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50-366

HL-6028

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Edwin I. Hatch Nuclear Plant  
Reporting of Changes and Errors in  
ECCS Evaluation Models

Ladies and Gentlemen:

The Code of Federal Regulations [10 CFR 50.46(a)(3)(i)] requires the licensee to estimate the impact of any change to or error in an emergency core cooling system (ECCS) evaluation model or in the application of such a model to determine whether the change or error is significant. Regulation 10 CFR 50.46 (a)(3)(ii) specifies reporting requirements based upon the sum of the absolute value of the changes or errors in calculated peak clad temperature (PCT). If the absolute sum of the changes or errors is significant (exceeds 50°F), a 30-day report is required. If not, the submittal of an annual report summarizing the effect of the changes or errors on the limiting ECCS analysis is required. This letter is intended to fulfill this annual reporting requirement.

In the last year, two small errors have been reported that affect the Plant Hatch loss-of-coolant accident (LOCA) analysis of record. It should be noted that the absolute sum of both errors reported by General Electric (GE), the LOCA analysis vendor, totals 20°F. These two errors were reported to Southern Nuclear Operating Company (SNC) in references 1 and 2 and evaluated in Table 1.

The reported errors insignificantly affect the licensing basis PCTs reported in the Plant Hatch Final Safety Analysis Reports (FSARs). Margins to regulatory limits remain large and fuel thermal limits are unaffected. No changes in plant configuration or operation are required as a result of the letter. The Plant Hatch FSARs will be revised to reflect the PCT change reported in Table 1 in the next scheduled FSAR amendment.

Should you have any questions in this regard, please contact this office.

Respectfully submitted,

H. L. Sumner, Jr.

GKM/eb

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References:

1. E-mail from Tammy G. Orr (Global Nuclear Fuel) to G. K. McElroy (SNC), "TGO:E00-038; 10 CFR 50.46 Report-Core Spray Leakage", dated September 27, 2000, with attached GE Notification Letter 2000-02.
2. E-mail from Tammy G. Orr (GNF) to G. K. McElroy (SNC), "TGO:300-044; 10 CFR 50.46 – Impact of SAFER Time Step Size on the Peak Clad Temperature (PCT) for Jet Pump Plant Analyses", dated November, 20, 2000 with attached GE Notification Letter 2000-04.

Enclosures: Table 1, Estimated PCT Change for Plant Hatch January 2000 through December 2000

cc: Southern Nuclear Operating Company  
Mr. P. H. Wells, Nuclear Plant General Manager  
SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. L. N. Olshan, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. L. A. Reyes, Regional Administrator  
Mr. J. T. Munday, Senior Resident Inspector - Hatch

**Table 1 - Estimated PCT Change for Plant Hatch**  
**January 2000 through December 2000**

<b><u>Ref. No.</u></b>	<b><u>Description</u></b>	<b><u>PCT Change</u></b>	<b><u>Absolute Value of PCT Change</u></b>	<b><u>Comments</u></b>
1.	Explicitly address in analysis Core Spray piping leakage inside vessel, but outside shroud	+15°F	+15°F	ECCS flow rates (including Core Spray) were reduced 10% or more in the analysis to account for uncertainties such as this. However, SNC elects to now account for this by increasing the reported PCT.
2.	SAFER time step size change for improved numerical convergence of PCT calculation	-5°F	5°F	None
<b>TOTAL</b>	(Ref. 1,2)	10°F	20°F	