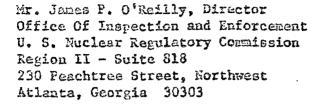
VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

December 30, 1977



Serial No. 573/120777
PO&M/DLB:wbh
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Dear Mr. O'Reilly:

This is in response to your letter of December 7, 1977, in reference to the inspection conducted at Surry Power Station on October 25-28, 1977, and reported in I.E. Inspection Reports 50-280/77-31 and 50-281/77-31.

We have reviewed your letter and the enclosed inspection report. Our response to the specific non-compliance item is contained in the attachment to this letter.

We have determined that no proprietary information is contained in the reports. Accordingly, the Virginia Electric and Fower Company interposes no objection to these inspection reports being made a matter of public disclosure.

Very truly yours.

Lo. M. Stallings

Vice President - Power Supply and Production Operations

Attachment: 5 copies

cc: Mr. Robert W. Reid

RESPONSE TO DEVIATION LISTED IN 1E INSPECTION REPORT NOS. 50-280/77-31, 50-281/77-31

NRC COMMENT

Based on the results of an NRC inspection conducted October 25-28, 1977, it appears one of your activities was not conducted in conformance with generally accepted industry practice as indicated below.

NCRP Report No. 10, "Radiological Monitoring Methods and Instruments," section 8 discusses beta-gamma radiation detectors. Section 8.1 states, "A detecting instrument should be used for locating sources of radiation and contamination. It shall not be used for measurement of the radiation unless it has been calibrated under appropriate conditions with radiation of approximately the same energy distribution as that being measured".

Contrary to the above detectors used to measure contamination have not been calibrated with a reference radioactive source. Efficiency factors necessary to calculate contamination levels, are based on manufacturers data and appear to be in error based on independent measurements of efficiency by an NRC inspector on November 1, 1977. These detectors are used to measure contamination of personnel, respirators, various tools and equipment, and to identify contaminated areas of the plant.

RESPONSE

The deviation listed above is correct as stated in the inspection reports.

Specifically, pursuant to section 2.201 of the NRC'S "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, the following information is submitted:

1. Corrective steps which have been taken and results achieved.

A preliminary study was conducted to determine the validity of using the 25% efficiency value for the HP-210 probe. It has been determined that the 25% value was based on using $^{90}\mathrm{Sr}^{-90}\mathrm{Y}$ as a check source. Using a $^{99}\mathrm{Tc}$ check source has been approximately 10%. A NBS traceable $^{99}\mathrm{Tc}$ check source has been ordered to check the HP-210 probe efficiency during instrument calibration period.

2. Corrective steps which will be taken to avoid further deviations.

Upon receipt of the ⁹⁹Tc source the proper efficiency value will be determined. All HP-210 probes will then be checked and marked to indicate they have been checked with a source. The correct efficiency value will be used and the appropriate procedures modified.

3. Date corrective actions will be completed.

Upon receipt of the 99Tc source.