

Duke Power Company  
P.O. Box 1006  
Charlotte, NC 28201-1006

M. S. TUCKMAN  
Senior Vice President  
Nuclear Generation  
(704)382-2200 Office  
(704)382-4360 Fax



**DUKE POWER**

May 16, 1996

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Subject: Catawba Nuclear Station, Unit 1,  
Docket No. 50-413  
McGuire Nuclear Station, Units 1 and 2,  
Docket Nos. 50-369 and 370

On May 14, 1996, a conference call was held between representatives of Duke Power Company and the NRC Staff. The purpose of the conference call was to clarify discussions of feedwater system pipe breaks that were provided in a March 15, 1996 Response to an NRC Request for Additional Information.

Consistent with the NRC-approved transient analysis methodology (DPC-NE-3002), the feedwater system pipe break event is analyzed to address two separate acceptance criteria: short-term core cooling (DNB) and long-term core cooling (hot leg boiling). Previous analyses have shown the feedline break event to be non-limiting with respect to the primary and secondary system pressure limits; therefore, no explicit peak pressure calculations are performed for this event.

The results of the long-term core cooling evaluation, performed in support of the steam generator replacement, show that the pressurizer pressure reaches a peak of slightly less than 2250 psig. This is significantly lower than the corresponding Model D steam generator result. The primary reasons for this difference are the increased tube bundle heat transfer area and the elevated feedwater nozzle of the feeding steam generator design. Both of these tend to enhance the overcooling phase of the feedline break transient and thereby reduce the RCS pressurization.

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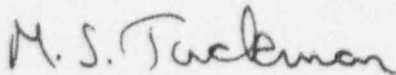
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Since the intent of the above analysis was to minimize the margin to hot leg boiling, assumptions were made for the initial and boundary conditions which minimize the RCS pressure. Were an explicit peak primary system pressure analysis to be performed, many of these assumptions would be reversed. The impact of the revised assumptions on the peak RCS pressure result has not been quantified. However, due to the large margin to the Standard Review Plan peak primary system pressure acceptance criterion of 3000 psig, this additional analysis was deemed to be unnecessary.

If additional information is required, please call Robert Sharpe at (704) 382-0956.

Very truly yours,



M. S. Tuckman

Attachments

xc: S. D. Ebnetter  
Regional Administrator, Region II  
U. S. Nuclear Regulatory Commission  
101 Marietta Street, NW, Suite 2900  
Atlanta, GA 30323

R. J. Freudenberger  
Senior Resident Inspector  
Catawba Nuclear Station

G. F. Maxwell  
Senior Resident Inspector  
McGuire Nuclear Station

P. S. Tam  
Project Manager, ONRR

V. Nerses  
Project Manager, ONRR