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Timothy A. Schenk Manager, Regulatory Assurance

September 13, 2018

RBG-47902

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

Subject:

Report of Changes and Errors to 10CFR50.46

River Bend Station - Unit 1

Docket No. 50-458 License No. NPF-47

Reference:

 Letter RBG-45789, "Report of Changes and Errors to 10CFR50.46," dated September 27, 2017

Dear Sir or Madam:

There has been no notice 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.

Since the last 10 CFR 50.46 report provided to the NRC, RBS is currently in Cycle 20 with the RBS core composed of the GNF2 and GNF3 fuel types.

GNF3 is the limiting fuel type with a PCT of 1830°F incorporating 10 CFR 50.46 error notifications up to and including NL-2017-02. As can be seen the PCT for the GNF3 fuel remains well below the 2200°F acceptance criteria of 10 CFR 50.46.

Notification Letter	Nature Of Change / Error	Estimated PCT Effect (°F)	
		GNF2	GNF3
Previous Periods			Bridge St.
NL-2017-02	Inputs for fuel rod plenum temperature modeling are updated to be reflective of current 10 x10 fuel bundle rod design without a getter included in the fuel rod plenum.	0	0
NL-2017-01	Input error in GNF2 fuel channel & LTP interface features, leaving default input for backflow leakage through these paths not consistent with GNF2 design.	0	NA
NL-2014-04	SAFER04A E4 – Bundle / Lower Plenum CCFL Head	0	0
NL-2014-03	SAFER04A E4 – Minimum Core DP Model	-15	-15
NL-2014-02	SAFER04A E4 – Mass Non-Conservatism	0	0
NL-2014-01	SAFER04A E4 – Maintenance Update Changes	0	0
NL-2012-01	PRIME Fuel Properties Implementation for Fuel Rod T/M Performance, replacing GESTR Fuel Properties	45	45
NL-2011-03	Impact of updated formulation for gamma heat deposition to channel wall for 9x9 and 10x10 fuel bundles	-40	-40
NL-2011-02	Impact of database error for heat deposition on the Peak Cladding Temperature (PCT) for 10x10 fuel bundles	25	25
Net of errors / changes		15	15
Sum of absolute magnitude of changes / errors		125	125

This letter does not contain any commitments.

If you have any questions or require additional information, please contact Mr. Tim Schenk at (225) 381-4177 or tschenk@entergy.com.

Sincerely,

TAS/bj

cc: U.S. Nuclear Regulatory Commission

Region IV

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