



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

APR 12 1991

Report No.: 50-395/91-04

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

Docket No.: 50-395

License No.: NPF-12

Facility Name: Summer

Inspection Conducted: March 11-15, 1991

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Preparedness Branch  
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SUMMARY

Scope:

This routine, unannounced inspection was conducted in the area of emergency preparedness. The licensee's program was reviewed to determine whether the licensee was maintaining a capability for emergency detection and classification, protective action decisionmaking, notifications and communications, shift staffing and augmentation, training, dose assessment, and public information program.

Results:

The licensee's program was found to be well maintained and managed by a knowledgeable staff. A program strength was the emergency preparedness training program.

The inspector verified that the licensee's notification procedures included criteria for initiation of offsite notifications and for development of protective action recommendations (PARs). The notification procedures required that offsite notifications be made promptly after declaration of an emergency.

The inspector discussed with licensee representatives the coordination of an annual emergency action level (EAL) review with State and local officials. By letter dated April 16, 1990, State and local authorities provided concurrence on the licensee's EALs included in Revision 16 of Emergency Plan Procedure (EPP-001), "Activation and Implementation of Emergency Plan."

The responsibility and authority for classification of emergency events and initiation of emergency action were prescribed in licensee procedures and in Sections 5.2.1 and 5.2.2 of the Summer Radiation Emergency Plan. An interview with a Shift Supervisor disclosed that the interviewee understood his role, responsibilities, and authorities in event classification, notification, and PARs.

The inspector reviewed the licensee's classification procedures. The event classifications in the procedures were consistent with those required by regulation and the Emergency Plan. The procedures did not appear to contain impediments or errors which could lead to incorrect or untimely classification. Selected EALs specified in the classification procedures were reviewed. The inspector noted that the selected EALs were based on parameters obtainable from Control Room instrumentation.

Selected Emergency Operation Procedures (EOPs) were reviewed and found to include under operator actions the statement "conditions for implementing Emergency Plan Procedures should be evaluated using EPP-001, Activation and Implementation of Emergency Plan."

No violations or deviations were identified.

### 3. Protective Action Decision-Making (82202)

Pursuant to 10 CFR 50.47(b)(9) and (10) and 10 CFR Part 50, Appendix E, Section IV.D.3, this area was inspected to determine whether the licensee had 24-hour-a-day capability to assess and analyze emergency conditions and make recommendations to protect the public and onsite workers, and whether offsite officials had the authority and capability to initiate prompt protective action for the public.

The inspector reviewed pertinent portions of the licensee's Emergency Plan and procedures for responsibility and authority for protective action decision-making. The steps of the General Emergency Procedure assigned the responsibility for protective action decision-making to the Emergency Director (ED) or Interim Emergency Director (IED). Because the licensee also has the physical responsibility for activating the Early Warning Siren System (EWSS) from the Control Room, the applicable procedure was

reviewed as a part of the protective action decision-making process. Included in the procedure was a flowchart that enabled the licensee to make PARs appropriate for the particular plant conditions. The licensee also provides for protective actions for onsite nonessential personnel by having the IED/ED consider site evacuation for Alert and higher classifications.

No violations or deviations were identified.

4. Notification and Communication (82203)

Pursuant to 10 CFR 50.47(b)(5) and (6) and 10 CFR Part 50, Appendix E, Section IV.D, this area was inspected to determine whether the licensee was maintaining a capability for notifying and communicating (in the event of an emergency) among its own personnel, with offsite supporting agencies and authorities, and with the population within the Emergency Planning Zone (EPZ).

The inspector reviewed the licensee's notification procedures. The procedures were consistent with the emergency classification scheme used by the licensee. The inspector determined that the procedures made provisions for message verification.

The inspector determined by review of applicable procedures and by discussion with licensee representatives that adequate procedural means existed for alerting, notifying, and activating emergency response personnel if the Radio Pager System functioned properly. A concern noted by the inspector was a potential delay in the augmentation if the system did not function. The licensee acknowledged this concern and was considering a callback for confirmation. The procedures specified when to notify and activate the onsite emergency organization, corporate support organization, and offsite agencies.

The content of initial emergency messages was reviewed and discussed with licensee representatives. The initial messages appeared to meet the guidance of NUREG-0654, Sections II.E.3 and II.E.4. Licensee representatives stated that the format and content of the initial emergency messages had been reviewed by State and local government authorities.

The licensee's management control program for the prompt notification system was reviewed. According to licensee documentation and discussion with offsite representatives, the system consisted of 106 warning sirens. Maintenance of the system had been provided for by the licensee. The sirens were growl tested twice monthly. Inadvertent siren activations continue to be a problem and were being addressed with a recent purchase order for a "coded signal" feedback system to ameliorate the inadvertent activation issue.

Communications equipment in the TSC was inspected. Provisions existed for prompt communications among emergency response facilities to emergency response personnel and to the public. The installed communication system at the emergency response facility (ERF) was consistent with systems descriptions in the Emergency Plan and Implementing Procedures (EPIPs).

The inspector conducted operability checks on selected communications equipment in the TSC. No problems were observed. The inspector reviewed records maintained in accordance with EPP-022, "Verification of Communication Operability," for the period of June 1990 to February 1991, which indicated that communication tests were conducted at the frequencies specified in the Emergency Plan and procedures.

No violations or deviations were identified.

5. Shift Staffing and Augmentation (82205)

Pursuant to 10 CFR 50.47(b)(2) and 10 CFR Part 50, Appendix E, Sections IV.A and IV.C, this area was inspected to determine if shift staffing for emergencies was adequate both in numbers and in functional capability, and whether administrative and physical means were available and maintained to augment the emergency organization in a timely manner.

Section 5.1 of the V. C. Summer Radiation Emergency Plan addressed the normal station organization during off-hours shifts and the responsibilities for the initial emergency organization. The inspector also discussed staff augmentation times with licensee representatives for the backshift periods. Records for an unannounced augmentation drill on August 14, 1990, were reviewed. The records indicated that the ERFs were staffed within the required time limits.

No violations or deviations were identified.

6. Knowledge and Performance of Duties (82206)

Pursuant to 10 CFR 50.47(b)(2) and (15), Section IV.F of Appendix E to 10 CFR Part 50, and Section 8.0 of the Emergency Plan, this area was inspected to determine whether the licensee's key emergency response personnel were properly trained and understood their emergency responsibilities.

The inspector reviewed Section 8.0 of the Emergency Plan and the Implementing Procedure (EPP-018) for a description of the training program and training procedures. Selected lessons plans and/or instructor guides were reviewed. It was also noted that in addition to Emergency Plan training commitments, the licensee also incorporated into the training modules lessons learned from the previous year (drills, exercises, industry events, etc.). Personnel with the responsibility for tracking training were interviewed. According to one interviewee, periodic training reviews are performed for verification that emergency response personnel training is current and up to date. The results of the review



are compiled in a status report that is provided to appropriate management for review and/or followup actions.

Four members of the licensee's staff did walk-throughs of manual dose calculations using the prompt dose assessment methodology. In each case, individuals were familiar with the procedure and various aids available to assist in the performance of dose calculations.

Training records were reviewed for 37 randomly selected members of the emergency organization. No problems were noted when personnel training records were compared with position assignments and required training modules. Offsite support agency training was reviewed for fire, rescue, hospital, local law enforcement agencies, and governmental support agencies. No problems were noted; training was consistent with the Plan and EPP. In addition to the aforementioned training reviews, the inspector observed the following training sessions: Operations Support Center Supervision, Public Information, and Emergency Operations Facility.

No violations or deviations were identified.

7. Dose Calculation and Assessment (82207)

Pursuant to 10 CFR 50.47(b)(9), this area was inspected to determine whether there was an adequate method for assessing the consequences of an actual or potential radiological release.

The inspector reviewed EPP-005, "Offsite Dose Calculations." The procedures provided the conditions and prerequisites for both the manual and computer methods of dose assessment. Walk-throughs were conducted with four individuals who might use the manual method for calculating offsite dose projections. The inspector noted that the nomogram used for the manual calculations provided for the classification of a General Emergency based on specified values for either a projected whole body exposure rate or a projected thyroid dose rate at one mile. As a result of difficulties encountered in determining emergency classification from the nomogram if the General Emergency condition was not met, the licensee committed to reviewing the nomogram and indicating those levels that require a lesser emergency classification. The information for lesser classifications was available from the computer method.

No violations or deviations were identified.

8. Public Information Program (82209)

Pursuant to 10 CFR 50.47(b)(7), Criteria in NUREG-0654, Section II.G, and Section 8.2 of the licensee's Emergency Plan, this area was reviewed to determine if the licensee was disseminating information to the public in the plume exposure pathway EPZ.

The licensee's public information brochure was designed in a calendar format. A licensee representative stated that the calendars were updated

annually and mailed to residents and businesses within the 10-mile EPZ. The inspector reviewed the current calendar issued January 1991. It was noted that the emergency information contained in the calendar was consistent with the criteria in NUREG-0654, Section II.G, and Section 8.2 of the Emergency Plan. A licensee representative provided documentation to show that the calendar update and review was coordinated with the appropriate offsite authorities. This was further confirmed by discussion with the Fairfield County Emergency Preparedness Agency contact. The inspector questioned a member of the licensee's staff regarding the methods for informing the transient population of appropriate emergency response measures. The interviewee stated that calendars had been distributed to local post office and businesses within the EPZ. The inspector confirmed the presence of calendars at two locations within the 10-mile EPZ. In addition to the calendars, the licensee stated that signs were posted at the entrance to various recreational sites near the Station. The inspector visited four locations north of the site along the Monticello Reservoir. It was noted that information was provided to the public regarding actions to take in the event of an emergency at the Station. Included in the list of actions were turn on radio for further instructions. However, no radio frequency was included. In response, a licensee representative stated that existing signs would be replaced during the calendar year with signs containing the appropriate radio frequency and additional details for the transient population. In addition to the signs and calendars, on a quarterly basis the licensee publishes a newsletter entitled "The Summer Times." This newsletter is provided to residents within the 10 mile EPZ and serves as a source of information regarding current events at the Summer Station.

No violations or deviations were identified.

#### 9. Exit Interview

The inspection scope and results were summarized on March 15, 1991, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results. No proprietary information was reviewed during this inspection. No dissenting comments were received from the licensee.

