

Docket No. 50-395

License No. NPF-12

Report No. 50-395/96-12

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

Facility: Virgil C. Summer Nuclear Station

Dates: September 16-19, 1996

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 50-395/96-12

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.

- Through observations, interviews, and documentation review, the inspector concluded that the licensee implemented programs that ensured the reliability of security related equipment and devices. This evaluation determined that compensatory measures implemented for degraded security equipment and conditions were prompt and effective. Security personnel used for compensatory measures were aware of their duties and technically proficient (Section S1).
- The evaluation of the vital area access controls for packages, personnel and vehicles revealed implementation of vital area access control of packages and personnel continues to be competent and efficient. The licensee implemented the criteria in Chapters 1, 5, 6 and 13 of the Physical Security Plan (PSP) and related Security Plan Procedures (Section S2).
- A review of the Security Events Log (SEL) revealed judicious tracking of the security events and the effective responsiveness of site management to act upon the problems identified. The review of the SEL also indicated a weakness in the trending of security events to identify specific problem areas. The inspector determined that the licensee had provided appropriate and responsive support for the Physical Security Program. This was based on reviews of the SEL and PSP, and interviews with management, support, and security personnel (Section S6).

## REPORT DETAILS

### **S1 Conduct of Security and Safeguards Activities**

#### **S1.1 Compensatory Measures**

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

The inspector evaluated the licensee's program for compensatory measures for degraded security equipment. This was to ensure the reliability of physical protection of vital equipment and security-related devices; and licensee's compliance with the criteria in Chapter 12 of the Physical Security Plan (PSP). The inspector evaluated the following compensatory posts and discussed with the security personnel their specific duties.

- Three (3) vital area: two one hour patrols and one fixed post.
- One (1) protected area fixed post.

##### **b. Observations and Findings**

Compensatory measures, which equaled the failed or damaged component of the security system, were reviewed. These measures consisted of equipment, additional security force personnel and specific procedures to assure that the effectiveness of the security system was not reduced. Security officers were interviewed on their compensatory duties.

##### **c. Conclusions**

Through observations, interviews, and documentation review, the inspector concluded that the licensee implemented programs that ensured the reliability of security related equipment and devices. This evaluation determined that compensatory measures implemented for degraded security equipment and conditions were prompt and effective. Security personnel used for compensatory measures were aware of their duties and technically proficient.

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

#### **S2.1 Vital Area Access Controls - Packages, Personnel and Vehicles**

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

Based on the commitments in Chapters 1, 5, 6, and 13 of the PSP, and appropriate Security Plan Procedures (SPP), the inspector evaluated the licensee's access control program for vital areas to verify that they were functionally effective, operationally

efficient and met licensee commitments. This evaluation was also to ensure that there were no vulnerabilities that could be exploited to gain unauthorized access to the vital areas.

b. Observation and Findings

The security force searched for firearms, explosives, and incendiary devices at the protected area entrance. Personnel, hand-carried packages or material, delivered packages or material, and vehicles were searched before being admitted to the protected and vital areas. These searches were either by physical search or by search equipment. At Summer, there are no vehicle entrances to vital areas. Materials are off loaded outside the vital areas. Security personnel searched all non-exempt delivered packages and materials, specifically designated as such by the licensee, outside the vital areas. This was for reasons of safety, security, or operational necessity.

The inspector found the following circumstances concerning personnel access control. The licensee has acquired a digital photographic identification system to better make, control and store individual identification badges. These new pictured, code numbered badges were used for licensee personnel who were authorized unescorted access to the vital area. The code corresponded to those vital areas the licensee granted individuals authorized access. Picture badges issued to nonlicensee personnel indicated areas and periods of authorized access. This information was magnetically encoded into the keycards and the badges showed that no escort was required. Personnel displayed their badges while within the vital areas. Personnel authorized escorted access to the vital areas were issued a badge that showed an escort was required, and were escorted by licensee-designated escorts while in the vital area. Access to vital areas was limited to personnel who required such access to do their duties.

Security personnel controlled access to the reactor containment when frequent access was necessary to assure that only authorized personnel and material entered the reactor containment.

The licensee had compensatory measures for defective or inoperative access control and search equipment in addition to procedures for controlling access to vital areas.

Noteworthy, was the implementation of biometrics hand-geometry devices at the entrance and exit of the main access portal. This was an enhancement to the protected and vital area control of personnel entering and leaving the site. This will have a significant affect on decreasing the misissuance of security badges.

Access control program records were available for review and contained sufficient information for identification of persons authorized access to the vital areas. The licensee maintained access records of keys, key cards, key codes, and other related equipment for the period of employment or for the duration of use of these items.

The inspector found the following circumstances concerning control of the entry and exit of packages and material to the vital area. Security personnel confirmed the

authorization of, and identified packages and material at access control portals before allowing them to be delivered into the vital areas. The licensee used security force personnel to identify and confirm the authorization of material before allowing it to enter reactor containment. Search equipment clearly annunciated detection alarms at the access portal. The licensee had compensatory measures for defective or inoperative package or material search equipment.

The inspector found as stated above that there were no vital area vehicle access points at this site. Vehicles were off-loaded in the protected area at specifically designated materials receiving areas.

The inspector also evaluated the licensee's program for control and protection of locks, keys, and key cards. Locks, keys, key cards, and related equipment used to control access to the vital areas were protected and controlled. This was to reduce the possibility of compromise. The licensee changed the locks, keycores, keys, keycards and combinations when there was evidence that they may have been compromised; when an employee, having access to or control over a key, key card, or combination, was terminated or transferred for cause; and when a master key or a cylinder in a mastered system was lost or compromised.

c. Conclusion

The evaluation of the vital area access controls for packages, personnel and vehicles revealed implementation of vital area access control of packages and personnel continues to be competent and efficient. The licensee implemented the criteria in Chapters 1, 5, 6 and 13 of the PSP and related SPPs.

**S6 Security Organization and Administration**

**S6.1 Management Support**

a. Inspection Scope (81700)

The inspector continued the evaluation of the degree of licensee management's support to the Physical Security Program started in Inspection Report No. 50-395/96-06. Based on the requirements contained in the PSP, the inspector reviewed the Licensee Event Reports (LER's and Safeguards Event Log (SEL) entries. This review was to determine if the licensee appropriately assigned, analyzed and set priorities for corrective action for the log entries, and whether the corrective action taken was technically adequate and timely.

b. Observations and Findings

There were no security LERs to review. The review of the SELs as of September 17, 1996 indicated the following:



EVENTS	1st Quarter '96 <sup>1</sup>	2nd Quarter '96 <sup>2</sup>	3rd Quarter '96 <sup>3</sup>
Human Errors	14 <sup>4</sup>	18 <sup>4</sup>	4
Hardware Systems	32 <sup>5</sup>	43 <sup>5</sup>	7
Other Events	0	2	1
<b>TOTALS</b>	<b>46</b>	<b>63</b>	<b>12</b>

NOTES: 1. Cooling Tower Outage

2. Reactor Outage.

3. Normal Nonoutage Condition.

4. Mostly unsecured doors caused by outage contractors.

5. Environmental Conditions and Electrical Abnormalities due to outage.

The 3rd quarter total was a significantly lower number when compared to previous quarters back to 1990. The security system availability rate for the 2nd quarter was 99.72 percent. The 3rd quarter was anticipated to be significantly higher based on the current event figures. The licensee's tracking of the security events and the support of management to remedy the conditions that caused the events was considered by the inspector as a strength to the program. The trending of the figures generated by the tracking program was found by the inspector as weakness. The licensee had identified this weakness in a licensee's audit. Not only with the SEL figures, but plant wide. The site, as well as security management, had identified the corrective action necessary to enhance this area and was in the process of implementing appropriate actions.

The licensee has moved the Security Response Center from the primary access portal to inside the plant. The new facility was called the Security Operations Center (SOC) and strategically enhanced the response capability of the security force.

c. Conclusion

A review of the Security Events Log (SEL) revealed judicious tracking of the security events and the effective responsiveness of site management to act upon the problems identified. The review of the SEL also indicated a weakness in the trending of security events to identify specific problem areas. The inspector determined that the licensee had provided appropriate and responsive support for the Physical Security Program. This was based on reviews of the SEL and PSP, and interviews with management, support, and security personnel.

**S8 Miscellaneous Inspection Issues**

**S8.1 Action on Previous Inspection Findings (92904)**

(CLOSE) VIO 50-395/96-05-06. Unsecured Vehicle in the Protected Area. The vehicle was secured once it was identified as unsecured. The security officer involved was counselled. There has been no other unsecured vehicle events since that event.

### Management Meetings

#### X1 Exit Meeting Summary

The inspector presented the inspection results to licensee management at the conclusion of the inspection on September 19, 1996. 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. Entze, Security Training Instructor, Security  
D. Lavigne, General Manager, Nuclear Support Services  
H. O'Quinn, Manager, Nuclear Protection Services  
J. Proper, Supervisor, Nuclear Licensing and Operator Experience  
J. Thiel, Access Control Coordinator, Security  
J. Wasieczko, Supervisor, Security

#### NRC

B. Bonser, Senior Resident Inspector

### INSPECTION PROCEDURES USED

IP 81700: Physical Security Program for Power Reactors  
IP 92904: Followup - Plant Support

### ITEMS OPEN, CLOSED, AND DISCUSSED

#### Closed

50-395/96005-06    VIO    Unsecured Vehicle in the Protected Area.