



Entergy Operations, Inc.
River Bend Station
5485 U.S. Highway 61N
St. Francisville, LA 70775
Tel 225-381-4157

David N. Lorfing
Manager, Licensing

October 27, 2009

RBG-46966

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-46847, "10 CFR 50.46 (a)(3)(ii) Report," dated September 22, 2008.
 2. Letter RBG-46863, "License Amendment Request (LAR) Changes to Technical Specification 5.6.5 – Core Operating Limits Report (COLR)," dated November 20, 2008.
 3. Letter RBG-46493, "Supplement to Amendment Request Changes to Technical Specification 5.6.5, "Core Operating Limits Report (COLR)," dated August 12, 2009.
 4. Letter RBC-50745, "Issuance of Amendment Re: Changes Technical Specification 5.6.5 - Core Operating Limits Report (COLR)," dated September 9, 2009 (TAC # ME 0157).

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. This report will address the annual reporting requirement and the 30 day reporting for the change in the analysis of record resulting in a decrease in the Peak Clad Temperature of 159°F as discussed below.

ADD
NR

Since the last 10CFR50.46 report provided to the NRC [Reference 1], there have been no notices of changes or errors in the RBS ECCS performance analysis supporting operations up to Cycle 16.

Beginning in Cycle 16, RBS introduced a new fuel type (GE14) into the core. As a result, the RBS ECCS Performance Analysis was updated using the fuel vendor, General Electric/Global Nuclear Fuel (GE / GNF) approved analytical methods to perform licensing calculations.

RBS submitted a License Amendment Request (LAR) [Reference 2] to revise TS 5.6.5 to add a reference to a new analytical method to be used to determine core operating limits.

RBS also provided supplemental information [Reference 3] describing the approved ECCS evaluation model to be used to determine the Peak Clad Temperature (PCT) for both the new GE14 fuel and legacy ATRIUM-10 fuel types and the quantitative results of the analysis.

ATRIUM-10 Analysis of Record (AOR) used in the LAR resulted in a decrease in the ATRIUM-10 Peak Clad Temperature of 159°F. The ATRIUM-10 is the fuel type with the limiting PCT. The LAR was approved by the NRC in Reference 4. There have been no changes or errors associated with the RBS ECCS Performance analysis since the implementation of the new AOR described above.

The Table below summarizes the current ECCS Performance analysis performed by GE/GNF using their NRC approved methodology.

Notification	Nature of change	Estimated PCT Effect
None	New Analysis	N/A
Sum of absolute magnitude of errors during this period		0
Cumulative sum of absolute magnitude of errors prior to this period		0
Cumulative sum of absolute magnitude of errors including this period		0

This letter does not contain any commitments.

For further information, contact myself, David Lorning at (225) 381-4157.

Sincerely,


Manager, Licensing
River Bend Station - Unit 1

DNL/bmb

cc: Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
612 E. Lamar Blvd., Suite 400
Arlington, TX 76011-4125

NRC Senior Resident Inspector
P. O. Box 1050
St. Francisville, LA 70775

U. S. Nuclear Regulatory Commission
Attn: Mr. Alan B. Wang
MS O-7 D1
Washington, DC 20555-0001

Mr. Jeffrey P. Meyers
Louisiana Department of Environmental Quality
Office of Environmental Compliance
Attn. OEC - ERSD
P. O. Box 4312
Baton Rouge, LA 70821-4312