



**DUKE POWER**

August 27, 1996

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

Subject: Catawba Nuclear Station, Unit 1, Docket No. 50-413  
Supplement to Replacement SG Proposed TS Amendment  
(TAC M90566)

By letter dated March 15, 1996, Duke Power Company submitted responses to the NRC Staff's Request for Additional Information. Subsequent review of the steam generator tube rupture (SGTR) analysis has identified a minor error in the calculation of the initial break flow rate. The revised offsite dose results (at the EAB) are summarized in Attachment 1. These doses remain bounded by 10CFR100 and the current FSAR Section 15.6.3 analysis. The remaining discussion of the SGTR event presented in the March 15, 1996 submittal remains valid.

Doses for the locked rotor and rod ejection accidents were also provided in the March 15, 1996 submittal. As a result of modifications to the Auxiliary Feedwater System during the steam generator replacement outage, the dose analyses for these two accidents have been revised and are provided in Attachment 1.

The March 15, 1996 submittal also provided the SGTR offsite dose results for McGuire Units 1 and 2. The identified error effects these offsite dose results, also. The McGuire SGTR offsite dose results are being revised and will be provided in a future submittal.

Please contact R. O. Sharpe at (704) 382-0956 if you have any questions.

Very truly yours, 290006

*M. S. Tuckman*

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Attachment

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## Attachment 1

Catawba Unit 1  
Revised UFSAR Ch 15 Offsite Doses

	Catawba 1 (3/15/96 Letter)	Catawba 1 (revised)	10CFR100 Limit	Current UFSAR
<b>S/G Tube Rupture (SGTR)</b>				
Whole body dose (Rem)	0.126	0.169	2.5	0.31
Thyroid dose (Rem):				
-pre-existing iodine spike	53.4	63.4	300	91
-coincident iodine spike	20.1	22.4	30	26
<b>Locked Rotor</b>				
Whole body dose (Rem)	0.252	0.250	2.5	0.44
Thyroid dose (Rem):				
-pre-existing iodine spike	8.294	5.632	30	3.7
<b>Rod Ejection</b>				
Total whole body dose (Rem)	1.127	1.119	6	0.094
Total thyroid dose (Rem):				
-no iodine spike	60.23	69.558	75	1.069

Note: Current UFSAR dose analyses do not include the effect of possible S/G tube bundle uncover. This effect has been added to Duke's dose calculation model for Westinghouse and BWI S/G's. It was included in the dose analyses submitted on 3/15/96 and will be included in the next update to the Catawba UFSAR. The percent failed fuel assumption for locked rotor was increased from 10% to 15% and for rod ejection was increased from 10% to 50%. The source term assumptions for SGTR remain unchanged and are the pre-existing and coincident iodine spike as delineated in the SRP (NUREG-0800).