# U.S. NUCLEAR REGULATORY COMMISSION

## REGION II

Docket Nos:

50-324, 50-325

License Nos:

DPR-71, DPR-62

Report Nos:

50-324/97-06, 50-325/97-06

Licensee:

Carolina Power & Light Company

Facility:

Brunswick Steam Electric Plant

Location:

8470 River Road S.E.

Southport, NC 28461

Date:

April 9-11, 1997

Inspector:

D. H. Thompson, Safeguards Specialist

Accompanied

Personnel:

B. Manalli, Licensing Reviewer Nuclear Reactor Regulation

Approved by:

P. E. Fredrickson, Chief Special Inspection Branch Division of Reactor Safety

## **EXECUTIVE SUMMARY**

Brunswick Nuclear Plant, Units 1 & 2 NRC Inspection Reports 50-324/97-06, 50-325/97-06

This safeguards inspection included aspects of licensee plant support. The report covers a special announced inspection by a regional safeguards specialist inspector, accompanied by a licensing reviewer from Nuclear Reactor Regulation (NRR).

- The planned upgrade of the Central Access Portal was found to be in conformance within the regulatory requirements of 10 CFR 73.55(c)(3).
- The random review of plans, records, reports, and interviews with appropriate individuals verified that changes did not appear to decrease the effectiveness of the Physical Security Plan.
- The licensee's planned compensatory measures at the Secondary Access Portal were acceptable.

#### REPORT DETAILS

# S2 Status of Security Facilities and Equipment

# S2.6 Protected Area Barriers

## a. Inspection Scope (81052)

The inspectors reviewed the licensee's planned new access control facility to ascertain whether the licensee maintained a physical barrier surrounding the protected area (PA) in accordance with the Physical Security Plan (PSP), and that the proposed changes were acceptable under the provisions of 10 CFR 50.54(p).

## b. Observations and Findings

Review of the proposed location of the PA barrier at the new access control facility determined that the licensee planned for the PA fence on the south side of the PA to be modified to enclose the applicable portion of the new Central Access Portal (CAP) building into the PA. A perimeter barrier will be installed across the roof of the new CAP, running east to west, and located directly overhead of the CAP turnstiles, which defines the inside PA. The perimeter fence on the south side of the Secondary Access Portal (SAP) building after being closed will be modified to enclose the SAP building area within the PA. The perimeter Intrusion Detection System (IDS) will be modified to establish the required alarms and closed-circuit television (CCTV) camera assessment capabilities for the affected area. In addition IDS and CCTV will be installed at the new CAP to ensure proper alarm and assessment of the perimeter zones.

The cables, post, and bollards of the Vehicle Barrier System (VBS) will be modified to provide the required design protection. The VBS will be modified on the north end of the CAP building, and a walkway will be constructed for personnel access. The VBS will require new end posts and revised cabling to conform to the systems design specifications. Permanent bollards will be installed where the VBS will traverse across the walkway.

During review of the isolation zones at the CAP, the inspectors noted that, although the generally acceptable width of an isolation zone to prevent bridging to avoid detection is 20 feet, the south side of the new CAP did not meet the 20-foot isolation zone criteria because of air-conditioning equipment located within 14 feet of the planned PA barrier. However, 10 CFR 73.55(c)(3) only requires that an "isolation zone shall be maintained in outdoor areas adjacent to the physical barrier at the perimeter of the protected area and shall be of sufficent size to permit observation of the activities of people on either side of that barrier in the event of its penetration." Therefore, the inspector determined that a 12-foot distance could be maintained for the isolation zone, which was acceptable and that bridging would not be a concern based on the distance from the nuisance fence to other equipment, and the isolation zone is of sufficient size to provide observation of a person in the isolation zone.

The inspector noted that at the new CAP the bullet resistant enclosure for the final access controller (FAC) will provide the FAC with communications, duress and access control capabilities. The access door of the bullet-resistant enclosure will open into the exit lobby, on the PA side. The windowed portions of the enclosure will protrude into the search area. This location will provide the FAC with a clear view of the access control entrance and exit points.

#### c. Conclusions

The planned upgrade of the CAP was found to be in conformance within the regulatory requirements of 10 CFR 73.55(c)(3). The licensee will submit a 10 CFR 50.54(p) change to the PSP defining the isolation zone size, a supplemental letter defining the VBS to NRR, and updated drawings defining the new locations of the VBS. Additionally, the licensee will update the bomb analysis based on the location of the new VBS to vital equipment.

The random review of plans, records, reports, and interviews with appropriate individuals verified that changes did not appear to decrease the effectiveness of the PSP. There were no violations of regulatory requirements found in this area.

# S1 Conduct of Security and Safeguards Activities

#### S6.1 Compensatory Measures

## a. Inspection Scope (81064)

The inspectors evaluated the planned compensatory measures during the upgrade of the new Access Control Building to ensure that they conformed to the PSP requirements, approved procedures, and were adequate and appropriate for their intended function.

#### b. Observations and Findings

The licensee planned to dismantle and move the hardened FAC booth at the present access control facility and re-install it at the new CAP. The licensee anticipated that it will take approximately three weeks to complete the move. As a maximum, for three weeks, the interim compensatory measures at the SAP will be the following: one armed officer located inside the PA in a protective position and camera coverage of the area inside the SAP remoted to the Central and Secondary Alarm Stations with a dedicated observer. In addition, the normal posted officers would remain in the SAP to operate the search equipment.

#### c. Conclusions

The inspector concluded that the licensee's planned compensatory measures at the SAP during the Access Control Building Upgrade were acceptable. The licensee stated that if the compensatory measures for the bullet resistant enclosure remained for more than three weeks, the NRC would be notified and all access would be directed through the Plant Access Portal.

## V. MANAGEMENT MEETING

# X1 Exit Meeting Summary

The inspectors presented the inspection results to licensee management at the conclusion of the inspection on April 11, 1997. The licensee acknowledged the findings presented. Although reviewed during this inspection, proprietary information is not contained in this report. At the exit the licensee stated that if the compensatory measures for the bullet resistant enclosure remained for more than three weeks, the NRC would be notified and all access would be directed through the Plant Access Portal. Dissenting comments were not received from the licensee.

#### PARTIAL LIST OF PERSONS CONTACTED

## Licensee

- A. Brittain, Security Supervisor
- K. Jury, Manager Regulatory Affairs
- W. Levis, Director, Site Operations
- B. Lindgren, Manager, Site Support
- H. Nguyen, Security Specialist
- M. Tabor, Senior Specialist, Regulatory Affairs
- M. Turkal, Manager, Licensing and Regulatory Programs

#### NRC

- E. Brown, Resident Inspector
- C. Patterson, Senior Resident Inspector

#### INSPECTION PROCEDURES USED

IP 81052 Physical Barriers - Protected Area

IP 81064 Compensatory Measures