



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

Report No.: 50-395/83-39

Licensee: South Carolina Electric and Gas Company  
Columbia, SC 29218

Docket No.: 50-395

License No.: NPF-12

Facility Name: Summer

Inspection at Summer site near Jenkinsville, South Carolina

Inspector: W. W. Peery 1/4/84  
Date Signed

Approved by: K. P. Barr 1/5/84  
Date Signed  
K. P. Barr, Section Chief  
Operational Program Branch  
Division of Engineering and Operational Programs

#### SUMMARY

Inspection on December 6-9, 1983

#### Areas Inspected

This routine, unannounced inspection involved 27 inspector-hours on site in the areas of procedures (special outage instructions); ALARA - advanced planning and preparation; training, exposure control; respiratory protection program; posting and controls; surveys and records and observations.

#### Results

Of the eight areas inspected, no violations or deviations were identified.

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## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*J. G. Connelly, Deputy Plant Manager
- \*K. W. Woodward, Manager, Operations
- \*W. Baehr, Manager, Corporate Health Physics and Environmental Programs
- \*B. G. Croley, Group Manager, T&SS
- \*L. A. Blue, Manager, Support Services
- \*F. Zander, Manager, Nuclear Training
- \*G. G. Putt, Manager, Schedule & Material Management
- \*J. W. Cox, Associate Manager, Health Physics
- \*A. B. Harrison, Nuclear Licensing
- \*A. R. Koon, Associate Manager, Regulatory
- \*H. I. Donnelly, Senior Licensing Engineer
- E. R. Robinson, Health Physics Supervisor
- G. A. Dicorte, Health Physics Supervisor
- R. A. Tripp, Health Physics Specialist

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on December 9, 1983, with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Enforcement Matters

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Radiation Protection Procedures

Special procedures and instructions relative to outage activities were reviewed. Many of the special instructions were associated with Radiation Work Permits issued for specific outage jobs. No departures from FSAR or Technical Specification requirements were noted. The inspector had no further questions.

### 6. Advance Planning and Preparation (ALARA)

The minutes of ALARA committee meetings concerning the eddy-current outage were reviewed and numerous recommendations noted to maintain exposures ALARA. The committee adopted an exposure goal of 34.4 Man-Rem for the outage, however, as of December 9, 1983, the total exposures were 64.797

Man-Rem for the outage. Licensee representatives stated that the reasons for the higher than anticipated exposures were underestimation of radiation levels in the steam generators (estimated 2-2.5 rem, actual averaged 4.0 rem in the bowl and 8-9 rem on the tube sheet) and additional jobs performed such as preventive maintenances and surveillance items. Licensee representatives stated that better coordination between various plant groups will be sought for future outages so that planning can include jobs in fact to be performed. This should also give the opportunity to include contingencies in the planning. Although the difference in projected and actual exposures in the outage was larger than expected, the difference between the total projected Man-Rem for the year 1983 of 105.00 Man-Rem and actual total exposures to date of 119.798 Man-Rem is not so large.

#### 7. Training

Selected records of training were reviewed as to content and testing. It was determined that required training and/or documentation is established for contractor as well as SCE&G personnel. The training meets the requirements of 10 CFR 19.12.

#### 8. Exposure Control

All personnel are required to have a TLD, pocket dosimeter and radiation dose card when passing through the Health Physics control point to the radiation control area. The dose card reflects the individuals current exposure as taken from the daily computer printout and, upon exit from the controlled area, his exposure for that entry and his remaining permissible dose. During steam generator work personnel also wore multi-personnel monitoring devices to monitor appropriate portions of the whole body, head and extremities. Review of licensee exposure records revealed that exposure histories are maintained as required by 10 CFR 20.102. Records showed maximum exposures for SCE&G and Contractor Health Physics personnel for the fourth quarter of 1983 of 855 mrem. The maximum individual fourth quarter exposure recorded for all personnel was 1482 mrem.

#### 9. Respiratory Protection Program

Health Physics controls the issuance, collection, maintenance, fitting and testing of respiratory protection equipment. The Training Group performs the training. The daily computer exposures printout contains the information on each individual's respirator qualifications and mpc-hr exposure status. Review of licensee records revealed that all internal exposures have been well below the limits of 10 CFR 20.103(a)(1) and this is supported by the air sampling and bioassay programs. No violations of the requirements of 10 CFR 20.103 were found.

#### 10. Posting and Control

During tours of the plant no violations of the posting and labeling requirements of 10 CFR 20.203 were observed. Storage areas were observed to be controlled as required by 10 CFR 20.207. Radiologically contaminated areas

were found to be satisfactorily controlled. High radiation areas were controlled as required by 10 CFR 20.203(c) and the licensee's Technical Specifications. During the outage it was possible to enter most areas in containment without protective clothing except isolated areas such as around the man-ways to steam generators and reactor coolant pump jobs which were controlled as contaminated areas. Use of Radiation Work Permits to control exposures and contamination apparently has been effective during the outage.

11. Radioactive and Contaminated Material Control

The control of radioactive and contaminated material was observed to be in accordance with licensee procedures.

12. Surveys

Routine and special surveys made pursuant to licensee procedures have satisfied the requirements of 10 CFR 20.201(b). Floor plans exhibiting the results of surveys for radiation and contamination are posted at the entrances to the respective areas. Independent surveys by the inspector verified that the radiation levels were as posted. The posted survey results were also noted to be current. Review of survey records revealed that they are being maintained as required by 10 CFR 20.401(b).