



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 11, 2014

Vice President, Operations  
Entergy Operations, Inc.  
River Bend Station  
5485 US Highway 61N  
St. Francisville, LA 70775

SUBJECT: RIVER BEND STATION, UNIT 1 - ISSUANCE OF AMENDMENT RE:  
TECHNICAL SPECIFICATION 2.1.1, "REACTOR CORE SLS" (TAC  
NO. MF1948)

Dear Sir or Madam:

The Commission has issued the enclosed Amendment No. 182 to Facility Operating License No. NPF-47 for the River Bend Station, Unit 1. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated May 28, 2013, as supplemented by letter dated May 8, 2014.

The amendment revises TS 2.1.1, "Reactor Core SLs [Safety Limits]," to reduce the reactor dome pressure from 785 pounds per square inch gauge (psig) to 685 psig. General Electric Nuclear Energy reported a calculational "defect" under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21. As a result of improved calculation methods, a "defect" was found concerning a potential to momentarily violate the reactor safety limits in TSs 2.1.1.1 and 2.1.1.2 during a Pressure Regulator Failure-Open transient.

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink that reads "Alan Wang".

Alan B. Wang, Project Manager  
Plant Licensing IV-2 and Decommissioning  
Transition Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosures:

1. Amendment No. 182 to NPF-47
2. Safety Evaluation

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

ENTERGY GULF STATES LOUISIANA, LLC

AND

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-458

RIVER BEND STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 182  
License No. NPF-47

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Entergy Operations, Inc. (the licensee), dated May 28, 2013, as supplemented by letter dated May 8, 2014, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

Enclosure 1

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-47 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 182 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Douglas A. Broaddus, Chief  
Plant Licensing IV-2 and Decommissioning  
Transition Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Facility Operating  
License No. NPF-47 and  
Technical Specifications

Date of Issuance: December 11, 2014

ATTACHMENT TO LICENSE AMENDMENT NO. 182

FACILITY OPERATING LICENSE NO. NPF-47

DOCKET NO. 50-458

Replace the following pages of the Facility Operating License No. NPF-47 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by Amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

<u>Remove</u>	<u>Insert</u>
-3-	-3-

Technical Specifications

<u>Remove</u>	<u>Insert</u>
2.0-1	2.0-1

- (3) EOI, pursuant to the Act and 10 CFR Part 70, to receive, possess and to use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (4) EOI, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) EOI, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) EOI, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

EOI is authorized to operate the facility at reactor core power levels not in excess of 3091 megawatts thermal (100% rated power) in accordance with the conditions specified herein. The items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 182 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

## 2.0 SAFETY LIMITS (SLs)

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### 2.1 SLs

#### 2.1.1 Reactor Core SLs

2.1.1.1 With the reactor steam dome pressure < 685 psig or core flow < 10% rated core flow:

THERMAL POWER shall be  $\leq$  23.8% RTP.

2.1.1.2 With the reactor steam dome pressure  $\geq$  685 psig and core flow  $\geq$  10% rated core flow:

MCPR shall be  $\geq$  1.08 for two recirculation loop operation or  $\geq$  1.10 for single recirculation loop operation.

2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.

#### 2.1.2 Reactor Coolant System Pressure SL

Reactor steam dome pressure shall be  $\leq$  1325 psig.

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### 2.2 SL Violations

With any SL violation, the following actions shall be completed:

2.2.1 Within 1 hour, notify the NRC Operations Center, in accordance with 10 CFR 50.72.

2.2.2 Within 2 hours:

2.2.2.1 Restore compliance with all SLs; and

2.2.2.2 Insert all insertable control rods.

2.2.3 Within 24 hours, notify the plant manager and the corporate executive responsible for overall plant nuclear safety.

(continued)

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 182 TO

FACILITY OPERATING LICENSE NO. NPF-47

ENTERGY OPERATIONS, INC.

RIVER BEND STATION, UNIT 1

DOCKET NO. 50-458

1.0 INTRODUCTION

By application dated May 28, 2013 (Reference 1), as supplemented by letter dated May 8, 2014 (Reference 2), Entergy Operations, Inc. (Entergy, the licensee), requested changes to the Technical Specifications (TSs) for the River Bend Station, Unit 1 (RBS). The supplemental letter dated May 8, 2014, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on August 6, 2013 (78 FR 47788).

The license amendment request (LAR) proposed to revise TS 2.1.1, "Reactor Core SLs [Safety Limits]," and associated Bases. General Electric (GE) Nuclear Energy reported a calculational "defect" under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21. As a result of improved calculation methods, a "defect" was found concerning a potential to momentarily violate the reactor safety limits in TSs 2.1.1.1 and 2.1.1.2 during a Pressure Regulator Failure-Open transient if the reactor steam dome pressure were to drop below 785 pounds per square inch gauge (psig).

These changes resolve this 10 CFR Part 21 defect by providing analysis to demonstrate that the reactor dome pressure can be as low as 700 pounds per square inch atmospheric (psia), or approximately 685 psig. The reduction in reactor dome pressure alleviates the potential to momentarily violate the reactor safety limits (SLs) in TSs 2.1.1.1 and 2.1.1.2 during a Pressure Regulator Failure-Open (PRFO) transient.

2.0 REGULATORY EVALUATION

The purpose of the SLs is to ensure that specified acceptable fuel design limits (SAFDLs) are not exceeded during steady-state operation and analyzed transients. The fuel cladding is one of the physical barriers that separate the radioactive materials from the environment. The integrity of this cladding barrier is related to its relative freedom from perforations or cracking. Fuel cladding perforations can result from thermal stresses, which can occur from reactor

operation significantly above design conditions. Since the parameters that result in fuel damage are not directly observable during reactor operation, the thermal and hydraulic conditions that result in the onset of transition boiling (OTB) have been used to mark the beginning of the region in which fuel cladding damage could occur.

The LAR includes changes to the TS, the contents of which are controlled by requirements in 10 CFR Section 50.36, "Technical specifications." TSs are required to include items in the following five categories related to plant operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls.

Criterion 10, "Reactor design," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR, Part 50 states, in part, that the reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that SAFDLs are not exceeded.

NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," provides guidance on the acceptability of the reactivity control systems, the reactor core, and fuel system design. Specifically, Section 4.2, "Fuel System Design" (Reference 3), specifies all fuel damage criteria for evaluation of whether fuel designs meet the SAFDLs. Section 4.4, "Thermal Hydraulic Design" (Reference 4), provides guidance on the review of thermal-hydraulic design in meeting the requirement of Criterion 10 and the fuel design criteria established in Section 4.2.

### 3.0 TECHNICAL EVALUATION

#### 3.1 Background

This TS change resolves a defect reported under 10 CFR Part 21 concerning a potential to momentarily violate reactor SLs in TSs 2.1.1.1 and 2.1.1.2 during a PRFO. On March 29, 2005, GE submitted a 10 CFR Part 21 notification, SC05-03, "Potential to Exceed Low Pressure Technical Specification Safety Limit" to the NRC (Reference 5). This Part 21 notification identified that applying newer computer analysis codes has resulted in a PRFO transient condition where the reactor steam dome pressure could potentially, momentarily, decrease below 785 psig while rated thermal power (RTP) was above the plant-specific thermal power limit specified in the TS 2.1.1.1 (23.8 percent RTP), violating reactor SLs in TS 2.1.1. On July 18, 2006, the Technical Specifications Task Force (TSTF) and the Boiling Water Reactor Owners' Group (BWROG) submitted TSTF-495, Revision 0, "Bases Change to Address GE Part 21 SC05-03" (Reference 6), proposing a modification to the "Applicable Safety Analysis" portion of the Reactor Core Safety Limit TS Bases (B 2.1.1). This change proposed to clarify that the SL was considered not to apply to momentary depressurization transients. In the NRC staff's safety evaluation (SE) for TSTF-495, dated August 27, 2007 (Reference 7), it was stated that although the technical arguments presented in TSTF-495 had some merit, the NRC staff found the proposed change is unacceptable because it would set a precedent which could lead to erosion of safety margins protected by SLs. The NRC staff further stated in the SE to the TSTF that from a regulatory standpoint, the proposed change to the TS Bases was not acceptable. Consequently, the BWROG discontinued the effort to resolve the issue generically



and recommended that plants lower their Low Pressure Safety Limit to meet the lower range of its critical power correlation on plant-specific basis.

Some advanced fuel designs have an NRC approved critical power correlation with a lower-bound pressure that is significantly below the 785 psig reactor steam dome pressure specified in TSs 2.1.1.1 and 2.1.1.2. In particular, GE14 and GNF2 fuels, which make up the RBS core use the GEXL14 and GEXL17 critical power correlations, respectively. References 8, 9, and 10 are approved topical reports with an approved pressure range from 700 to 1400 psia or 685 to 1385 psig for GEXL14 and GNF2 fuels. This amendment will approve a new TS limit of 685 psig for the reactor steam dome pressure consistent with the approved lower-bound pressures for the critical power correlations for the GE14 and GNF2 fuels. Revising the reactor steam dome pressure specified in TSs 2.1.1.1 and 2.1.1.2 to 685 psig resolves the 10 CFR Part 21 defect concerning the potential to violate an SL during a PRFO transient.

### 3.2 Proposed TS Changes

Current TS 2.1.1.1 states, in part, that:

With the reactor steam dome pressure < 785 psig or core flow < 10% rated core flow:

Revised TS 2.1.1.1 would state, in part, that:

With the reactor steam dome pressure < 685 psig or core flow < 10% rated core flow:

Current TS 2.1.1.2 states, in part, that:

With the reactor steam dome pressure  $\geq$  785 psig or core flow  $\geq$  10% rated core flow:

Revised TS 2.1.1.2 would state, in part, that:

With the reactor steam dome pressure  $\geq$  685 psig or core flow  $\geq$  10% rated core flow:

### 3.3 NRC Technical Evaluation

During the PRFO transient both pressure regulators fail open, calling for Turbine Control Valves to open wider. This causes rapid depressurization. When reactor pressure reaches 810 psig, the Low Pressure Isolation Set point, Main Steam Isolation Valves (MSIVs) begin to close. When MSIVs are approximately 10 percent closed (90 percent open), a position-driven Reactor Scram occurs, which terminates the event. The proposed changes to lower the Low Pressure TS limit to 685 psig offer a greater range for pressure to reduce further while MSIVs are closing. MSIVs close in the next 3 to 5 seconds, which terminates pressure reduction.

In its letter dated March 29, 2005, 10 CFR Part 21 notification (Reference 3), GE concluded that during the PRFO event, the calculated critical power ratio (CPR) increases during

depressurization. However, the initial calculated CPR value is the maximum calculated CPR value for the entire transient. As such the conditions that the low pressure TS SL can be exceeded exist for only a few seconds, and fuel cladding integrity is not threatened. Nevertheless, GE considers the PRFO to be a known anticipated operational occurrence (AOO) that could contribute to the exceeding of a safety limit. While this condition was determined to not involve an actual safety hazard, the potential for violation of a reactor core SL was identified, and restoration to comply with the SL is required for the PRFO event. As a result, the licensee is revising the reactor steam dome pressure TS SL to be consistent with the NRC approved pressure range of critical power correlations for the current GE14 and GNF2 fuels designs. Lowering the reactor steam dome pressure specification in this fashion provides margin to ensure that the reactor core SLs in TS.2.1.1 are not violated.

The NRC staff concludes that revising the reactor core SLs in TSs 2.1.1.1 and 2.1.1.2 for the reactor steam dome pressure from 785 to 685 psig resolves the reported defect under 10 CFR Part 21 concerning the potential to violate reactor core SLs in TS 2.1.1 during a PRFO transient. TS SLs are specified to ensure that SAFDLs are not exceeded during steady-state operation, normal operational transients, and AOOs. The reactor core SLs are set such that fuel cladding integrity is maintained and no significant fuel damage is calculated to occur due to OTB if the SLs are not exceeded.

In an SE dated August 3, 2007 (Reference 8), the NRC staff approved the use of the GEXL14 critical power correlation for GE14 fuel. As described in the associated licensing topical report and the NRC staff's SE, the pressure range over which the GEXL14 correlation is approved for performance of critical power calculations is from 700 psia to 1400 psia. The reactor steam dome pressure of 685 psig (approximately 700 psia) is established from the lower bound pressure. As such, the proposed change to the reactor core SLs will ensure that a valid CPR calculation is performed for the AOOs described in the Updated Final Safety Analysis Report (UFSAR), including the PRFO transient, and that the value of 685 psig proposed for the reactor steam dome pressure should not result in a violation of Reactor Core Safety Limit 2.1 during a PRFO transient. In addition, the GEXL17 correlation for the GNF2 fuel was approved for use per NEDE-24011-PA "General Electric Standard Application for Reactor Fuel (GESTAR II)." This approach follows, and is consistent with, the way the reactor steam dome pressure has been established, and as such, valid CPR calculations will continue to be performed and the NRC has concluded that it is a safe and appropriate method to address the defect reported under 10 CFR Part 21.

As noted earlier, the NRC staff concluded that reactor depressurization transients, such as PRFO, are non-limiting for fuel cladding integrity because CPR increases during the PRFO event. Although this condition does not involve an actual safety hazard, the potential for violation of a TS reactor core SLs was identified in accordance with Part 21, and restoration of the TS to comply with the requirements of 10 CFR 50.36 is required. Therefore, the licensee proposed the amendment to address the Part 21 defect.

The proposed TS changes were analyzed based on the following NRC-approved methods with databases covering the pressure range from 700 to 1400 psia for GEXL critical power correlation for GE14 and GNF2 fuel:

- (1) the data used for development and verification of the GEXL 14 and GEXL 17 critical power correlation for GE14 fuel and GNF2 fuel, respectively, have a pressure range extended from 700 to 1400 psia using Stern Laboratory test data and documented in NEDC-32851P-A and NEDC-33292P (References 9 and 10, respectively); and
- (2) the GEXL 14 and GEXL 17 correlations provides the validity of Minimum Critical Power Ratio (MCPR) calculations since the PRFO event causes the MCPR to increase due to the pressure reduction effect on the greater latent heat of vaporization and the large voids causing negative reactivity and lower power comparing with the higher pressure condition (References 1 and 2).

The NRC staff evaluated the proposed TS changes against the applicable regulatory requirements and acceptance criteria. The staff concludes that as long as the core pressure and flow are within the range of validity of the specified CPR correlation (GEXL14 and GEXL17 correlations), the proposed reactor steam dome pressure change to TSs 2.1.1.1 and 2.1.1.2 will ensure that 99.9 percent of the fuel rods in the core are not expected to experience OTB. This satisfies the regulatory requirements regarding acceptable fuel design limits and continues to assure that the underlying criteria of the SLs are met and therefore, the NRC staff concludes that the proposed changes in TSs 2.1.1.1 and 2.1.1.2 are acceptable.

#### 4.0 CHANGES TO TS BASES AND REGULATORY COMMITMENTS

In Attachments 3 and 4 to the LAR, respectively, the licensee identified changes to (1) the TS Bases to reflect the proposed amendment and (2) a regulatory commitment. In identifying changes to the TS Bases, the licensee is not requesting that the NRC approve these changes. As stated in 10 CFR 50.36(a) bases are not part of the TSs. The changes to the TS Bases and the regulatory commitment are for information purposes for the NRC staff. Bases changes are controlled by the licensee's program under TS 5.5.11, "Technical Specifications (TS) Bases Control Program," which states, in part, that

Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:

1. A change in the TS incorporated in the license; or
2. A change to the USAR [Updated Safety Analysis Report] that involves an unreviewed safety question as defined in 10 CFR 50.59.

However, the NRC staff notes that the NRC-approved methodologies in References 9, 10, and 11, which were used to justify the TS change to reduce the reactor dome pressure from 785 psig to 685 psig are not included in the TS Bases. The methodologies are discussed in the LAR and its addition to the TS Bases would clarify the bases for the change.

In the LAR, the licensee provided the following commitment:

- 1) TS BASES changes will be incorporated into TS upon receipt of the NRC approved License Amendment in accordance with TS [5.5.11], "Bases Control Program."

The above items are not evaluated in this safety evaluation.

## 5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Louisiana State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on August 6, 2013 (78 FR 47788). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 7.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

## 8.0 REFERENCES

1. Olson, E. W., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "License Amendment Request, Changes to Technical Specification 2.1.1, 'Reactor Core SLs,' River Bend Station, Unit 1, Docket No. 50-458, License No. NPF-47," dated May 28, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13155A138).

2. Olson, E. W., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "License Amendment Request - Response to NRC RAI, Changes to Technical Specification 2.1.1, 'Reactor Core SLs,' River Bend Station, Unit 1, Docket No. 50-458, License No. NPF-47," dated May 8, 2014 (ADAMS Accession No. ML14140A345).
3. U.S. Nuclear Regulatory Commission, NUREG-0800, "Standard Review Plant for the Review of Safety Analysis Reports for Nuclear Power Plants," Section 4.2, "Fuel System Design" (ADAMS Accession No. ML070740002).
4. U.S. Nuclear Regulatory Commission, NUREG-0800, "Standard Review Plant for the Review of Safety Analysis Reports for Nuclear Power Plants," Section 4.4, "Thermal Hydraulic Design" (ADAMS Accession No. ML070550060).
5. Post, J. S., GE Energy-Nuclear, letter to U.S. Nuclear Regulatory Commission, "10 CFR 21 Reportable Condition Notification: Potential to Exceed Low Pressure Technical Specification Safety Limit," dated March 29, 2005 (ADAMS Accession No. ML050950428).
6. Sparkman, W., Crowthers, M., Woods, B., and Infanger, P., Technical Specifications Task Force, letter to U.S. Nuclear Regulatory Commission, "TSTF-495, Revision 0, 'Bases Change to Address GE Part 21 SC05-03,'" dated July 18, 2006 (ADAMS Accession No. ML061990227).
7. Kobetz, T., U.S. Nuclear Regulatory Commission, letter to Technical Specifications Task Force, "Denial of TSTF-495, Revision 0, 'Bases Change to Address GE Part 21 SC05-03.'" Docket No: PROJ0753 (TAC MD2672)," dated August 27, 2007 (ADAMS Accession No. ML072340113).
8. Nieh, H. K., U.S. Nuclear Regulatory Commission, letter to Andrew A. Lingenfelter, Global Nuclear Fuel-Americas, LLC, "Final Safety Evaluation for Global Nuclear Fuel (GNF) Topical Report (TR) NEDC-32851P, Revision 2, "GEXL14 Correlation for GE14 Fuel" (TAC No. MD5486)," dated August 3, 2007 (ADAMS Accession No. ML072080365).
9. Global Nuclear Fuel-Americas, LLC, NEDC-32851P-A, "GEXL14 Correlation for GEXL Fuel 14," Rev. 4 (Table 2, Page 6), September 2007 (proprietary).
10. Global Nuclear Fuel-Americas, LLC, NEDC-33292P, "GEXL 17 Correlation for GNF2 Fuel," Rev. 3 (Table 3-1, Page 3-4), June 2009 (proprietary).
11. Global Nuclear Fuel-Americas, LLC, NEDC-33270P, "GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II)," Rev. 4, October 2011

Principal Contributor: T. Huang

Date: December 11, 2014

December 11, 2014

Vice President, Operations  
Entergy Operations, Inc.  
River Bend Station  
5485 US Highway 61N  
St. Francisville, LA 70775

SUBJECT: RIVER BEND STATION, UNIT 1 - ISSUANCE OF AMENDMENT RE:  
TECHNICAL SPECIFICATION 2.1.1, "REACTOR CORE SLS" (TAC  
NO. MF1948)

Dear Sir or Madam:

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A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/RA/

Alan B. Wang, Project Manager  
Plant Licensing IV-2 and Decommissioning  
Transition Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosures:

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2. Safety Evaluation

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THuang, NRR/DSS/SRXB

MRazzaque, NRR/DSS/SRXB

**ADAMS Accession No. ML14192A831**

OFFICE	NRR/DORL/LPL4-2/PM	NRR/DORL/LPL4-2/LA	NRR/DSS/STSB/BC	NRR/DSS/SXRB/BC
NAME	ABWang	JBurkhardt	RElliott	CJackson
DATE	7/29/14	7/24/14	8/5/14	7/19/14
OFFICE	OGC	NRR/DORL/LPL4-2/BC	NRR/DORL/LPL4-2/PM	
NAME	MYoung	DBroaddus	ABWang	
DATE	8/19/14	12/10/14	12/11/14	

OFFICIAL AGENCY RECORD