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

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Report Nos.: 50-280/90-02 and 50-281/90-02

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 8-12, 1990

Inspector: W Rankin for W. Sartor 1/30/90
Date Signed

Approved by: W Rankin 1/30/90
W. Rankin, Chief Date Signed
Emergency Preparedness Section
Emergency Preparedness and Radiological
Protection Branch
Division of Radiation Safety and Safeguards

SUMMARY

Scope:

This routine, announced inspection was conducted in the area of emergency preparedness (EP). Several aspects of the emergency preparedness program were inspected to determine if the program was being maintained in a state of operational readiness for responding to emergencies. Observations included a review of selected records and audit reports, discussions with the ongoing audit team, discussions with the corporate EP staff, and reviewing open items for closure.

Results:

In the areas inspected, violations or deviations were not identified.

The Surry emergency preparedness program was being maintained adequately to respond to an emergency. Program strengths included significant corporate resources being allocated to plan additional program improvements since the successful November 15, 1989 emergency exercise. Inspection emphasis was given to progress made in needed additional corrective actions for previously identified problem areas such as staff augmentation response times and the command and control of offsite monitoring teams.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*W. Benthall, Supervisor Licensing
J. Collins, Director, Corporate Emergency Preparedness
*J. Costello, Station Coordinator, Emergency Preparedness
*E. Grecheck, Assistant Station Manager, Nuclear Safety and Licensing
*S. Harrison, Senior Emergency Planner, Corporate Emergency Preparedness
*M. Knasler, Station Manager
C. Matthews, Assistant Security Shift Supervisor
R. Morgan, Quality Assurance Auditor
J. O'Hanlon, Vice President, Nuclear Services
*E. Smith Jr., Manager, Quality Assurance
C. Tarantino, Staff Health Physicist
L. Thomasson, Supervisor, Corporate Health Physics
W. Webb, Security Shift Supervisor

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

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*W. Holland, Senior Resident Inspector
*Attended exit interview

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

Discussions were held with licensee representatives concerning modifications to facilities, equipment, and instrumentation since the last inspection. The inspection activity concentrated in areas that had previously been identified as problem areas in routine inspections or during emergency exercises. The areas encompassed equipment and instrumentation used for initiating emergency organization callout, instrumentation contained in emergency kits, and the status of the new Multiple Integrated Dose Assessment System (MIDAS) dose assessment software.

Since the November 15, 1989 emergency preparedness exercise, the pagers and telephone speed dialers have been an integral part of the callout procedures. Surveillance Test Procedure (STP) STP-56 entitled "Emergency Plan Augmentation Callout Drill" was reviewed for the August 9, 1989 callout. It was not fully satisfactory because one position (Reactor Engineer) was not filled within the required time. The December 12, 1989 callout results could not be reviewed because Records Control had not yet filed the STP. Although the December 4, 1989 callout was not fully satisfactory, licensee representatives indicated the use of the pagers was improving the augmentation time. The inspector also conducted interviews

with the backshift Security Shift Supervisor and Assistant Security Shift Supervisor to ascertain their ability to initiate an emergency callout if so required. Both individuals were familiar with the equipment and procedures, and a walkthrough of the facilities indicated they could effectively implement the callout. Subsequent to this inspection, during a meeting with licensee management on January 16, 1990, the licensee indicated further specific actions would be taken to meet specified augmentation times. These included personnel relocation to a closer site proximity, maintaining personnel off shift in a standby response status, and further enhancements to call in practices.

Discussions with a licensee representative concerning instruments in the emergency kits indicated six to eight microcurie Cs-137 sources had been added to provide a capability for ensuring the operability status of portable survey instruments.

Discussions with Corporate Health Physics representatives addressed the status of the MIDAS software. Information provided indicated that MIDAS should be available by July 31, 1990, with the contractor providing documentation to identify differences greater than a factor of three between MIDAS results and the then current Commonwealth of Virginia dose assessment model results.

The inspector stated that the review of the documentation explaining any differences greater than a factor of three would be tracked as an inspector follow-up item (IFI).

IFI 50-280, 281/90-02-01. Review the documentation of differences between the MIDAS dose assessment model and the Commonwealth of Virginia's dose assessment model. This item permits IFI 50-280, 281/87-12-05 to be closed because the differences between the current but soon to be discontinued RAD/MET model and the current Commonwealth of Virginia model are not now planned for formal documentation.

No violations or deviations were identified.

3. Licensee 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 had performed an independent review or audit of the emergency preparedness program.

Records of audits of the program were reviewed. The most recent 10 CFR 50.54(t) audit had been conducted from July 31-September 1, 1989, by the Corporate Quality Assurance (QA) Department with the support of technical specialists from Enercon Services. The overall assessment was the emergency preparedness program was satisfactory with 12 concerns and six improvements items being identified. The aforementioned audit satisfied the annual frequency requirements for such audits. During the week of this inspection, the inspector observed two interviews being conducted by the Surry QA Staff which had initiated the 1990 EP Audit.

Audit interviews observed were well organized and reflected knowledge of the EP program.

No violations or deviations were identified.

4. Action on Previous Inspection Findings (92701, 92702)

a. (Closed) IFI 50-280, 281/87-12-05: Documentation of the manual, computerized and Commonwealth dose models such that differences are understood by all parties prior to their use. Although test cases were run on the above dose models, documentation of the differences was not made because of updates to the RAD/MET dose model. Because the licensee is implementing a new dose model (MIDAS), the documentation of differences will be followed with that program (see Paragraph 2).

b. (Closed) IFI 50-280, 281/87-12-06: Ensure operability of the computerized dose model. The inoperability referenced appeared to occur as a result of key files needed to make the system operable being deleted or modified. Station software control has been enhanced since that time and should prevent a similar occurrence.

c. (Closed) IFI 50-280, 281/87-12-09: Review documentation to ensure that Local Emergency Operations Facility (LEOF) habitability is in accordance with NUREG-0696 and section 7.1.d of the Emergency Plan. A magnahelic gauge with a range of 0 to 5 inches of water was installed next to the LEOF HVAC control panel and the reference leg field routed to the outside with work completed on February 15, 1989. Procedure PT-32.14 now provides for LEOF pressurization testing on an 18 month cycle.

d. (Open) IFI 50-280, 281/87-29-12: Improve command and control of the offsite monitoring team during the initial deployment. This item will be a performance objective of the licensee conducted mini-exercise for training purposes to be conducted during the first quarter of 1990. An NRC inspector will try to observe the item to provide closure.

e. (Closed) IFI 50-280, 281/89-09-01: Conduct more frequent audits of the Emergency Plan Implementing Procedures (EPIPs) controlled distribution. STP 55.3 has been revised to require quarterly (or following facility activation) inventories of the EPIPs.

f. (Closed) IFI 50-280, 281/89-09-03: Review and evaluate, providing a capability in the emergency kits for ensuring the operability status of portable survey instruments. A six to eight microcurie Cs-137 source had been added to the required emergency kits to provide the capability of performing operability status of the portable survey instruments.

5. Exit Interview

The inspection scope and results were summarized on January 12, 1990, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results listed below. Proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

Item Number	Description/Reference
50-280, 281/90-02-01	IFI - Review the documentation of differences between the MIDAS dose assessment model and the Commonwealth of Virginia's dose assessment model (Paragraph 2).