

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

May 7, 1976

Mr. Norman C. Moseley, Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Region II - Suite 818
230 Peachtree Street, Northwest
Atlanta, Georgia 30303

Serial No. 847-S
PO&M/ALH:jlf

Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Dear Mr. Moseley:

Pursuant to Surry Power Station Technical Specification 6.6.2, the Virginia Electric and Power Company hereby submits a copy of The Supplemental Report To USRE-S1-76-01.

The substance of this report has been reviewed by the Station Nuclear Safety and Operating Committee and will be placed on the agenda for the next meeting of the System Nuclear Safety and Operating Committee.

Very truly yours,

G. M. Stallings **ACKNOWLEDGED**

G. M. Stallings
Vice President-Power Supply
and Production Operations



Enclosure

cc: Mr. Robert W. Reid, Chief (40)
Operating Reactors Branch 4

DO NOT REPLY
Regulatory Docket



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SUPPLEMENTAL REPORT

USRE-S1-76-01

INOPERABILITY OF UNIT NO. 1 AND UNIT NO. 2
CONTAINMENT GASEOUS AND PARTICULATE MONITORS

APRIL 28, 1976

DOCKET NOS. 50-280 AND 50-281
LICENSE NOS. DPR-32 AND DPR-37

SURRY POWER STATION

VIRGINIA ELECTRIC AND POWER COMPANY

I. INTRODUCTION

This report is submitted to provide supplemental information to USRE-S1-76-01, which described an occurrence involving the inoperability of containment gaseous and particulate monitors of Unit Nos. 1 and 2. This report will be concerned with the duration of the inoperable condition and with actions taken to prevent recurrence.

II. SUMMARY OF OCCURRENCE

At the time of the occurrence, Unit No. 1 was at refueling shutdown and Unit No. 2 was operating at 100 percent power. On December 4, 1975, at approximately 0600 hours, a member of the operations staff noted that there was no air flow indicating from the local flow indicator on the Unit No. 2 containment gaseous and particulate monitor cabinet. The flow indicator on Unit No. 1 was then checked and found to be reading zero. While the vacuum pump control switch on each unit was checked "on", neither unit indicated any air flow.

Investigation revealed a failed bearing on the Unit No. 1 vacuum pump. The bearing was replaced and the pump tested satisfactorily, and was returned to service. The loss of flow through the Unit No. 2 monitors was due to a clogged inline charcoal filter. Following replacement of the filter element, the flow rate through the monitors returned to the design level of 10 cfm.

III. DURATION OF INOPERABILITY

A review of station records has been made to determine the duration of the inoperability of the containment gaseous and particulate monitors on Unit Nos. 1 and 2.

A maintenance request for Unit No. 1 issued November 17, 1975 indicates that the loss of flow was originally noted on that date. However, the operator

did not designate the maintenance request as "urgent" in that the unit was shut-down and refueling was completed. The Unit No. 1 vacuum pump was repaired on December 4, 1975. The Unit No. 1 monitors were inoperable for 18 days.

A maintenance request for Unit No. 2, noting zero monitor flow, was originally issued on November 25, 1975. The problem was originally believed to be due to a vacuum pump failure. However, on January 6, 1976, the loss of flow was determined to be the result of a clogged inline charcoal filter. The filter was replaced at that time and monitor flow returned to normal. The Unit No. 2 monitors were inoperable for 42 days.

During the period of time that the Unit No. 2 monitors were inoperable, the process vent system particulate and gaseous monitors served as an alternate method of reactor coolant leak detection via the containment vacuum pumps. The discharge of the vacuum pumps leaves the site via the process vent system. Therefore, any reactor coolant leakage would have been detected by the process vent particulate and gaseous monitors. This indication in conjunction with other indicators (changes in reactor coolant inventory, high sump levels, etc.) provide evidence of reactor coolant leakage.

IV. ACTIONS TAKEN TO PREVENT RECURRENCE

Prior to this occurrence, the only indication of a loss of flow through these monitors has been the flow fault alarm. This alarm system failed to indicate the loss of flow on the Unit No. 2 monitors.

In order to provide a redundant indication of loss of flow, Periodic Test No. 26.1, Radiation Monitoring Equipment Check, has been revised to include a recording of the containment gaseous and particulate monitor flow rates. This will provide a daily verification of monitor flow via the local flow indicator.

V. CONCLUSION

The duration of inoperability of the containment gaseous and particulate monitors on Unit Nos. 1 and 2 was 18 and 42 days, respectively.

The periodic check of radiation monitors has been revised to provide redundant checks of the flow rates through these monitors.