

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-338, 50-339  
License Nos: NPF-4, NPF-7

Report Nos.: 50-338/96-11, 50-339/96-11

Licensee: Virginia Electric and Power Company

Facility: North Anna Power Station Units 1 and 2

Location: State Route 700  
Mineral, VA 23117

Dates: October 14 - 18, 1996

Inspectors: W. W. Stansberry, Safeguards Specialist

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

## EXECUTIVE SUMMARY

North Anna Power Station, Units 1 and 2  
NRC Inspection Report 50-338/96-11, 50-339/96-11

This safeguards inspection included aspects of licensee plant support. The report covers a one week period of an announced routine inspection by a regional safeguards specialist inspector.

### Plant Support

- Compensatory measures implemented for degraded security equipment and conditions were prompt and effective. There were no violations of regulatory requirements found in this area (Section 1.1).
- 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. The security maintenance program is a major strength in the security program. There were no violations of regulatory requirements found in this area (Section 2.1).
- The inspector concluded through observation and interviews of security force personnel, and document reviews that the security force could adequately cope with the design-basis threat. The security force met the requirements of the Physical Security Plan (PSP) and Training and Qualification Plan (T&QP). The security training program and organization was a major strength in the security program. There were no violations of regulatory requirements identified in this area (Section 5.1).
- Licensee has made numerous equipment, plan, access, and management support enhancements since the last inspection, in areas previously evaluated. Hand geometry has been installed. The PSP, Security Contingency Plan, and T&QP of North Anna and Surry have been consolidated. Access level to the protected and vital areas at North Anna and Surry have been reduced. Badging and clearance systems at North Anna and Surry have been consolidated. Security personnel have been shared between sites during outages to reduce personnel costs and enhance site commonality. These are major strengths to the security program at North Anna and Surry (Section 8.1).

## REPORT DETAILS

### IV. Plant Support

#### **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 the physical protection of vital equipment and security-related devices; and licensee's compliance with the criteria in the Physical Security Plan (PSP).

###### 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. During this inspection, no compensatory measures were in effect. Review of the six outstanding work order requests showed that compensatory measures were not necessary nor used. Most compensatory measures were short term, less than 24 hours.

###### c. Conclusions

Through observations, interviews, and documentation review, the inspector concluded that compensatory measures implemented for degraded security equipment and conditions were prompt and effective. There were no violations of regulatory requirements found in this area.

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

##### S2.1 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 Chapters 4, 5, 6, and 9 of the 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. Appropriate onsite personnel tested and maintained the security-related devices and

equipment in an operable condition. 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.

At approximately 1:00 a.m. on October 16 and 17, the inspector observed the seven day testing of protected and vital area intrusion detection devices from the Central Alarm Station (CAS) and the Secondary Alarm Station (SAS). Seventy-four detection device tests were monitored. During this inspection, the inspector observed testing and maintenance personnel performing periodic maintenance on the explosive detection equipment\* at the protected area entry point. Review of shift logs revealed that seven day tests were conducted as required.

The maintenance of security equipment is monitored daily and tracked using a data base. The data base contains dates, component information, and documents repairs to all security equipment. Information from the data base was retrieved and reviewed quarterly and annually to document trends to detect accomplishments, areas of concern, and maintenances costs.

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. The security maintenance program is a major strength in the security program. There were no violations of regulatory requirements found in this area.

**S5 Security and 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 criteria in the Security Personnel Training and Qualification Plan (T&QP), Revision 0, dated October 1, 1995, were met.

b. Observations and Findings

The inspector interviewed approximately 30 security personnel, including supervisors, and witnessed approximately 10 others in the performance of their duties. Members of the security force were knowledgeable of their responsibilities, plan commitments, and procedures. Documentation was reviewed concerning training, firearms, testing, job/task performance and requalification. Documentation and equipment inspected met the requirements in the approved T&QP.

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 found that armed response personnel

had been instructed in the use of deadly force as required by 10 CFR Part 73. Members of the security organization were requalified at least every twelve months in the performance of their assigned normal and contingency tasks. This included the conduct of physical exercise requirements and the completion of the firearms course. An appropriate number of security officers were available onsite that could respond immediately to alarms.

North Anna's and Surry's Security Training and Qualification Plans have been consolidated into one document to enhance flexibility and consistency in the training process. As part of the consolidation, the training organization has been changed. Four Security Field Team Leader positions were created. These positions were assigned to each shift and were responsible for conducting all security training for shift members. Further, all security officers were trained as security control systems operators. This provided versatility and flexibility for all security officers qualified to perform all duties, to include CAS and SAS operations.

The Computer Based Training (CBT) continues to expand with the reorganization. Security officers can take task tests at their own speed, any time. Consequently, training was concentrated on other needs and areas that require attention. The following specialty training has been conducted during this SALP period:

- New proficiency test: Stress Course.
- Hostage Negotiation Training by FBI.
- Combined Tactical Training with Albermarle County Sheriff's Department Tactical Team.
- Drug Interdiction Training by the Virginia Police and the Louisa County Sheriff's Department.
- Investigative Techniques by the Virginia Power Investigations Supervisor.
- Violence In The Workplace Training by Employee Assistance Program Coordinator.

The security training staff also provided training to station employees on Violence in the Workplace, Telephone Bomb Threats, Letter and Package Bombs, and Handling of Safeguards Information.

c. Conclusions

The inspector concluded through observation and interviews of security force personnel, and document reviews that the security force could adequately cope with the design-basis threat described in 10 CFR 73.1(a) and that the security force met the requirements of the PSP and T&QP. The security training program and organization was a major strength in the security program. There were no violations of regulatory requirements identified in this area.

## S8 Miscellaneous Security and Safeguards Issues

### S8.1 Update of Previous Inspected Areas

#### a. Inspection Scope (81700)

To assess the capabilities of operating power licensees to protect their facilities against radiological sabotage.

#### b. Observation and Findings

Security Program Plans - North Anna's and Surry's Physical Security Plan and Safeguards Contingency plan have been consolidated into one generic document. This reduces the number of NRC commitment documents from four to one.

#### Access Control

- ° Standard access levels have been developed at North Anna and Surry for use in granting access into the protected and vital areas. For North Anna, this represented a decrease from 56 to 6 levels of access.
- ° A new badging system consolidates the old badging system and the clearance system, making it easier and quicker to make and issue badges or remake current badges. There is no longer a need to sign on to two computers, North Anna and Surry, to get clearance information, data sheets, and make a badge. This consolidates the badging capabilities of both sites.
- ° The key/core program has been revised to reduce the number of different core combinations used for protected and vital areas. This aids with tracking core locations, reduces the number of keys available for issue, and simplified the inventory process.
- ° A biometrics hand geometry system was installed. This system enhanced the personnel access control process by eliminating badge issuance and decreasing the likelihood of an unauthorized entry into the protected area.

Management Support - During two refueling outages, four security officers from Surry were assigned to North Anna. This resulted in a cost savings, a reduction in overtime, and a culture share between the sites with the objective of commonality.

#### c. Conclusions

Licensee has made numerous equipment, plan, access, and management support enhancements since the last inspection, in areas previously evaluated. These enhancements included Hand geometry, security plan consolidation, access level

reduction, badging and clearance systems consolidation, and sharing of security personnel at both sites. These are major strengths to the security program at North Anna and Surry

S8.2 Follow-up (92904)

- a. (CLOSED) Unresolved Item 50-338, 339/96-09-05: Failure to maintain control of escort required personnel. On two occasions, control, as required by Virginia Power Administrative Procedure - 2501, "Security and Access Control", Revision 4, August 13, 1996, Section 6.2.8, by escort personnel was not maintained of escort required contract personnel. Contract personnel have been counselled on their responsibilities in escorting personnel. All plant personnel have been reminded of their escort responsibilities. There has been no recurrence of this violation in the last two years, has minimal safety significance, and the licensee took prompt and decisive corrective action; consequently, it was determined that this failure constitutes a violation of minor significance and is being treated as a noncited violation, consistent with Section IV of the NRC Enforcement Policy (NCV 50-338,339/96-11-01).
- b. (CLOSED) Violation 50-338,339/95-05-01: Failure to follow procedures in testing special detection equipment. The licensee requires personnel to pause within the detection zone of the equipment before passing through the device. This is also performed by the testing person when testing these devices. Appropriate procedures have been changed to reflect this process.
- c. (CLOSED) Violation 50-338,339/95-05-02: Failure to control and provide adequate protection for Safeguards Information (SGI). The licensee has consolidated SGI documents and centralized storage of them in approved safeguards containers at two places for better control. Administrative controls have been enhanced by revising appropriate procedures. A Review Team made significant efforts to reduce the amount of SGI documents and number of individuals authorized access to SGI. SGI documents were marked with a distinctive color to call attention to the classification of the document.



### V. Management Meeting

#### X1 **Exit Meeting Summary**

The inspector presented the inspection results to licensee management at the conclusion of the inspection on October 18, 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

G. Recheck, Assistant Station Manager, Operations and Maintenance, North Anna Power Station (NAPS)  
 L. Jones, Nuclear Specialist, Nuclear Oversight, NAPS  
 P. Keep, Supervisor, Licensing, NAPS  
 T. Madly, Superintendent, Security, NAPS  
 N. Martin, Supervisor, Security Operations, NAPS  
 M. Whale, Licensing, Technician Analyst, NAPS

##### NRC

R. McWhorter, Senior Resident Inspector

#### INSPECTION PROCEDURES USED

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

#### ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Closed</u>	URI	50-338, 339/96-09-05	Failure to maintain control of escort required personnel (Section 8.2).
<u>Closed</u>	VIO	50-338, 339/95-05-01	Failure to follow procedures in testing special detection equipment (Section 8.2).



<u>Closed</u>	VIO	50-338, 339/95-05-02	Failure to control and provide adequate protection for Safeguards Information (Section 8.2).
<u>Opened/ Close</u>	NVC	50-338, 339/96-11-01	Failure to maintain control of escort required personnel (Section 8.2).