79-074-000 (N)

Vepco

VIRGINIA ELECTRIC AND POWER COMPANY, RICHMOND, VIRGINIA 23261

January 11, 1979

Mr. James P. O'Reilly, Director
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Serial No. 024
P[illegible]/LCK,jr.:bep/mc

Docket No. 50-339

Dear Sir:

On January 8, 1979, a report was made under the provisions of 10CFR50.55(e) concerning a possible deficiency in the calculation of the axial flux shape Fj(z) by the APDMS hardware for North Anna Unit 2.

In accordance with the reporting requirements of 10CFR21, the following information is submitted:

A. Name and address of reporting individual:

Mr. E. A. Baum, Executive Manager
Licensing and Quality Assurance
Virginia Electric and Power Company
P. O. Box 26666
Richmond, Virginia 23261

B. Facility, activity, and/or component affected:

North Anna Power Station, Unit 2
Axial Power Distribution Monitoring System (APDMS)

C. Name of firm constructing the facility or supplying the component, activity or service.

Westinghouse Electric Corporation
Water Reactor Divisions
P. O. Box 355
Pittsburg, Pennsylvania 15230

D. Description of defect, deficiency, or failure to comply:

Vepco has determined that the Axial Power Distribution Monitoring System (APDMS) does not properly account for the in-core moveable detector background signal when determining the axial flux shape, Fj(z). Since APDMS does not subtract the background signal from the measured flux signal, it has been determined from a review of North Anna Unit 1 flux map data that the value calculated by APDMS for the peak of the axial flux shape has been in error by as much as 0.4 percent. However, the calculation of Fj(z) is only non-conservative for values greater than 1.0.

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E. Date of determination of reportability:

January 8, 1979

F. Similar components, activities or services:

North Anna Power Station, Unit 1

G. Corrective action which has been, is being or will be taken, the individual responsible and the length of time to complete the action:

The equipment is not yet operational. A permanent solution is currently being discussed in-house and with Westinghouse.

H. Other information:

None

Any information not available at this time will be submitted in a follow-up letter as a 30-day report.

Should you require further information, please contact this office.

Very truly yours,

Sam C. Brown, Jr.
Senior Vice President
Power Station Engineering
and Construction

cc: Director, Office of Inspection
and Enforcement (3)

ATTACHED IS PART 21 REPORT FROM IE MAIL UNIT - ROOM 317 E/W

PART 21 IDENTIFICATION NO. 79-094-000
DATE OF LETTER 1/11/79

COMPANY NAME Vapco
DOCKET NO. 50-339
DATE DISTRIBUTED 1/16/79

ORIGINAL REPORT [X]
SUPPLEMENTARY [ ]

DISTRIBUTION:

[X] REACTOR(R)

NRR/DOR (Stello,
NRR/DPM (Boyd)
AD/ROI (Sniezek/Seyfrit)
AD/RCI
MPA/PERFORMANCE EVALUATION BR. MNB 12105
REGIONS
PDR
LPDR
NSIC
TIC
IE FILES (2)
CENTRAL FILES 016
CENTRAL FILES (CHRON)

[ ] FUEL CYCLE AND MATERIALS(M)

NMSS/FC&MS
AD/FF&MSI
PDR
MPA/PERFORMANCE EVALUATION BR. MNB 12105
REGIONS
NSIC
TIC
IE FILES (2)
CENTRAL FILES-SS 396
CENTRAL FILES (CHRON)

[ ] SAFEGUARDS(S)

NRR/DOR (Stello)
NMSS/SG
AD/SG-IE
AD/ROI
REGIONS
MPA/PERFORMANCE EVALUATION BR. MNB12105
PDR
LPDR
NSIC
TIC
IE FILES (2)
CENTRAL FILES 016
CENTRAL FILES (CHRON)
CENTRAL FILES - SS 396

ACTION:

PRELIMINARY EVALUATION OF THE ATTACHED REPORT INDICATES LEAD RESPONSIBILITY FOR FOLLOW-UP AS SHOWN BELOW:

IE [X] NRR [ ] NMSS [ ] OTHER [ ]

RO I
ROI
SG
FFMS