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Docket Nos.: 50-321
50-366

NL-12-2567

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Edwin I. Hatch Nuclear Plant
10 CFR 50.46 ECCS Evaluation Model Annual Report for 2011

Ladies and Gentlemen:

Southern Nuclear Operating Company (SNC) is the licensed operator for the Edwin I. Hatch Nuclear Plant (Hatch). The requirements of 10 CFR 50.46(a)(3)(ii) include an annual report by licensees of changes to or errors in acceptable emergency core cooling system (ECCS) models that affect the temperature calculation and the estimated effect of changes or errors on the limiting ECCS analysis. Accordingly, the report required by 10 CFR 50.46(a)(3)(ii) for Hatch is provided in Enclosure 1. The resulting peak cladding temperature (PCT) for Hatch continues to meet the criterion of 10 CFR 50.46(b)(1) (i.e., $\leq 2200^{\circ}\text{F}$).

This letter contains no NRC commitments. If you have any questions, please contact Ken McElroy at (205) 992-7369.

Respectfully submitted,

A handwritten signature in cursive script that reads "Mark J. Ajluni".

M. J. Ajluni
Nuclear Licensing Director

MJA/RMJ/lac

Enclosure: 1. Edwin I. Hatch Nuclear Plant 10 CFR 50.46 ECCS
Evaluation Model Annual Report for 2011

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cc: Southern Nuclear Operating Company

Mr. S. E. Kuczynski, Chairman, President & CEO

Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer

Mr. D. R. Madison, Vice President – Hatch

Mr. B. L. Ivey, Vice President – Regulatory Affairs

Mr. B. J. Adams, Vice President – Fleet Operations

RTYPE: CHA02.004

U. S. Nuclear Regulatory Commission

Mr. V. M. McCree, Regional Administrator

Mr. R. E. Martin, NRR Senior Project Manager - Hatch

Mr. E. D. Morris, Senior Resident Inspector – Hatch

**Edwin I. Hatch Nuclear Plant
10 CFR 50.46 ECCS Evaluation Model Annual Report for 2011**

Enclosure 1

**Edwin I. Hatch Nuclear Plant Unit 1
 SAFER/GESTR-LOCA Analysis Model**

Table 1-1a – Summary of Changes/Errors (2011)	
Description	Estimated Effect (Δ PCT)
None affecting PCT*	N/A

Table 1-1b – Cumulative Impact of Changes/Errors	
Description	GE14
	ΔPCT ($^{\circ}F$)
• Changes/Errors Previously Reported (Reference 1)	0*
• Current Year – 2011 (Reference 2)	0*
Cumulative Total	0

* On August 12, 2011, a Significant Change/Error Report for Hatch was submitted (Reference 1). This “reset” the baseline PCT for reporting purposes. There were no additional changes/errors in 2011 from those reported in Reference 1.

**Edwin I. Hatch Nuclear Plant Unit 2
 SAFER/GESTR-LOCA Analysis Model**

Table 1-2a – Summary of Changes/Errors (2011)	
Description	Estimated Effect (Δ PCT)
None affecting PCT*	N/A

Table 1-2b – Cumulative Impact of Changes/Errors	
Description	GE14
	Δ PCT (°F)
• Changes/Errors Previously Reported (Reference 1)	0*
• Current Year – 2011 (Reference 2)	0*
Cumulative Total	0

* On August 12, 2011, a Significant Change/Error Report for Hatch was submitted (Reference 1). This “reset” the baseline PCT for reporting purposes. There were no additional changes/errors in 2011 from those reported in Reference 1.

Enclosure to NL-12-2567
Edwin I. Hatch Nuclear Plant
10 CFR 50.46 ECCS Evaluation Model Annual Report for 2011

References:

1. Letter from Mark J. Ajluni to USNRC (NL-11-1652), "Edwin I. Hatch Nuclear Plant 10 CFR 50.46 ECCS Evaluation Model Significant Change/Error Report," dated August 12, 2011.
2. Letter from J. D. Chavers to L. P. Hill (CAH-12-044), "2011 ECCS Error Notifications for Plant Hatch," dated December 11, 2012.