

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No. 50-395

License No. NPF-12

Report No. 50-395/97-06

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

Facility: Virgil C. Summer Nuclear Station

Location: P. O. Box 88  
Jenkinsville, SC 29065

Dates: May 27-30, 1997

Inspector: W. W. Stansberry, Safeguards Inspector

Approved by: P. E. Fredrickson, Chief, Special Inspections Branch  
Division of Reactor Safety

## EXECUTIVE SUMMARY

Virgil C. Summer Nuclear Station  
NRC Inspection Report 50-395/97-06

This routine announced inspection was conducted in the area of plant support by a regional safeguards specialist. The specific area evaluated was the Physical Security Program for Power Reactors.

- The licensee used programs that will ensure the reliability of security related equipment and devices. (S2.4)
- The licensee was complying with the weapons storage criteria in the Training and Qualification Plan and security procedures. (S2.8)
- The licensee's changes to the Training and Qualification Plan, Physical Security Plan and selected supporting procedures did not decrease the effectiveness of these plans. (S3.1)
- By observations of training exercises/drills, the security force was being trained in accordance with the Training and Qualification Plan and regulatory requirements. Noteworthy were the strong emphasis on safety and the dedicated professionalism demonstrated by the security force and security management. This area was a strength in the security program. (S5.1)
- Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The audit and surveillance reports concluded that the security program was effective and recommended appropriate action to improve the effectiveness of the security program; and the licensee had acted appropriately in response to recommendations made in the audit report. The licensee reviewed the items of each audit and surveillance, appropriately assigned, analyzed, and prioritized each item found for corrective action. The corrective actions taken were technically adequate and performed in a timely manner. (S7.1)

## REPORT DETAILS

### **S2 Status of Security Facilities and Equipment**

#### S2.4 Testing and Maintenance

##### a. Inspection Scope (81700)

The inspector evaluated the licensee's program for testing and maintenance of security equipment. This was to ensure the reliability of physical protection-related equipment and security-related devices; and licensee's compliance with the criteria in Chapter 12 of the Physical Security Plan (PSP).

##### b. Observations and Findings

The licensee's program for testing and maintenance was established to ensure that physical protection-related equipment met the general performance requirements. Each intrusion alarm was tested for performance at the beginning and end of any period in which it was used but at least every seven days during continuous use. Alarm station operators tested the communication equipment required for on-site communication for performance at least at the beginning of each security work shift. Communication equipment required for offsite communication was tested at least once a day.

The inspector observed the quarterly testing and preventive maintenance of a card reader and control box. The equipment was cleaned, calibrated and tested in accordance with Security Maintenance Procedure (SMP)-010, "Access Control Sensor Supervision and Tamper Indicating Devices", Rev. 2. The technicians performing the testing and maintenance were thorough and knowledgeable of their duties. Procedure documentation was efficiently completed when the testing and maintenance were done.

##### c. Conclusions

Through observations, interviews, and documentation review, the inspector concluded that the licensee used programs that will ensure the reliability of security related equipment and devices. There were no violations of regulatory requirements found in this area.

#### S2.8 Security Equipment Storage/Armory

##### a. Inspection Scope (81700)

Based on the commitments in Section 3.0 (a) of the Training and Qualification Plan (T&QP), "Weapons Training, Weapons Cleaning and Storage" and Nuclear Security Guideline #18, "Firearms Control and Accountability", the inspector evaluated the

licensee's weapons storage facility to ensure application of the criteria in the T&QP and to verify that appropriate security procedural requirements were met.

b. Observation and Findings

There were two weapon's storage areas. One outside the Protected Area and the other inside the Protected Area. Firearms were stored and/or secured in weapon's containers located in the two designated security areas, except when in use for operational, training, maintenance, or repair. These firearms were secured in weapon's containers and locked at all times when the areas were unattended. Access to the weapons was through metal doors and was limited to the shift armorer and the response personnel. These doors were key locked and alarmed. The Central and Secondary Alarm Stations' operators monitored these alarms. Weapons were inventoried at the end of each shift. Weapons receipts were used to issue and exchange weapons. The storage area outside the Protected Area had sheetrock walls to the ceiling on all four sides. One wall was adjacent to a public common area. The storage area inside the Protected Area had an expanded metal ceiling. One wall was concrete, the others were sheetrock to the ceiling. One of the sheetrock walls was inside a 24 hour manned secured area, the other two were adjacent to common areas (hall and office area).

c. Conclusion

Based on this evaluation, the inspector concluded that the licensee was complying with the weapons storage criteria in the T&QP and security procedures. There were no violations of regulatory requirements found in this area.

### **S3 SECURITY AND SAFEGUARDS PROCEDURES AND DOCUMENTATION**

#### **S3.1 Security Program Plans**

a. Inspection Scope (81700)

The inspector reviewed the T&QP, Amendment #3, dated February, 1996; PSP, Amendment #39, dated October, 1996; and supporting procedures to ensure compliance with 10 CFR 50.54 (p).

b. Observations and Findings

Review of the changes to the T&QP and PSP submitted verified their compliance to the requirements of 10 CFR 50.54(p). Changes were structural and grammatical in that the changes enhanced or clarified existing commitments and made the plans more efficient. The inspector noted that the removed Personnel Access Portal was still identified in the PSP. The licensee indicated that removal of the portal will be addressed in the next change, due shortly.

Security Plan Procedure (SPP) 300, "Security Training and Qualification Program: Training, Revision 5; SPP 301, "Security Training and Qualification Program: Qualification, Revision 5; and SPP 221, "Security Surveillances and Audits", Revision 8 were reviewed. These documents were reviewed to ensure that they were current and supported the current revisions of the appropriate plans.

c. Conclusions

The review of the T&QP, PSP and selected supporting procedures and interviews with appropriate individuals verified that the licensee's changes to these documents did not decrease the effectiveness of the plans. There were no violations of regulatory requirements found in this area.

**S5 SECURITY SAFEGUARDS STAFF TRAINING AND QUALIFICATION**

S5.1 Security Training and Qualification

a. Inspection Scope (81700)

The inspector reviewed the security training and qualification program to ensure that the licensee was complying with the criteria in the T&QP, and the two SPPs 300 and 301, mentioned above.

b. Observation and Findings

The inspector interviewed security non-supervisory personnel, supervisors, and witnessed approximately 30 other security personnel in the performance of their duties. Members of the security force were knowledgeable in their responsibilities, plan commitments and procedures. Documentation and equipment inspected were found as committed to in the approved T&QP.

The inspector found that armed response personnel had been instructed in the use of deadly force as required by 10 CFR Part 73 and Nuclear Security Guideline #21, Revision 1, dated January 29, 1997. Members of the security organization were requalified at least every twelve months in the performance of their assigned tasks, both normal and contingency. This included the conduct of physical exercise requirements and the completion of the firearms course. The licensee had an onsite security organization, including adequately trained and qualified security force members in accordance with the licensee's T&QP and the Safeguards Contingency Plan.

The inspector observed the annual plant fire drill that involved all onsite plant response teams and offsite response agencies. Offsite emergency vehicles entered the Protected Area to assist the plant response teams during this drill. All offsite vehicles and personnel were escorted by either security force personnel or site response personnel.

The inspector also observed tactical exercises for response personnel at the firing range. Security force personnel fired rifles, shotguns and handguns at targets from

numerous positions. All personnel performed in a superior manner. Range and weapon's safety was emphasized at all times. Security force personnel demonstrated outstanding target analyses and marksmanship.

c. Conclusion

The inspector concluded through observation and interviews of security force personnel, and observations of training exercises/drills that the security force was being trained in accordance with the T&QP and regulatory requirements. Noteworthy were the strong emphasis on safety and the dedicated professionalism demonstrated by the security force and security management. This area was a strength in the security program. There were no violations of regulatory requirements identified in this area.

**S7 Quality Assurance in Security and Safeguards Activities**

S7.1 Audits and Corrective Actions

a. Inspection Scope (81700)

Based on the commitments of Chapter 14 of the PSP, the inspector evaluated the licensee's audit program and corrective action system. The inspector also verified compliance with the requirement for an annual audit of the security and contingency programs. During the inspection, a small representative sample of the problems identified by audits, was evaluated by the inspector to determine whether review and analysis were appropriately assigned, analyzed and prioritized for corrective action and whether the corrective action taken was technically adequate and performed in a timely manner.

b. Observations and Findings

The licensee's program commitments included auditing its security program, including the Safeguards Contingency Plan, at least every twelve months. The licensee's annual audits included a review of routine and contingency security procedures and practices. These reviews also evaluated the effectiveness of the physical protection system testing and maintenance program. The inspector reviewed the following audit and surveillances:

- QA-AUD-96014-0, Security and Unescorted Access Authorization/Fitness for Duty Program, dates of audit, 10/28-11/19/97, date of the report, 12/3/96: There were three weaknesses, six findings and three Quality Action Items.
- QA-SUR-96012-0, Access Controls Unescorted Access Authorization Program, dates of surveillance, 1/22-30/96, date of the report, 2/8/96: There were no findings.
- QA-SUR-96084-0, Vehicle Barrier System (VBS), dates of surveillance, 6/28-7/9/96, date of report, 7/29/96. One Quality Action Item was noted.

- QA-SUR-96111-0, Employment Screening Program, dates of surveillance, 8/20-23/96, date of report, 9/10/96. No findings were identified.
- QA-SUR-97035-0, Security Training, dates of surveillance, 3/19-26/97, date of report, 4/1/97. No findings were identified.

These surveillances and audit were available for inspection at the plant for a period of three years. The audit and surveillance conclusions were that the security program was adequately and effectively implemented.

c. Conclusions

Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The audit reports concluded that the security program was effective and recommended appropriate action to improve the effectiveness of the security program; and the licensee had acted appropriately in response to recommendations made in the audit report. The inspector determined that the licensee reviewed the items found in each audit and surveillance, then appropriately assigned, analyzed, and prioritized each item found for corrective action. The corrective actions taken were technically adequate and performed in a timely manner. There were no regulatory issues found in the findings. There were no violations of regulatory requirements found in this area.

### Management Meetings

X1 Exit Meeting Summary

The inspector presented the inspection results to licensee management at the conclusion of the inspection on May 30, 1997. The licensee acknowledged the findings presented. Although reviewed during this inspection, proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

### PARTIAL LIST OF PERSONS CONTACTED

Licensee

S. Byrne, General Manager, Nuclear Plant Operations  
 S. Furstenberg, Manager, Maintenance Services  
 D. Lavigne, General Manager, Nuclear Support Services  
 H. O'Quinn, Manager, Nuclear Protection Services  
 A. Rice, Manager, Nuclear Licensing and Operating Experience  
 J. Thiel, Security Coordinator, Security  
 A. Torres, Supervisor, Quality Assurance

NRC

B. Bonser, Senior Resident Inspector

INSPECTION PROCEDURES USED

IP 81700: Physical Security Program for Power Reactors

ITEMS OPEN, CLOSED, AND DISCUSSED

None