U.S. NUCLEAR REGULATORY COMMISSION

REGION II

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License Nos:	NPF-4, NPF-7
Report Nos.:	50-338/97-05 and 50-339/97-05
Licensee:	Virginia Electric and Power Company
Facility:	North Anna Power Station, Units 1 and 2
Location:	1022 Haley Drive Mineral, VA 23117
Dates:	June 16-20, 1997
Inspectors:	W. W. Stansberry, Safeguards Specialist
Approved by:	P. E. Fredrickson, Chief, Special Inspection Branch Division of Reactor Safety

EXECUTIVE SUMMARY

North Anna Power Station, Units 1 & 2
NRC Inspection Report No: 50-338/97-05 and 50-339/97-05

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

Plant Support

- The licensee used appropriate compensatory measures that were equal or better than the failed or damaged component of the front vehicle barrier gate. (See Section S1.1)

- The licensee was storing and securing ammunition and weapons in an acceptable manner. (See Section S2.8)

- The review of the Physical Security Plan changes and interviews with appropriate individuals verified that changes did not decrease the effectiveness of the Plans. (See Section S3.1)

- The interviews with security force personnel, and observation of range and simulator training found that the security force was being trained in accordance with the Training and Qualification Plan and regulatory requirements. (See Section S5.1)

- Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The audit items were reviewed, appropriately assigned, analyzed, and prioritized for corrective action. The corrective actions taken were technically adequate and performed in a timely manner. (See Section S7.1)

Report Details

IV.Plant Support Areas:

S1 CONDUCT OF SECURITY AND SAFEGUARDS ACTIVITIES

S1.1 Compensatory Measures

a. Inspection Scope (81700)

The inspector evaluated the licensee's security system compensatory measures program. This was to ensure that compensatory measures implemented were at least equal to the normal function of the failed or damaged component of the security system and met the commitments of the Physical Security Plan (PSP), Contingency Plan and Security Plan Implementing Procedures (SPIP).

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. Compensatory measures, which equaled the failed or damaged component of the security system, that were implemented during the inspection were reviewed. The inspector monitored the compensatory measures for the front vehicle barrier gate while it was in a maintenance/repair mode. Appropriate compensatory measures were applied. The licensee's compensatory measures consisted of additional security force personnel and specific procedures to assure that the effectiveness of the security system was not reduced.

c. Conclusion

Through observations, interviews, and documentation review, the inspector concluded that the licensee used appropriate compensatory measures that were equal or better than the failed or damaged component of the front vehicle barrier gate. There were no violations of regulatory requirements found in this area.

S2 STATUS OF SECURITY FACILITIES AND EQUIPMENT

S2.8 Security Equipment Storage/Armory

a. Inspection Scope (81700)

The inspector evaluated the licensee's weapons storage facility to ensure application of the criteria in Chapter 6 of the PSP.

b. Observations and Findings

The inspector verified that weapons and ammunition not in use were stored in the security weapons vault or other suitable storage cabinets. There were no PSP or procedural commitments for the storage of weapons, only for the use of the weapons on duty and during training. The weapons storage room was within the protected area. The walls, floor and ceiling were concrete and the one access metal fire door was alarmed. This alarm was monitored by the alarm stations. The long guns, hand guns and ammunition were not secured inside the vault.

c. Conclusions

Based on this evaluation, the inspector concluded that the licensee was storing and securing ammunition and weapons in an acceptable manner. 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 North Anna Power Station, Unit 1 and 2, PSP, Revision 38, dated October 18, 1995 and Revision 39, dated February 28,1996. The North Anna/Surry Power Station, Unit 1 and 2, PSP, Revision 0, dated April 1; 1996; SPIP 001, "Format, Content, and Requirements of SPIP", Revision 1, dated January 24, 1997; and SPIP 003, "Central/ Secondary Alarm Station Operation", Revision 3, dated January 29, 1997 were also reviewed. The review was conducted to ensure the licensee's compliance with 10 CFR 50.54 (p).

b. Observations and Findings

Review of the changes to the PSP verified their compliance with the requirements of 10 CFR 50.54(p). Changes in Revision 38 were the changing of the document's font and updated vital area doors listing. Changes to Revision 39 were updates to the Independent Spent Fuel Storage Installation (ISFSI) portion of the PSP. Revision 0 to the PSP changes were grammatical, eliminated phrase and reference redundancy, updated organizational changes, and clarified integrated commitments. Revision 0 made the plans more consistent, efficient and provided clarity to the consolidation process by combining the two Virginia Power nuclear power station's security programs. The inspector noticed the need for a uniform procedure in designating the effective date for future plan changes. The licensee acknowledged this observation, and stated that they plan to develop an "effective date" procedure. The procedures reviewed by the inspector were found to support the PSP, specifically the North Anna implementation of the combined plan.

c. Conclusions

The review of the PSP changes and interviews with appropriate individuals verified that changes 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 Nuclear Security Personnel Training and Qualification Plan (T&QP), Revision 0, dated October 1, 1995.

b. Observation and Findings

The inspector interviewed security non-supervisory personnel, supervisors, and witnessed approximately 20 other security personnel during the performance of their duties. Members of the security force were knowledgeable of their responsibilities, plan commitments and procedures. Documentation and equipment inspected was found to be 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. The inspector observed the range training of security force personnel with handguns, rifles and shotguns. Stealth and dynamic room entry, clearing and exiting was observed by the inspector. The weapons stress course was observed also. The inspector noted that due to the absence of a defined level of stress in the training procedures and plan, there was very little stress being applied during this training. This was discussed with the training personnel and security management. The licensee agreed with the inspector, and stated that this issue will be reviewed. The inspector also noted that rifles were equipped with infra-red Aiming Point scopes and were used during familiarization, stress and qualification firing. Discussions with security personnel revealed that if the scopes failed to function, personnel were not familiar or qualified to fire the rifles without the scopes. This was discussed also with the security training personnel and security management. The licensee agreed with the inspector and stated that future firing with and without the scopes will be reviewed.

The inspector observed simulator training for alarm station operators. This was a computer program developed by Science Applications International Corporation. A trainer controlled the messages and scenarios presented to the alarm station operator on monitor screens similar to the ones in the alarm stations. The trainer had numerous events and scenarios to present to the operator to test the operator's skills. Discussions with the trainer indicated that there were no procedures or operating

manuals developed for this operator training. The inspector informed the licensee that if this is to be required training for alarm station operators, the simulator training must be proceduralized and documented in the training records. The licensee's Self-Check Simulator Functional Test, as documented in Procedure #0-TPM-FT-SC-001, Revision 0, undated, was also observed by the inspector. This test provided instructional designed testing of personnel to enhance their self-checking techniques. Thirty nine commands with alpha-numeric designators were communicated to the security officer, who had to find the matching alpha-numeric designator from a control panel of lighted switches. If the wrong switch was pressed, the "system would crash". The security officers interviewed felt that this training improved their concentration and self-checking skills to prevent operational errors.

c. Conclusion

The inspector concluded through observation and interviews of security force personnel, and observation of range and simulator training that the security force was being trained in accordance with the T&QP and regulatory requirements. 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 10 of the PSP, the inspector evaluated the licensee's audit program and corrective action system. This also verified compliance with the requirement for an annual audit of the security and contingency programs. A 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 PSP, T&QP and the Safeguards Contingency Plan, at least every twelve months. The annual audit was to include a review of routine and contingency security procedures and practices. The Nuclear Oversight Audit Report 97-01, dated April 17, 1997, conducted during the periods of January 6-17 and March 18-19, 1997 was reviewed by the inspector. The report was sent to the Vice-President, Nuclear Operations and corporate management. Reports of audits and corrective actions were available for inspection at the plant for a period of three years. There were three findings and one enhancement pertaining to North Anna. The findings were either non-regulatory or of minor significance. Five differences of the North Anna and Surry portions of the consolidated PSP were documented in the audit. Station

Deviation Reports were submitted for appropriate findings; corrective action dates were established; and corrective actions reviewed were timely, effective and properly analyzed. The audit concluded that the programs implemented by the Security Department were capable of protecting company assets and deterring attempts of radiological sabotage.

c. Conclusions

Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The audit report 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 findings were reviewed, appropriately assigned, analyzed, and prioritized for corrective action. The corrective actions taken were technically adequate and performed in a timely manner. There were no violations of regulatory requirements found in this area.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on June 20, 1997. The licensee acknowledged the findings presented.

Partial List of Persons Contacted

Licensee

J. Hayes, Superintendent, Operations
M. Kansler, Vice President - Nuclear Operations
H. Leberstien, Licensing Technical Specialist
M. McCarthy, Director Nuclear Oversight
T. Maddy, Superintendent, Security
N. Martin, Supervisor, Security Operations
T. Williams, Manager, Nuclear Oversight

NRC

W. Poertner, Acting Senior Resident Inspector
R. Gibbs, Resident Inspector

Inspection Procedures Used

IP81700: Physical Security Program for Power Reactors

Items Opened, Closed, and Discussed

NONE