

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

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

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Docket Nos. 50-338
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Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
HEATUP AND COOLDOWN CURVES

The current North Anna Unit 1 and Unit 2 heatup and cooldown curves are valid to 10 Effective Full Power Years (EFPY). The Unit 1 curves are estimated to expire in March 1993 and the Unit 2 curves in March 1994. During the latter part of 1989 and early 1990, post-irradiation testing and evaluation was performed on the reactor vessel material specimens contained in the "U" Unit 2 surveillance capsule. Capsule U had been withdrawn from Unit 2 in March 1989. Revised heatup and cooldown curves applicable to 17 EFPY were developed to account for the additional surveillance data.

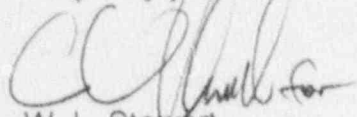
In a letter dated March 8, 1990, we committed to submit technical specification changes by March 15, 1991 to implement revised heatup and cooldown curves and low temperature overpressure protection system (LTOPS) setpoints. It was expected that this interval provided us with sufficient time to complete the analyses, reports, and draft documentation changes needed to implement revised curves and setpoints applicable to an extended cumulative core burnup. However, two issues have recently been identified which require us to revise the date for submitting the proposed changes.

First, it was expected that ample operating margin would exist in the Unit 2 heatup and cooldown curves after incorporating the Capsule U results to support extending the applicability of the curves to an average core burnup to 17 EFPY. (A revision to 17 EFPY was attempted because 17 EFPY is 2 EFPY beyond the removal date of the next Unit 2 surveillance capsule. That additional 2 EFPY period would have provided sufficient time for analysis, submittal, and NRC review and approval of needed technical specification changes without any interim changes to the curves.) However, for core burnups this far in the future, the form of the LTOPS setpoints (i.e., step function) results in insufficient operating margin at low pressure and temperature operating conditions.

Second, the Unit 1 heatup and cooldown curves will expire at the same time the next surveillance capsule is removed from Unit 1 (approximately March 1993). Thus, it is necessary to submit revised Unit 1 technical specifications sufficiently in advance of the next Unit 1 capsule analysis to provide adequate time for NRC review and approval.

Given these two considerations, we now plan to submit technical specification changes associated with revised heatup and cooldown curves for both North Anna units by December 15, 1991. This consolidated technical specification change will be submitted sufficiently in advance to support any changes needed for the Unit 1 curves and still provide us with the additional time necessary to revise the Unit 2 curves so that sufficient operating margin is maintained. Because fluence data from recent surveillance capsule dosimetry analyses indicates an excellent comparison between measured and predicted vessel fluence values, we are confident that the curves and limits currently in the Unit 1 and 2 technical specifications remain conservative through their core average burnup of 10 EFPY.

Very truly yours,



W. L. Stewart
Senior Vice President - Nuclear

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