



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

Report Nos.: 50-338/78-26 and 50-339/78-25

Docket Nos.: 50-338 and 50-339

License Nos.: 44-4 and CPPR-78

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

Facility Name: North Anna 1 and 2

Inspection at: North Anna, Mineral, Virginia

Inspection conducted: August 28 - September 1, 1978

Inspector: W. W. Peery

Reviewed by:

J. W. Hufham
J. W. Hufham, Chief
Environmental and Special Projects Section
Fuel Facility and Materials Safety Branch

10/5/78
Date

Inspection Summary

Inspection on August 28 - September 1, 1978 (Report Nos. 50-338/78-26 and 50-339/78-25)

Areas Inspected: Radiological environmental monitoring program including management control, quality control of analytical measurements, inspection of environmental monitoring stations, review of environmental monitoring data, review of radiological environmental monitoring procedures and implementation of the monitoring program. The inspection involved 28 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified in the six areas inspected.

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DETAILS I

Prepared by:

W. W. Peery
W. W. Peery, Radiation Specialist
Environmental and Special Projects Section
Fuel Facility and Materials Safety Branch

10/5/78
Date

Dates of Inspection: August 28 - September 1, 1978

Reviewed by:

J. W. Hufham
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1. Persons Contacted

- *J. A. Ahladas, VEPCO - Director of Operations and Maintenance
- *W. R. Cartwright, Station Manager
- *C. E. Necessary, VEPCO - Superintendent Maintenance Services
- *E. R. Smith, Jr., Supervisor - Engineering Services
- *D. L. Smith, VEPCO - Resident QC Engineer
- *D. M. Hopper, Supervisor - Health Physics
- R. Queener, Health Physicist
- *D. C. Woods, NRC Coordinator
- *F. P. Miller, QC Senior Engineering Technician
- L. G. Ellyson, QC Engineering Technician
- W. Barnes, Health Physics Technician

*Denotes those present during the exit interview.

2. Licensee Action on Previous Inspection Findings

There were no licensee actions on pending items of noncompliance or deviations inspected during this inspection.

3. Unresolved Items

No additional unresolved items were identified during this inspection.

4. Management Controls

- a. Sections 5.1 and 5.3.1.2 of the Environmental Technical Specifications (ETS) assigns responsibility to specific organizations and individuals to conduct the environmental monitoring program. Assignment of responsibility had been made with designation to management and supervision. The assignments of responsibility apparently afford management control equivalent to the previous program.

- b. Sections 5.3.2.2 and 5.3.2.3 of the Environmental Technical Specifications assign responsibility for conducting audits of the environmental monitoring program. Audits of the program had not been conducted since the last inspection (50-338/77-17, 50-339/77-14). Section 5.3.2.2.a of the ETS provides that audits shall be made at least once per 12 months. The ETS did not go into effect until November 26, 1977. Licensee representatives informed the inspector that an audit of the program had been scheduled for September, 1978. Reviews by the inspector of the results of previous audits revealed that provision is made for recording the audit findings, followup and corrective actions and a system for reporting the results to management and supervision.

5. Quality Control of Analytical Measurements

Samples from the licensee's radiological environmental monitoring program are analyzed by an outside contractor. The contractor has provided to the licensee information on the quality control exercised in the analysis of the samples. Information has also been provided on intercomparisons with the EPA cross-check program. The previous audits mentioned in paragraph 4 above have included the contractor's program and licensee representatives informed the inspector that another audit of the contractor program is scheduled for the last quarter of 1978. The inspector had no further questions.

6. Implementation of the Environmental Monitoring Program

- a. Review by the inspector of licensee reports revealed that the requirements of Section 3.2 of the ETS have apparently been met in terms of sampling locations, monitoring and measurement frequencies.
- b. The inspector reviewed licensee reports and data generated from the radiological environmental monitoring program for 1977 and the first quarter of 1978 and found them satisfactory except for several obvious mistakes and items of an editorial nature for the 1978 data which was furnished to a licensee representative who entered corrections at the time of this inspection.
- c. One nonroutine report LER-78-031/04L-0 was submitted in accordance with ETS 5.6.2.2.a. The event involved environmental measurements greater than ten times previous measurements for the week of 3/21-3/28/78. The licensee evaluated the event and, based on available information, concluded the probable cause to be fallout from Chinese nuclear tests. The conclusion appears reasonable. This event is closed.

- d. The inspector inspected all (10) air particulate and charcoal filter environmental monitoring stations including those with TLD's and also a representative number of solely TLD stations. Inspection of these stations indicated that the samples required by ETS 3.2 had been taken.
- e. The stations inspected appeared to be well maintained and in good condition. During the last inspection (Report Nos. 50-338/77-17, 50-339/77-14) licensee representatives responded to items discussed by the inspectors. These items and the outcome for each are as follows:
 1. A periodic frequency was to be established to calibrate air flow rotameters on air sampling station. This item had not been completed. A licensee representative stated that a satisfactory means of accomplishing the calibrations had not been found. The licensee representative was furnished information by the inspector as to a source of an acceptable procedure and equipment to use in the calibrations. The licensee representative stated that the procedure and equipment would be sought to make the calibrations.
 2. Charcoal filter holders were to be replaced or modified. Six of ten filter holders had been replaced and a licensee representative stated that the remaining four would be replaced by the week of September 3, 1978. There is a question that the replacement filter holders are going to be satisfactory. A licensee representative stated that commercially available charcoal filter holders will be sought to further improve the seal around the filters and enhance the ease of changing the filters.
 3. Broken timer meter covers were to be replaced on air monitoring stations. Inspection revealed that this had been accomplished.
 4. Elimination of water inside plastic bags containing TLDs was to be accomplished. This inspection revealed no water inside plastic TLD bags.
 5. Statements to be added to procedures to assure timely submittal of environmental samples. The procedures contain statements for timely submittal of samples.

6. Sufficient spare parts were to be stocked to allow timely repair of monitoring. Inspection revealed a sufficient supply of spare parts to make timely repairs.
7. In addition to items 1-6 above, licensee representatives stated that an occasional problem had been experienced with rain reaching the particulate filter under the weather shield during severe rain storms. The majority of the weather shields had been replaced with extended shields and the remainder should be replaced by the week of September 3, 1978.
8. The inspector informed licensee representatives that ETS 3.2 and referenced Table 3.2-2 shows a sensitivity for iodine-131 in water of 10 picocuries per liter, whereas Regulatory Guide 4.8 suggests a sensitivity of 0.4 picocuries per liter for water samples. A licensee representative contacted the contractor performing the analysis by telephone during this inspection on September 1, 1978, and requested that the water samples be analyzed to the 0.4 picocuries per liter sensitivity. The licensee representative stated that the contractor commitment to meet the request will be verified in written records.

7. Exit Interview

The inspector met with licensee representatives (as denoted in paragraph 1) at the conclusion of the inspection on September 1, 1978, and summarized the scope and findings of the inspection.