor brought in additional pipe fitters to do some of the welding work in the Unit 1 drywell. The licensee was replacing reactor water clean-up piping and had some trouble approving welds. The high radiation exposure rates and need to rework some of the welds resulted in the licensee raising worker administrative exposure limits for many of the welders. Since the workers were brought in to weld pipe in high radiation areas the workers were only needed if they could do the work and maintain personnel exposures below regulatory limits. The inspector reviewed the licensee's personnel exposure records for the alleged and other pipe fitters and verified that exposures received were below regulatory limits. Several of the pipefitters had more than one administrative dose limit during the fourth quarter.

If the contractor's workers did not wish to receive allowable radiation exposures in 500 millirem increments up to the allowable federal limit, it is possible that they would have been dismissed from the assignment. However, no violations of NRC or licensee requirements were identified.

Finding

The allegation was not substantiated.

- (2) Plant ALARA will not allow workers to place lead blankets over sources of radiation in order to reduce personnel radiation exposures.

Discussion

The licensee's general employee training program discusses the common methods utilized in the industry to keep exposures As Low As Reasonably Achievable (ALARA). Shielding the worker from radiation is one such method. The alleged reported that health physics ALARA staff would not allow lead blankets to be placed over sources of radiation. The inspector determined that the

allegor was working in the Unit 1 Drywell during the fall 1988 refueling outage. The worker was a welder working on the reactor water clean-up pipe replacement job. The inspector determined that the licensee had utilized lead shielding where ever possible in the drywell during the outage when evaluations showed the installation of the shielding would result in a net radiation dose reduction. The licensee's portable shielding program would not allow lead shielding blankets to be placed directly on some runs of pipe in the drywell for engineering safety reasons. However, whenever possible the licensee erected shielding supports around such equipment to allow shielding to be utilized.

Finding

The allegation was not substantiated.

4. Exit Interview

The inspection scope and results were summarized on September 7, 1989, with those persons indicated in Paragraph 1. The inspector reported to management that while no violations of NRC requirements were identified concerning the allegations reviewed during the inspection, the fact that a vendor supervisor would joke about violating licensee and NRC requirements was inappropriate. The plant manager agreed with the inspector and directed a management bulletin be issued addressing appropriate supervisory behavior associated with the licensee's policy on regulatory compliance. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspectors during this inspection. Dissenting comments were not received from the licensee.