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Joseph A. Clark  
Manager, Licensing

August 4, 2011

RBG-47168

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

Subject: River Bend Station - Unit 1  
Docket No. 50-458  
License No. NPF-47  
Report of Changes and Errors to 10CFR50.46

- References:
1. Letter RBG-47055, "Report of Changes and Errors to 10CFR50.46," dated July 20, 2010.
  2. Letter RBG-46943, "Supplement to Amendment Request Changes to Technical Specification 5.6.5, "Core Operating Limits Report (COLR)," dated August 12, 2009.

Dear Sir or Madam:

In accordance with 10 CFR 50.46 (a)(3)(ii), River Bend Station (RBS) is required to report to the Commission, at least annually, the estimated effect on the limiting Emergency Core Cooling System (ECCS) analysis caused by changes to or errors discovered in acceptable ECCS evaluations for information.

With the cumulative sum of the absolute magnitude being greater than 50°F this report is also submitted in accordance with 10 CFR 50.46 (a)(3)(i).

A134  
NRK

There have been two notices of changes or errors associated with the RBS ECCS analysis since the last 10CFR50.46 report provided to the NRC [Reference 1]. The table below summarizes the effects on the current ECCS analysis performed by General Electric – Hitachi Nuclear Energy (GEH) using their NRC approved SAFER/GESTR – LOCA methodology.

Notification	Nature of change	Estimated PCT Effect		
		A10	GE14	GNF2
NL-2011-02	Impact of database error for heat deposition on the Peak Cladding Temperature (PCT) for 10x10 fuel bundles	25	25	25
NL-2011-03	Impact of updated formulation for gamma heat deposition to channel wall for 9x9 and 10x10 fuel bundles	-40	-40	-40
Sum of absolute magnitude of errors during this period		65	65	65
Cumulative sum of absolute magnitude of errors prior to this period		0	0	0
Cumulative sum of absolute magnitude of errors including this period		65	65	65

Since the last 10 CFR 50.46 report provided to the NRC [Reference 1], RBS loaded a new fuel type (GNF2). The RBS core is now comprised of ATRIUM-10 (A10), GE14, and GNF2 fuel types. However, the ATRIUM-10 fuel remains the limiting fuel type with a licensing basis PCT  $\leq 1810^{\circ}\text{F}$  as reported in Reference 2, which is well below the  $2200^{\circ}\text{F}$  acceptance criterion of 10 CFR 50.46.

RBS remains in compliance with 10 CFR 50.46 as these two errors / changes result in a net reduction in PCT. Therefore, there is no need for re-analysis.

This letter does not contain any commitments.

For further information, contact me at (225) 381-4157.

Sincerely,



Manager, Licensing  
River Bend Station - Unit 1

JAC/bmb

cc: Regional Administrator  
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