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the southern electric system

April 6, 1988

Docket No. 50-348
Docket No. 50-364

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

SUBJECT: Reply to a Notice of Violation
J. M. Farley Nuclear Plant NRC Inspection of
January 4 - 6, 1988

RE: Report Number 50-348/88-02
50-364/88-02

Dear Sir:

This letter refers to the violations cited in the subject inspection reports which state:

"During an NRC inspection conducted on January 4 - 6, 1988, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987), the violations are listed below:

- A. Technical Specification 6.12.1 requires in part that each individual or group of individuals permitted to enter a high radiation area in which the intensity of radiation is greater than 100 millirem per hour but less than 1,000 millirem per hour be provided with either a radiation monitoring device which continuously indicates the radiation dose rates in the area or continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received, or be accompanied by a health physics qualified individual with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area.

Technical Specification 6.12.2 requires, in part, that in addition to the requirements of Technical Specification 6.12.1, areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose greater than 1,000 millirem be provided with locked doors to prevent unauthorized entry. Doors shall remain locked except during period of access by personnel.

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Contrary to the above:

1. On December 28, 1987, two decontamination workers entered Room 450/449 in the Unit 1 Auxiliary Building, a high radiation area, in which the intensity of radiation was in excess of 100 millirem per hour, without having in their possession one of the required radiation monitoring devices and without being accompanied by a health physics qualified individual who maintained positive control over the workers' activities.
 2. As of December 28, 1987, a radiological exclusion area located in Room 450/449, which was accessible to personnel and which had radiation levels such that a major portion of the body could receive in one hour a dose greater than 1,000 millirem, was not provided with locked doors, but was provided with three yellow and magenta ropes, radiological warning signs, and a flashing red light, which were not adequate to prevent unauthorized entry.
- B. Technical Specification 6.8.1 requires, in part, that written procedures shall be established, implemented, and maintained covering activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, 1978.

Regulatory Guide 1.33, Appendix A, Section 7.e(1), states that access control to radiation areas including a radiation work permit (RWP) system should be covered by written procedures.

Plant Procedure FNP-0-RCP-2, Radiation Work Permit, Section 4.1.2, requires that a special RWP be issued for specific tasks to be performed that require entries into exclusion areas.

Plant Procedure FNP-0-M-001, Health Physics Manual, Section 6.3.6, defines radiological exclusion areas as any area, cubicle, etc., with radiation levels generally in excess of 1 rem per hour at 12 to 18 inches from the surface which in the judgement of the Health Physics Supervisor or Health Physics Manager require precautionary measures to prevent large or unanticipated exposure.

Plant Procedure FNP-0-M-001, Health Physics Manual, Section 4.1.1.7, states that the individual will know and follow the requirements of the RWP for work being performed.

RWP 87-0010 requires that individuals have a high range dosimeter.

Contrary to the above:

1. On December 28, 1987, a decontamination worker entered a high radiation/exclusion area with dose rates up to approximately 150 rem per hour at 18 inches from the spent fuel pool demineralizer without having a special RWP prior to entry.

2. On December 28, 1987, two individuals entered a high radiation area (Room 450) on routine RWP 87-0010 to perform routine decontamination of articles and equipment without high range dosimeters as required by the RWP.
- C. 10 CFR 19.12 requires, in part, that all individuals working in or frequenting any portion of a restricted area shall be kept informed of the storage, transfer, or use of radioactive materials or of radiation in such portions of the restricted area, and shall be instructed in precautions or procedures to minimize exposure and in the purposes and functions of protective devices employed. The extent of these instructions shall be commensurate with potential radiological health protection problems in the restricted area.

Contrary to the above, three contract decontamination employees working in Room 450/449 in the Unit 1 Auxiliary Building (a restricted area) on December 28, 1987, were not adequately instructed in the precautions or procedures to minimize exposure for entry into exclusion areas.

These violations have been evaluated in the aggregate as a Severity Level III problem (Supplement IV)."

Admission or Denial

The above violations occurred as described in the subject reports.

Reason for Violations

- A. 1. This violation was caused by personnel error in that the two workers did not read and follow the RWP for Room 450. Their foreman did not ensure that his crew complied with the RWP.
2. This violation was caused by a misinterpretation of the Technical Specifications in that Specification 6.12.2 was interpreted to allow use of rope, posting and flashing light in lieu of locked doors in the Spent Fuel Pool Demineralizer Valve Room.
- B. 1. This violation was caused by personnel error in that the worker crossed the exclusion area barricade which consisted of three ropes, a flashing light, and an exclusion area sign. In doing this, he disregarded radiation postings. There was also a lack of detailed communications between the foreman and the Health Physics technician concerning conditions at the job site and work requirements.
2. This violation was caused by personnel error in that the two workers did not read and follow the RWP for Room 450.
- C. This violation was caused by procedural inadequacy in that the lesson plans for radiation worker basic training and retraining failed to explain the controls required for exclusion area entry.

Corrective Action Taken and Results Achieved

- A. 1. The two workers and their foreman were restricted from further radiation work pending counseling and retraining.
- 2. Closed circuit television cameras were set up to avoid the need to enter Room 450 and Room 2450 (comparable area on Unit 2) on a routine basis. Other exclusion areas in the Auxiliary Building were expanded such that access can be controlled by a locked door.
- B. 1. The two workers and their foreman were restricted from further radiation work pending counseling and retraining. All other jobs at FNP in the proximity of exclusion area boundaries were reviewed for adequacy of radiation controls. All exclusion areas outside containment were verified locked or tagged in an inaccessible condition. For pipe chases and other pathways to exclusion areas which would require extraordinary effort to utilize, barricades (ropes, flashing lights, and signs) were erected.
- 2. The two workers and their foreman were restricted from further radiation work pending counseling and retraining.
- C. Training on exclusion area controls was conducted for each FNP work group (both Alabama Power Company and contractors) in January 1988.

Corrective Steps to Avoid Further Violations

- A. 1. Discussions have been held with principal contractors to provide additional assurance that they understand the significance of following FNP radiological controls and feel free to question supervisory instructions that appear to be in conflict with these controls.
- 2. Design changes will be considered for all instances in which Auxiliary Building exclusion areas require frequent entries.
- B. 1. Discussions have been held with principal contractors to provide additional assurance that they understand the significance of following FNP radiological controls and feel free to question supervisory instructions that appear to be in conflict with those controls. Additional Health Physics coverage for contractor crews working independently in FNP high radiation areas has been implemented. Whenever possible, exclusion area boundaries were expanded such that access can be controlled by a locked door. Keys to exclusion area doors were removed from all key rings except for the emergency key ring in the sole custody of the Shift Supervisor. The system for issuance of exclusion area keys was segregated from that of other keys.
- 2. Discussions will be held with contractors to provide additional

assurance that they understand the significance of following FNP radiological controls and feel free to question supervisory instructions that appear to be in conflict with those controls.

- C. Exclusion area controls have been incorporated into radiation worker basic training and retraining.

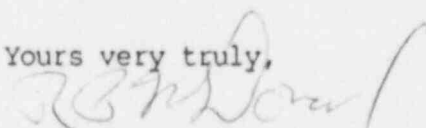
Date of Full Compliance

- A. April 1, 1990
B. March 31, 1988
C. February 1, 1988

Affirmation

I affirm that this response is true and complete to the best of my knowledge, information, and belief. The information contained in this letter is not considered to be of a proprietary nature.

Yours very truly,


R. P. McDonald

RPM:emb

cc: Mr. L. B. Long
Dr. J. N. Grace
Mr. E. A. Reeves
Mr. W. H. Bradford