UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

Report No. 50-395/82-44

Licensee: South Carolina Electric and Gas Company
P. O. Box 764
Columbia, SC 29218

Facility Name: V. C. Summer

Docket No. 50-395

License No. CPPR-94

Inspection at the Summer site near Jenkinsville, South Carolina

Inspector: D. L. Andrews — 8/11/82
D. L. Andrews — Date Signed

R. R. Martson — 8/12/82
R. R. Martson — Date Signed

Approved by: G. R. Jenkins — 8/12/82
G. R. Jenkins, Chief — Date Signed
Emergency Preparedness Section
EPOS Division

SUMMARY

Inspection on July 26-30, 1982

Areas Inspected

This routine, announced inspection involved 76 inspector-hours on site in the area of Emergency Preparedness.

Results

In the area inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

W. A. Williams, Jr., General Manager, Nuclear Operations
*O. S. Bradham, Station Manager
*H. C. Fields, Technical Service Engineer
*A. R. Koon, Technical Service Coordinator
*L. A. Blue, Director of Health Physics
*K. E. Beale, Coordinator, Emergency Planning
*S. S. Howze, Nuclear Licensing Engineer
*V. R. Albert, Assistant Manager, Support Services
*M. N. Browne, ISEG
*M. Counts, Emergency Coordinator
J. Nesbitt, Electrical Foreman
M. Fowlkes, Shift Technical Advisor

Other licensee employees contacted included several technicians, operators, mechanics, security force members, and office personnel.

NRC Resident Inspector

J. Skolds, Senior Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 30, 1982, with those persons indicated in paragraph 1 above. At the conclusion of the exit interview the inspector stated that the licensee had satisfied all aspects of Item III.A.1.1 of NUREG 0737.

3. Licensee Action on Previous Inspection Findings

(Closed) Deficiency (50-395/81-12-11; 50-395/81-12-41; 50-395/81-12-42): Installation and testing of post accident containment sampling system, and training personnel in post accident sampling of containment atmosphere. The system was installed as described during the inspection of January 11-15, 1982 and training in operation of the system has been provided to appropriate personnel. (Details, paragraph 6.a)

(Closed) Deficiency (50-395/81-12-12): Complete operational testing of post accident effluent sampling system. An inspector verified that the post accident effluent sampling system has been installed and is operational; and training in the use of the system has been provided to the appropriate personnel as described during the inspection of January 11-15, 1982. (Details, paragraph 6.a)

(Closed) Deficiency (50-395/81-12-23): Complete installation and testing of high range containment monitors. An inspector verified that the high range containment monitors are installed and are operational. (Details, paragraph 6.c)

(Closed) Deficiency (50-395/81-12-54): Complete development and issue the Corporate Emergency Management Plan (CEMP) and procedures. An inspector verified that the CEMP and procedures have been approved and issued. Training has been conducted in corporate emergency response for the appropriate personnel. (Details, paragraph 9)

(Closed) Deficiency (50-395/82-03-02): Complete testing of the Public Notification System (PNS) and resolve problems encountered during a test of the system during January 1982. An inspector verified that the PNS is operational and that all existing problems have been corrected. (Details, paragraph 7)

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Training

The inspector reviewed the emergency preparedness training program and discussed this area with licensee representatives. Training records for members of the emergency organization and selected training records for general employees were reviewed. In addition, records of training for offsite support and the corporate emergency organization were reviewed. Training for each area of the emergency preparedness program is presented by qualified instructors, whose qualifications in the particular area are reviewed by the Emergency Coordinator, and the instructor is approved in advance of the scheduled training. An inspector follow-up item is this area (IFI 50-395/82-03-01) is closed.

Subsequent discussions with licensee personnel assigned to the emergency organization indicated that training had been provided in all areas of emergency response and that the individuals understood their assigned functions in the event of an emergency. Previously identified deficiencies in this area are discussed in paragraphs 6 and 9. The inspectors had no further questions in this area.

6. Emergency Facilities and Equipment

Facilities and equipment provided for an emergency response were inspected and the utilization of these facilities were discussed with licensee representatives. Previously identified deficiencies and improvement items in this area are discussed below:

a. Post Accident Sampling and Analysis - Equipment for post accident sampling of reactor coolant, containment atmosphere and gaseous and particulate effluents were inspected. Walk-through demonstrations in this area indicated that the sampling equipment was in place and functional, and that personnel responsible for post accident sampling have been provided training on these systems and appeared to be familiar with their operation. Training records indicated that sufficient personnel have been trained to insure that qualified personnel will be available at all times during reactor operation. Previously identified deficiencies in this area (50-395/81-12-11, 50-395/81-12-12, 50-395/81-12-41 and 50-395/81-12-42) are closed.

Sample analysis procedures have been revised to address analysis of high activity samples. An improvement item (50-395/81-12-44) is closed.

Sampling procedures have been revised to include an operator checklist for sampling reactor coolant following an emergency and appropriate references to other procedures which impact on post accident sampling have been included. Improvement items (50-395/81-12-39, 50-395/81-12-40, 50-395/81-12-43 and 50-395/81-12-45) are closed.

b. Emergency Kits and Survey Instruments - The licensee's emergency kits were inspected and procedures relating to the use of the kits and instruments were reviewed. All emergency kits were in place and inventory of selected kits indicated that the contents were complete as required by EPP-019 and EPP-022. TLD and pocket dosimeters had been provided in the kits and all survey instrument calibrations were current. Air samplers had been calibrated for air flow and directions were provided for collecting various types of samples during an emergency. Review of procedures and discussion with licensee representatives indicate that training had been provided in emergency surveys and sampling, including sampling for radioiodines in the environment. Procedures also included provision for back-up means of communications for survey teams and described a central collection point for disposition of survey records. Previously identified improvement items in this area (50-395/81-12-17, 50-395/81-12-19, 50-395/82-03-05, 50-395/82-03-06, 50-395/81-12-38 and 50-395/82-03-03) are closed. During review of the procedures the inspectors noted that EPP-009 has been revised to include instructions on the use of the Ambulance Radiation Emergency Kit during a medical emergency. Improvement item (50-395/82-03-04) is closed.

A previous improvement item concerning an Emergency Plan change to more clearly define emergency kit contents was discussed with licensee personnel. The plan was changed in February, 1982, following the inspection in January (OIE Report Number 50-395/82-03); however, the change to Appendix B of the Site Emergency Plan does not itemize all components of the emergency kits. Licensee representatives stated that

kit contents would probably continue to change from time to time depending on exercise and drill critiques and identification of additional needs, and that the kits' contents are accurately reflected in the emergency kit inventory procedure (EPP-019). The inspector stated that the emergency plan should be changed to reflect general types of equipment available in each kit and to contain a reference to the inventory procedure EPP-019 for specific kit contents. Improvement item (50-395/81-12-20) shall remain open until this change has been completed as agreed to by the licensee.

c. Radiation Monitoring System - The inspectors verified that the area and process radiation monitoring system is operational and has been turned over to plant personnel for use. This system includes high range monitors on effluent pathways and in containment. The inspectors observed the placement of the high range monitors in containment and the readouts in the Control Room. A proposal for special calibration of these high range monitors has been submitted to NRC for review and inclusion in the Station's Technical Specifications. Basically, the station does not possess a radiation source with a high enough fluence rate to calibrate the upper ranges of these monitors and will rely on manufacturer's calibration, an in situ electronic calibration of system components and an operational check within the lower decades of the two monitors. The proposal is currently being reviewed by the Office of Nuclear Reactor Regulation. A previously identified deficiency in this area (50-395/81-12-23) is closed.

d. Emergency Communications - A previous improvement item concerning installation of speaker type telephones in the TSC and EOF for NRC use and provisions for electrical hook ups and parking facilities for the NRC Mobile Laboratory was reviewed and discussed with licensee personnel. Speaker type telephones have been installed in the TSC and EOF for NRC use. The inspector also observed designated parking spaces, with electrical hook ups, provided for the NRC Mobile Laboratory inside the protected area near the control building and at the Interim EOF, and reviewed work orders for providing similar facilities at the permanent EOF now under construction near the PARR facility. Inspector followup item (IFI 50-395/82-12-01) is closed.

A previous inspection report (OIE Report Number 50-395/82-03) discussed installation of the NRC Health Physics Network (HPN) telephones in the licensee's emergency facilities. The licensee was informed during this inspection that the HPN system is being discontinued by the NRC and the previous discussion regarding installation of that system is no longer relavent. A substitute system, such as FTS, is under consideration but no definite plans to install the alternate system have been made. This area will be reviewed following final plans for an alternate system by NRC.

e. Emergency Procedures - During the emergency exercise in May 1982, the inspectors noted that during containment atmosphere sampling the sample team failed to verify that sampling media was in place prior to collecting the sample. This could have resulted in the necessity of retaking the sample and unnecessary radiation exposure to the team. The sampling procedure (HPP-920) has been revised to include a note to insure that sampling media is in place prior to sampling. Inspector followup item (IFI 50-395/82-33-01) is closed.

7. Public Notification System (PNS)

During a previous inspection (OIE Report No. 50-395/82-03) the inspectors noted that during a test of the PNS some of the sirens failed to operate properly. During this inspection the inspectors reviewed the PNS along with documentation on testing and system performance with licensee representatives. The PNS at the Summer Station consists of 104 installed sirens, two mounted public address systems at recreation areas and portable radios, which can be remotely activated, at local schools within the Emergency Planning Zone (EPZ). The system was produced from Alerting Communication of America (ACA), and was, with the exception of 4 existing sirens, installed by a local contractor with SCE&G supervision during the spring and summer of 1981. Following system installation a consultant was retained to verify system coverage and operation. The consultant (Acoustics Technology Inc. of Boston, MASS) proceeded by first obtaining representative samples of the three types of sirens installed in the system and measuring the sound level output of each in an anechoic chamber. This information was used to model sound level coverage in the EPZ of the installed system using a computer program. During November and December of 1981 the consultant sent field teams to the Summer site to obtain actual sound level readings in the environment, under various conditions, to verify the computer predicted coverage of the system. Field measurements were taken around each installed siren and inside representative single family dwellings at selected locations within the EPZ. Results of the measurements confirmed the computer predictions of sound level coverage within ±1.8db mean deviation. The consultant's report, on file with the licensee, stated that siren coverage was adequate for complete coverage of the EPZ during an emergency.

During a subsequent test of the system during January 1982 several of the sirens failed to operate properly. Discussions with licensee representatives responsible for system maintenance and a review of documentation indicated that the problems, in general, were minor in nature and had been corrected promptly following the test. During the emergency exercise in May of 1982 the PNS was activated and operated without apparent problems.

A test and maintenance program for the PNS has been instituted which consists of a weekly circuit signal check using the "cancel" button on the system actuator in the Summer Station Control Room. Pressing the cancel button sends a signal to each siren location where a counter system records the number of signals sent. Quarterly, an inspection of each installation

is conducted in which the counter is checked and recorded, the siren motors are checked for continuity and a growl test is performed by activating the siren locally for a brief period in which the siren starts, but is not allowed to obtain operating speed. This results in a growl tone being produced but without the full siren sound level being obtained. On July 25, a report was received at the site that one siren had inadvertently activated; however, subsequent inspection and testing by SCE&G personnel revealed no apparent problems. A previously identified deficiency in this area (50-395/82-03-02) is closed.

8. Protective Actions

The inspectors reviewed the Station Health Physics Manual and discussed protective actions during an emergency with licensee representatives. The Health Physics Manual has been approved for use and is in the process of being designated and approved as an Administrative Procedure (ADM 500). The manual covers radiation protection and administrative concerns related to protection of workers. Improvement items (50-395/81-12-48 and 50-395/81-12-50) are closed.

9. Corporate Emergency Management Plan (CEMP)

During a previous inspection (OIE Report No. 50-395/82-03) the plan and procedures for corporate personnel designated to respond to an emergency were in draft form and had not been approved nor implemented. The inspector reviewed the CEMP and discussed corporate response to an emergency with licensee representatives. The CEMP includes both the corporate plan and emergency procedures. The CEMP has been approved and implemented and training has been conducted for corporate personnel assigned an emergency response function. A previous deficiency in this area (50-395/81-12-54) is closed.

10. Emergency Preparedness Audits

The inspector reviewed the licensee's audit of the emergency preparedness program of March 1982 (QA II-4-82). The audit appeared to be complete and covered the major areas of emergency preparedness for the Station. Findings were submitted to management for review, and follow-up on audit findings, including tracking of completion of each item along with the individual assigned corrective actions, was being maintained by the Emergency Coordinator. It appeared that corrective actions were being completed in a timely manner. The inspectors had no further questions in this area.

11. Drills and Exercises

The inspectors reviewed the licensee's procedures for conducting emergency drills and exercises along with the mechanism for followup of identified weaknesses in the emergency preparedness program based on drill and exercise critiques. The Emergency Coordinator documents critique findings and submits them to plant management along with recommended corrective measures.

The Station Manager assigns corrective actions as appropriate and reviews completion of corrective measures which are followed by the Emergency Coordinator. The inspectors had no further questions in this area.