

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

January 23, 1986

Mr. Harold R. Denton, Director	Serial No. 85-628
Office of Nuclear Reactor Regulation	E&C/DMB/amc
Attn: Mr. Lester S. Rubenstein, Director	Docket Nos. 50-280
PWR Project Directorate #2	50-281
Division of PWR Licensing-A	50-338
U.S. Nuclear Regulatory Commission	50-339
Washington, D.C. 20555	License Nos. DPR-32
	DPR-37
	NPF-4
	NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
NORTH ANNA POWER STATION UNITS 1 AND 2
PRESSURIZED THERMAL SHOCK FINAL RULE SUBMITTAL

Pursuant to 10 CFR 50.61, the Virginia Electric and Power Company is providing a submittal of the values of the current and projected reference temperature for pressurized thermal shock (RT_{pts}) for Units 1 and 2 of the Surry and North Anna Power Stations. The submittal consists of two reports prepared by Westinghouse. Plant specific analyses were performed and are documented in WCAP 11015 for Surry Units 1 and 2, and in WCAP-11016 for North Anna Units 1 and 2. Fifteen copies of each report are provided.

The values of RT_{pts} for the reactor vessels were calculated in accordance with the requirements of 10 CFR 50.61(b)(2). The fluence analyses are based on actual power distributions for past cycles. The power distribution in the current cycle is used to determine the projected fluence until the date the operating license expires. The current cycle is designed using an eighteen month low-leakage fuel management scheme.

The fluences were calculated using an adjoint analysis technique consisting of importance functions derived from transport calculations. Actual material properties were used when possible. Otherwise, the material properties were determined based on a search of the Westinghouse Owners Group (WOG) Reactor Vessel Beltline Region Weld Metal Data Base.

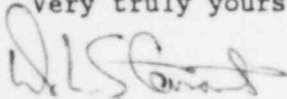
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PSB (GAMMILL)
PSB (BERLINGER)
FOB (BENAROYA)

The present RT_{pts} values and the projected RT_{pts} values at the expiration date of the operating license were calculated for each material in the vessel beltline region for each unit. The RT_{pts} values do not exceed the PTS screening criteria. This assessment will be updated in accordance with 10 CFR 50.61(b)(1) whenever changes in core loadings, surveillance measurements, or other information indicate a significant change in projected values.

Very truly yours,



W. L. Stewart

Attachments

1. Fifteen copies of WCAP-11015
2. Fifteen copies of WCAP-11016

cc: Dr. J. Nelson Grace
Regional Administrator
NRC Region II

Mr. Donald J. Burke
NRC Resident Inspector
Surry Power Station

Mr. Morris W. Branch
NRC Resident Inspector
North Anna Power Station

Mr. Terence L. Chan
NRC Surry Project Manager
PWR Project Directorate #2
Division of PWR Licensing-A

Mr. Leon B. Engle
NRC North Anna Project Manager
PWR Project Directorate #2
Division of PWR Licensing-A