



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30323

Report Nos.: 50-280/86-08 and 50-281/86-08

Licensee: Virginia Electric and Power Company  
Richmond, VA 23261

Docket Nos.: 50-280 and 50-281

License Nos.: DPR-32 and DPR-37

Facility Name: Surry 1 and 2

Inspection Conducted: March 17-21 and 26, 1986

Inspector:

*for* R. Marston

04/09/86  
Date Signed

Accompanying Personnel: M. Poston-Brown

Approved by:

*for* T. Decker, Chief  
Emergency Preparedness Section  
Division of Radiation Safety and Safeguards

04/09/86  
Date Signed

SUMMARY

Scope: This routine, unannounced inspection involved 64 inspector-hours onsite in the area of emergency preparedness.

Results: No violations or deviations were identified.

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## REPORT DETAILS

## 1. Persons Contacted

## Licensee Employees

- \*R. F. Saunders, Plant Manager
- \*H. L. Miller, Assistant Plant Manager, Nuclear Safety and Licensing
- \*F. M. Cox, Supervisor, Emergency Planning, Corporate
- \*G. A. Polson, Coordinator, Emergency Planning, Corporate
- \*B. R. Parkhurst, Coordinator, Emergency Planning, Surry
- \*W. D. Grady, Supervisor, Quality Control
- \*W. Craft, Coordinator, Licensing, Surry

Other licensee employees contacted included engineers, technicians, operators, mechanics, security force members, and office personnel.

## Other Organizations

- G. Urquhart, Department Environmental Services, State of Virginia
- M. Cline, Department of Health, Radiological Health, State of Virginia
- C. Thompson, Emergency Planning Coordinator, Surry County
- J. Holt, Chief, Volunteer Fire Department, Surry County

## NRC Resident Inspector

- \*M. Davis

- \*Attended exit interview

## 2. Exit Interview

The inspection scope and findings were summarized on March 21, 1986, with those persons indicated in Paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

## 3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

## 4. Emergency Detection and Classification (82201)

Pursuant to 10 CFR 50.47(b)(4) and 10 CFR Part 50, Appendix E, Sections IV.B and IV.C, this program area was inspected to determine whether the licensee used and understood a standard emergency classification and action level scheme.

The inspector reviewed the licensee's classification procedures. The event classifications in the procedures were consistent with those required by regulation. The classification procedures did not appear to contain impediments or errors which could lead to incorrect or untimely classification.

Selected emergency action levels (EALs) specified in the classification procedures were reviewed. The reviewed EALs appeared to be consistent with the initiating events specified in Appendix 1 of NUREG-0654.

The inspector verified that the licensee's notification procedures included criteria for initiation of offsite notifications and for development of protective action recommendations. The notification procedures required that offsite notifications be made promptly after declaration of an emergency.

The inspector discussed with licensee representatives the coordination of EALs with state and local officials. Licensee documentation showed that the licensee had discussed the EALs during July 1985, with State and local officials, and that these officials agreed with the EALs used by the licensee.

The responsibility and authority for classification of emergency events and initiation of emergency action were prescribed in licensee procedures and in the emergency plan.

Selected Emergency Plan Implementing Procedures (EPIPs) were reviewed by the inspector and discussed with licensee personnel. The EPIPs provided direction to users concerning timely classification of accidents. All personnel interviewed appeared to be familiar with the classification information in the EPIPs.

Walk-through evaluations involving accident classification problems were conducted with three Shift Supervisors. All personnel interviewed classified the hypothetical accident situations presented to them, and appeared to be familiar with appropriate classification procedures.

No violations or deviations were identified.

#### 5. Protective Action Decision-Making (82202)

Pursuant to 10 CFR 50.47(b)(9) and (10) and 10 CFR Part 50, Appendix E, Section IV.D.3, this area was inspected to determine whether the licensee had 24-hour-per-day capability to assess and analyze emergency conditions and make recommendations to protect the public and onsite workers, and whether offsite officials had the authority and capability to initiate prompt protective action for the public.

The inspector discussed responsibility and authority for protective action decision-making with licensee representatives and reviewed pertinent portions of the licensee's emergency plan and procedures. The plan and

procedures clearly assigned responsibility and authority for accident assessment and protective action decision-making.

No violations or deviations were identified.

6. Notification and Communication (82203)

Pursuant to 10 CFR 50.47(b)(5) and (6) and 10 CFR Part 50, Appendix E, Section IV.D, this area was inspected to determine whether the licensee was maintaining a capability for notifying and communicating (in the event of an emergency) among its own personnel, offsite supporting agencies and authorities, and the population within the EPZ.

The inspector reviewed the licensee's notification procedures. The procedures were consistent with the emergency classification and EAL scheme used by the licensee. The inspector determined that the procedures made provisions for message verification.

The inspector determined by review of applicable procedures and by discussion with licensee representatives that adequate procedural means existed for alerting, notifying, and activating emergency response personnel. The procedures specified when to notify and activate the onsite emergency organization, corporate support organization, and offsite agencies. Selected telephone numbers, which are considered to be proprietary are kept in the Coordinator of Emergency Preparedness's office were checked in order to determine whether the listed numbers were current and correct. No problems were noted.

The content of initial emergency messages was reviewed and discussed with licensee representatives. The initial messages appeared to meet the guidance of NUREG-0654, Sections II.E.3 and II.E.4. Licensee representatives stated that the format and content of the initial emergency messages had been reviewed by State and local government authorities.

The licensee's management control program for the prompt notification system was reviewed. According to licensee documentation and discussions with licensee representatives, the system consisted of 48 fixed sirens. The licensee's records for this system were kept in corporate headquarters and therefore were not reviewed.

Communications equipment in the Control Room and the Technical Support Center was inspected. Provisions existed for prompt communications among emergency response organizations, to emergency personnel and to the public. The installed communications systems at the emergency response facilities were consistent with system descriptions in the emergency plan and implementing procedures.

The inspector conducted operability checks on selected communications equipment in the Technical Support Center and the Operational Support Center.

No problems were observed.

Redundancy of offsite and onsite communications links was discussed with licensee representatives. The inspector verified that the licensee had established a backup communications system. The backup system made use of dedicated circuits, automatic ringdown systems, instaphone systems, and radios.

No violations or deviations were identified.

7. Changes to the Emergency Preparedness Program (82204)

Pursuant to 10 CFR 50.47(b)(16), 10 CFR 50.54(q), and 10 CFR 50, Appendix E, Sections IV and V, this area was reviewed to determine whether changes were made to the program since the last routine inspection and to note how these changes affect the overall state of emergency preparedness.

The inspector discussed the licensee's program for making changes to the emergency plan and implementing procedures. The inspector reviewed the licensee's procedures governing review and approval of changes to the plan and procedures. The inspector verified that changes to the plan and procedures were reviewed and approved by management. It was also noted that all such changes were submitted to the NRC within 30 days of the effective date, as required.

Discussions were held with licensee representatives concerning recent modifications to facilities, equipment, and instrumentation.

The organization and management of the emergency preparedness program were reviewed. The inspector verified that there had been no significant change in the organization for the plant emergency planning staff since the last inspection. The inspector's discussion with the licensee representatives also disclosed that there have been changes in the organization and staffing of the offsite support agencies since the last inspection.

The inspector reviewed the licensee's program for distribution of changes to the emergency plan and procedures.

No violations or deviations were identified.

8. Knowledge and Performance of Duties (Training) (82206)

Pursuant to 10 CFR 50.47(b)(15) and 10 CFR Part 50, Appendix E, Section IV.F, this area was inspected to determine whether emergency response personnel understood their emergency response roles and could perform their assigned functions.

The inspector reviewed the description (in the emergency plan) of the training program, training procedures, and selected lesson plans, and interviewed members of the instructional staff. Based on these reviews and interviews, the inspector determined that the licensee had not established a

formal emergency training program. Most lesson plans were not available for review as the licensee was in the midst of revising the emergency preparedness training program. The lesson plans that were available were reviewed and appeared to be adequate. Documentation was also reviewed which committed the licensee to have all of the lesson plans complete and approved by September of this year. This inspector followup item was discussed with the licensee and will be reviewed in a subsequent inspection. (50-280/86-08-01, 50-281/86-08-01)

Records of training for key members of the emergency organization for the period January 1985 to December 1985, were reviewed. The training records revealed that personnel designated as alternates or given interim responsibilities in the emergency organization were provided with appropriate training.

The inspector conducted walk-through evaluations with selected key members of the emergency organization. During these walk-throughs, individuals were given various hypothetical sets of emergency conditions and data and asked to discuss their response as if the emergency actually existed.

Walk-through evaluations involving protective action decision-making and other emergency duties were conducted with three Shift Supervisors. Personnel interviewed appeared to be cognizant of appropriate onsite protective measures and aware of the range of protective action recommendations appropriate to offsite protection. Personnel had difficulty in making protective action decisions for offsite protection, however, this appeared to be due to inadequate training. The protective action recommendations made by the Shift Supervisors were not always consistent with each other. This inspector followup item was discussed with the licensee and will be reviewed during a subsequent inspection. (50-280,281/86-08-02)

IE Information Notice 85-80, "Timely Declaration of an Emergency Class, Implementation of an Emergency Plan, and Emergency Notifications," was discussed with the licensee and the notification procedures were reviewed. Notifications are the responsibility of selected Control Room Operators. The training records for these communicators were reviewed and appear to be adequate.

The inspector discussed emergency training, coordination, and communications with representatives of several offsite agencies. These agencies included the Surry County Emergency Planning Office, the Surry County Volunteer Fire Department, the Department of Disaster Services (State of Virginia) and the Radiological Health Division of the State Health Department. No problems were noted in these areas; however, both State agencies did mention a problem with notification. Both State agencies noted that sometimes the notifications were late, or the licensee failed to notify them upon termination of events. Both State agency representatives have discussed these issues with the licensee and feel that they have been resolved in a satisfactory manner.

No violations or deviations were identified.

9. Licensee Audits (82210)

Pursuant to 10 CFR 50.47(b)(14) and (16) and 10 CFR 50.54(t), this area was inspected to determine whether the licensee had performed an independent review or audit of the emergency preparedness program.

Records of audits of the program were reviewed. The records showed that an independent audit of the program was conducted by the Surry Plant Quality Control Group during August 1985, (ADM-02-04-10, #S85-04). This audit fulfilled the 12-month frequency requirement for such audits. The audit records showed that the State and local government interfaces were evaluated, and the findings concerning the interfaces were made to State and local government authorities. Audit findings and recommendations were presented to plant and corporate management. Three findings were made in the 1985 QA audit, the first (S85-04B) stated that EIPs were not reviewed and updated on an annual basis, the second (S85-04C) identified that only 78% of licensee personnel were receiving their annual training and the third (S85-04A) stated that the deficiencies identified in the 1984 exercise had not been corrected in a timely manner. S85-04B was corrected by September, S85-04A was closed out by October and S85-04C was corrected by January of 1986. A review of past audit reports indicated that the licensee complied with the five-year retention requirement for such reports.

The licensee's program for follow-up action on audits, drill, and exercise findings was reviewed. Licensee procedures required follow-up on deficient areas identified during audits, drills, and exercises.

No violations or deviations were identified.

10. Inspector Follow-up (92701)

- a. (Closed) Inspector Follow-up Item (IFI) 84-EP-01: Review EALs for NOUE, Alert, Site Area Emergency, and General Emergency based on PNLs plan review of November 1984. Classification tables were reviewed and found to be consistent with Appendix 1 of NUREG-0654.
- b. (Closed) IFI 85-EP-01: Verify State of Virginia officials notified following Unusual Event of July 23, 1985. Notification procedure for the event showed that notification was made in 13 minutes.
- c. (Closed) IFI 85-16-02: Formal system for documenting individualized training for new members of the emergency organization. The individualized program was placed on computer diskette and was reviewed by the inspector.