

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

October 29, 1991

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No. 91-134C
NL&P/CGL R0
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
SUPPLEMENTAL INFORMATION ON SURRY INDIVIDUAL
PLANT EXAMINATION / INTERNAL FLOODING ANALYSIS

The purpose of this letter is document the October 29, 1991 conference call between the NRC and Virginia Electric and Power Company. The conference call was conducted to discuss the core damage frequency (CDF) for internal flooding considering the current plant configuration at Surry Power Station. Specifically, the following items have been factored into calculation of a reduced CDF for internal flooding:

- Expansion joints on the circulating water and service water systems and associated MOVs, which are significant contributors to any flood damage state frequency, have recently been replaced.
- Inspections on MOV bolting have recently been completed. (MOV bolt failure was considered a significant initiating event in the original IPE analysis.)
- A minimum of seven of nine turbine building sump pumps are being maintained operable.

Considering the above and using the same methodology as was used in the original IPE analysis (August 30, 1991 submittal - Serial No. 91-134), the CDF for internal flooding is now reduced to $1.7E-4$ per reactor year.

Also discussed during the conference call were additional physical plant modifications that will be completed by November 22, 1991. These physical modifications include:

C40007

9111060257 911029
PDR - ADOCK 05000280
P PDR

Ad 11

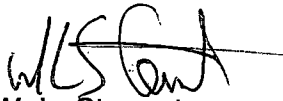
- Charging pump cubicle drain lines will be modified to prevent backflow. Planned installation of backflow devices or temporary installation of blank flanges to close the drains lines will be completed. This modification eliminates core damage sequences that initiate from RWST supply floods in either safeguards building.
- Flow shields on the six expansion joints in the service water supply lines for bearing cooling and component cooling will be installed. This modification reduces the maximum flow rate which could occur upon failure of the expansion joints to less than the dewatering capacity of the sump pumps.

Considering the above physical modifications and using the same methodology as was used in the original IPE analysis (August 30, 1991 submittal), the CDF for internal flooding will be further reduced to $9.9E-5$ per reactor year.

Attachment 1 summarizes the total reductions in CDF discussed in this letter. It should be noted that no credit is being taken for interim administrative controls or the accelerated schedule for plant modifications discussed in our October 28, 1991 submittal (Serial No. 91-134B).

If you have questions regarding this transmittal, please contact us.

Very truly yours,



W. L. Stewart
Senior Vice President - Nuclear

Attachment - Reduction of CDF for Internal Flooding for Current Configuration and Planned Short Term Modifications

cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
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Atlanta, Georgia 30323

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station

ATTACHMENT 1

**REDUCTION OF CDF FOR INTERNAL FLOODING
FOR CURRENT CONFIGURATION
AND PLANNED SHORT TERM MODIFICATIONS**

IPE Report (8/30/91)	1.1E-3
October 9, 1991 Meeting with NRC (10/9/91)	
Credit taken for Procedural Revisions and 7 of 9 Sump Pumps Operable	<8.0E-4
Current (1029/91)	1.7E-4
Credit taken for Expansion Joint Replacement and MOV Replacement/Bolt Inspection 7 of 9 Sump Pumps Operable	
Planned Short Term Modifications (by 11/22/91)	9.9E-5
Charging Pump Cubicle Isolation Expansion Joint Shields	