



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report No. 50-281/79-19

Licensee: Virginia Electric and Power Company
P. O. Box 26666
Richmond, Virginia 23261

Facility Name: Surry 2

Docket No. 50-281

License No. DPR-37

Inspection at Surry Site near Williamsburg, Virginia

Inspectors:

G. R. Jenkins

4/9/79

Date Signed

for L. L. Jackson

4/9/79

Date Signed

Approved by:

A. F. Gibson
A. F. Gibson, Section Chief, FF&MS Branch

4/9/79

Date Signed

SUMMARY

Inspection on March 13-16, 1979

Areas Inspected

This routine unannounced inspection involved 46 inspector-hours on site in the areas of radiological controls and radiation dosimetry associated with the steam generator replacement project.

Results

Of the two areas inspected, no apparent items of noncompliance or deviations were identified.

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DETAILS

1. Persons Contacted

Licensee Employees

*W. L. Stewart, Station Manager
*J. L. Wilson, Operations Superintendent
T. A. Peebles, Technical Superintendent
*R. M. Smith, Health Physics Supervisor
*S. Sarver, Corporate Health Physicist
P. P. Nottingham, Health Physics Coordinator - SGRP
M. R. Beckham, Senior Health Physics Technician
J. Dodson, Senior Health Physics Technician

Other licensee and contract employees contacted included 8 construction craftsmen and 5 technicians.

NRC Resident Inspector

*D. J. Burke

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on March 16, 1979 with those persons indicated in Paragraph 1 above. With regard to the labeling of bags containing radioactive material, management representatives stated that such bags would be labeled or placed in labeled drums.

3. Licensee Action on Previous Inspection Findings

(Open) Infraction (280/79-09-03, 281/79-10-03) Labeling containers of radioactive waste. Drums containing radioactive waste appeared to be labeled. However, large numbers of yellow plastic bags containing radioactive waste material were observed in Unit 2 Containment without labels (Details, Paragraph 5.b.)

(Closed) Unresolved Item (281/79-13-01) Idle workers in Unit 2 Containment. Observations by inspectors were that people in containment who were not working were waiting in designated areas and were no longer loitering in radiation areas.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Radiological Controls Associated With the Steam Generator Replacement Project (SGRP)

- a. Through observations of work preparations and work in progress in Unit 2 Containment, as well as discussions with workers, the inspectors determined that workers appeared to be informed of the radiological conditions in their work areas. The inspectors reviewed the air sampling and results associated with the initial reactor coolant pipe cuts in steam generator "C" cubicle. Samples were taken both inside and outside the containment tent, and the maximum concentration was about twice maximum permissible concentrations (MPC) inside the tent during the cut. Personnel entering the tent were required to wear wet suits with air supplied hoods. The inspectors also made independent radiation surveys on all levels in containment; all areas checked appeared to be posted and controlled in accordance with regulatory requirements. No items of noncompliance or deviations were identified in the above areas.
- b. The inspectors observed a large number of yellow plastic bags in containment, with no identifying tags or labels, which contained radioactive or contaminated waste material. Most were located in the basement, but some bags were observed on all levels. As an example, an inspector surveyed a bag on the basement floor outside the crane wall; the radiation level was about 40 mrem/hour at contact, and the bag was not labeled. An inspector noted that noncompliance with 10 CFR 20.203(f) was identified in RII Report Nos. 50-280/79-09 and 50-281/79-10. The inspector cited the unlabeled bags as an additional example of this noncompliance item.

6. Radiation Exposure and Dosimetry

- a. Through discussions with the Health Physics Supervisor, the inspectors determined that there was no system in effect to provide up-to-date management information on man-rem exposure expended on the steam generator replacement project. The Health Physics Supervisor said that exposure data would be tabulated in order to provide input to the required bi-monthly status report. The inspectors emphasized the advantages of continuously tracking man-rem data for the various jobs and the project as a whole in order to use the data as a management tool in maintaining radiation exposures as low as reasonably achievable (ALARA). Licensee management acknowledged the inspectors' comments and said that a computer program was being developed which will provide the needed data.

- b. The Health Physics Supervisor totaled the SGRP radiation exposure for all active Daniels Construction Company contract personnel, based on a March 15 computer printout, and found the total to be about 266 man-rem. An inspector also reviewed the March 15 report and determined that, out of about 800 workers on the list, about 31 had received quarterly exposure greater than 1250 mrem; the maximum recorded exposure was 1522 mrem. The licensee's administrative limit for these contract workers is 2000 mrem/quarter.

- c. The inspectors discussed differences between pocket dosimeter and TLD results with the Health Physics Supervisor. In response to questions, he said that no system or procedure exists to insure that significant differences in these results are promptly brought to the attention of health physics management for resolution. The inspectors noted the need for such a system to help promote more accurate dose assignment. The Health Physics Supervisor concurred, and said that a computer program was near completion which will provide pocket dosimeter/TLD comparisons for each worker and differences of greater than 20 per cent will be identified for investigation. He said if the computer program was not operational by March 23, 1979, an interim procedure would be implemented whereby dose control technicians would identify differences of more than 20 percent. (79-19-01)