



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

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Report Nos.: 50-280/91-01 and 50-281/91-01

Licensee: Virginia Electric and Power Company
Glen Allen, VA 23060

Docket Nos.: 50-280 and 50-281

License Nos.: DPR-32 and DPR-37

Facility Name: Surry 1 and 2

Inspection Conducted: January 7-11, 1991

Inspector: Eldon D. Testa
E. D. Testa

1/28/91
Date Signed

Accompanying Personnel: G. Salyers

Approved by: William H. Rankin
W. H. Rankin, Chief
Emergency Preparedness Section
Radiological Protection and Emergency
Preparedness Branch
Division of Radiation Safety and Safeguards

1/28/91
Date Signed

SUMMARY

Scope:

This routine, unannounced inspection was conducted in the area of emergency preparedness, and included review of the following programmatic elements:

- (1) Radiological Emergency Response Plan and its implementing procedures;
- (2) emergency facilities, equipment, instrumentation, and supplies;
- (3) organization and management control; (4) training; and (5) independent reviews/audits.

Results:

In the area inspected, no violations or deviations were identified. The emergency preparedness program appeared to be receiving adequate management support. Emergency response facilities, equipment, and supplies were properly maintained. Training of emergency response personnel appeared to be effective. The requirements and commitments addressed by the emergency preparedness program were effectively managed by the licensee's staff. Records of program activities were maintained and readily auditable. The findings of this inspection indicated that the licensee was adequately prepared to respond to a radiological emergency at the Surry Nuclear Plant.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *W. Benthall, Supervisor Licensing, Surry
- *J. Collins, Director, Nuclear Emergency Preparedness
- *J. Costello, Station Coordinator, Emergency Preparedness
- *A. Friedman, Superintendent Nuclear Training
- *D. Hart, Supervisor, Quality (Auditing)
- *M. Kansler, Station Manager, Surry
- *R. Kulp, Emergency Preparedness, Surry
- *J. Price, Assistant Manager, Nuclear Safety and Licensing, Surry
- *W. Quinn, Nuclear Training Supervisor, Evaluation and Support
- *W. Renz, Staff Planner, Nuclear Emergency Preparedness
- *S. Wood, Training, Surry

Other licensee employees contacted during this inspection included engineers, operators, mechanics, security force members, technicians, and administrative personnel.

NRC Resident Inspectors

- W. Holland
- *J. York

*Attended exit interview

2. Emergency Plan and Implementing Procedures (82701)

Pursuant to 10 CFR 50.47(b)(16), 10 CFR 50.54(q), and Appendix E to 10 CFR Part 50, this area was reviewed to determine whether changes were made to the program since the last routine inspection (March 1990), and to assess the impact of these changes on the overall state of emergency preparedness at the facility.

The inspector reviewed the licensee's program for making changes to the Emergency Plan (EP) and the Emergency Plan Implementing Procedures (EPIPs). A review of selected licensee records confirmed that all changes to the EP and EPIPs since March 1990 were approved by management and submitted to the NRC within 30 days of the effective date, as required.

Controlled copies of the Emergency Telephone Directory, EP, and EPIPs were audited in the Control Room, Technical Support Center (TSC), the Local Emergency Operations Facility (LEOF) and the Corporate Emergency Response Center. With one exception, the selected documents that were examined were found to be a current revision. The one exception was as follows:

- ° The Surry Emergency Telephone Directory in the Corporate Emergency Response Center was found to be an out-of-date revision.

The cognizant licensee representative, when informed regarding the superseded document, took the following immediate action: a current revision was immediately requested from document control and placed in the affected copy and the superseded copy was removed. The licensee was informed of the finding during the exit. The licensee promptly addressed long term corrective action by placing the issue on their Incomplete Items List.

The inspector reviewed one emergency declaration made by the licensee since the last inspection of March 1990. The following declaration was reviewed:

October 23, 1990 Notification of Unusual Event

Review of the Emergency Action Level (EAL) Classification procedure and conditions prompting the classification indicated that the classification was made promptly, correctly and timely offsite notifications conducted.

The inspector reviewed the meeting Agenda of October 10, 1990 (VOPEX2-90), where the EALs were presented and reviewed by the State. The State made no recommendations for EAL changes at that time.

No violations or deviations were identified.

3. Emergency Facilities, Equipment, Instrumentation, and Supplies (82701)

Pursuant to 10 CFR 50.47(b)(8) and (9), and 10 CFR 50.54(q), and Section IV.E of Appendix E to 10 CFR 50, this area was inspected to determine whether the licensee's emergency response facilities (ERFs) and other essential emergency equipment, instrumentation, and supplies were maintained in a state of operational readiness, and to assess the impact of any changes in this area upon the emergency preparedness program.

The inspector toured the licensee's ERFs, including the Control Room, TSC, Operations Support center (OSC), LOEF, and Corporate Emergency Center. The facilities and emergency equipment therein appeared to be maintained in an appropriate state of readiness. According to observations by the inspector and statements by licensee representatives, no significant changes in the facilities were made since the last inspection.

The inspector and licensee checked the inventory of the Emergency Kit located in the TSC and found the inventory complete.

The inspector verified the operability of the site Fire Engine and site ambulance by requesting the licensee start the vehicles. Both started and ran satisfactorily. Visual inspection of both vehicles indicated that the vehicles were equipped and ready to respond.

The inspector reviewed the licensee's documentation of required communications tests for the period of March 1990 to January 1991, including the following: (1) EOF communications system functional tests, performed biweekly; (2) monthly communications drills involving message transmission from the Control Room to the state Warning Point via the Automatic Ring-Down; and (3) tests of the Emergency Notification System (ENS). According to the records, prompt corrective actions were undertaken when equipment deficiencies were identified.

The Early Warning Notification System (EWNS) consisted of 60 fixed sirens (7 in York, 15 in James, 16 in Surry, 4 in Isle of Wight, 6 in Williamsburg, and 12 in Newport News Counties). Testing was performed under the jurisdiction of the respective county emergency management agencies, with test results forwarded quarterly to the licensee. The licensee has a computerized data logger and feedback system. This provided on line capabilities to monitor the activation and operability of the EWNS system. The inspector witnessed a January 8, 1991 surveillance test (STP 55.5) for the Early Warning System Polling Functional test. The test was conducted from the LEOF and the results indicated that all sirens met the acceptance criteria.

No violations or deviations were identified.

4. Organization and Management control (82701)

Pursuant to 10 CFR 50.47(b)(1) and (16) and Section IV.A of Appendix E to 10 CFR Part 50, this area was inspected to determine the effects of any changes in the licensee's emergency response organization and/or management control systems in the emergency preparedness program and to verify that such changes were properly factored into the EP and EIPs.

Questions concerning county organization and management changes involving the emergency preparedness program were reviewed and discussed with licensee representatives. There were no county changes identified.

The inspector discussed the site relationship, in Emergency Preparedness, with the Emergency Service Coordinator for James City County and Assistant County Administrator and Emergency Service Coordinator for Surry County. The relationships were described as open and responsive. No problem areas were identified by either offsite local official.

The organization and management of the emergency preparedness program were reviewed and discussed with licensee representatives. Minor management organizational changes in these aspects of the program had occurred since the March 1990. These did not change nor affect the licensee's ability to respond.

The inspector reviewed the licensee's EP Section 8 and Implementing Procedures methodology for program maintenance. The Plan and procedure (Surry Power Station Emergency Plan Section 8 "Maintaining Emergency Preparedness" and EPAP-2601 "Maintaining Emergency Preparedness") addressed the performance of a variety of required activities, including

testing of communication systems, training for licensee and offsite emergency response personnel, shift augmentation drills, and other program maintenance activities. Documentation of these activities was maintained. Records were reviewed in the following areas:

- ° STP-55.4 Emergency Communications Test
- ° STP-55.5 Early Warning System Polling Function Test
- ° STP-55.6 Early Warning System Siren Activation Monitoring
- ° STP-56 Emergency Plan Augmentation Callout
- ° PT-55.3 Emergency Plan Radiation Instruments and Emergency Kit Inspection and Checks

All of the required records were found satisfactory.

No violations or deviations were identified.

5. Independent Review/Audits (82701)

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 has performed an independent review of audit of the emergency preparedness program, and whether the licensee has a corrective action system for deficiencies and weaknesses identified during exercise and drills.

The most recent independent audit of the program (Audit Report 90-18 dated August 16 - September 21, 1990), conducted by Virginia Power Quality Program Department, was reviewed. The Audit was a comprehensive integrated audit involving Surry, North Anna, and the Corporate Emergency Preparedness Program. The inspector's review of the subject audit report indicated that the licensee had conducted a detailed evaluation of :

- ° Emergency Preparedness Administration
- ° Emergency Response Organization
- ° Training
- ° Facilities/Documents/Equipment
- ° Interface with offsite Agencies
- ° Emergency Plan and Implementing Procedures
- ° Drills/ Exercises
- ° Assurance of Quality

A copy of the appropriate section of the audit finding, which included an evaluation of the interface between the licensee, State and Local Authorities transmitted on November 1, 1990 (Collins to Urquhart), was reviewed and found satisfactory.

During this inspection, the inspector reviewed the qualifications of the team members and check list questions in use by the Quality Program Department performing the 1990 audit. The inspector reviewed the qualifications for the technical experts for the emergency preparedness audit. The two technical experts resume's for this audit were reviewed and found adequate.

The licensee's program for follow-up on findings from audits, drills, and exercises was reviewed. The licensee has established a corporate wide computer-based system on both the corporate and facility level called Emergency Preparedness Incomplete Items Listing as a tool for managing the follow-up actions required for deficient areas of the program. Review of a sample of completed corrective actions indicated that findings were satisfactorily addressed. Appropriate corrective actions had been completed.

IR 90-37 noted Virginia Power Security Audit S90-01-OBS03 identified a need to upgrade the local law enforcement Security and EP Training. As a followup the inspection team reviewed the additional Law Enforcement Security and EP Training. The documents reviewed were:

- Signed Copy of the Invitation letter to the Local Law Enforcement
- Meeting Agenda
- Attendees sign-in sheet

The reviewed documentation satisfactorily addressed the concerns expressed in Inspection Report No. 90-37 and this issue is considered closed.

No violations or deviations were identified.

6. Training (82701)

Pursuant to 10 CFR 50.47(b)(2) and (15), and Section IV. F of Appendix E to 10 CFR Part 50, this area was inspected to determine whether the licensee's key emergency response personnel were properly trained and understood their emergency responsibilities.

Two SRO qualified operators from the shift in training were interviewed individually. Previously developed scenarios were given to the operators and they were asked to classify the event. Although operators were able to use the EAL tables to classify the events, the meaning of such words and phrases as "safety system", "major" damage, and "make up system capacity" raised questions as to the severity levels of different EALs. This was brought to the attention of the licensee management at the exit and they committed to review the use and meaning of these words and phrases used in the EAL.

Both operators stated that only one to two days per year were specifically dedicated to Emergency Preparedness classroom training. The majority of the EP training is integrated to the simulator session.

No violations or deviations were identified.

7. Actions on Previous Inspection Findings (92701)

(Closed) Inspector Follow-up Item (IFI) 50-280/281 89-09-02: Add loss of station PBX to Loss of Communications EAL.

EPIP-1.01, Tab A, EAL #10 and Table 4.1a of the Surry Emergency Plan were revised on 4-27-89 to list loss of station PBX with loss of station

Gai-Tronics System and station UHF radios as the indication for Loss of Station Communication capability.

8. Exit Interview

The inspection scope and results were summarized on March 11, 1991, with those persons indicated in Paragraph 1. Although proprietary information was reviewed during this inspection, none is contained in this report. Licensee management was informed that the previous IFI is considered closed.