UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 E. LAMAR BLVD
ARLINGTON, TX 76011-4511

February 27, 2017

Mr. William F. Maguire
Site Vice President
Entergy Operations, Inc.
River Bend Station
5485 US Highway 61N
St. Francisville, LA 70775

SUBJECT: RIVER BEND STATION - NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (05000458/2017007) AND INITIAL REQUEST FOR INFORMATION

Dear Mr. Maguire:

On May 30, 2017, the U.S. Nuclear Regulatory Commission (NRC) will begin a triennial baseline Design Bases Assurance Inspection at the River Bend Station. A seven-person team will perform this inspection using NRC Inspection Procedure 71111.21M, "Design Bases Assurance Inspection."

The inspection focuses on components, modifications, and operator actions that have high risk and low design margins. The samples reviewed during this inspection will be identified during an information gathering visit and the subsequent in-office preparation week. In addition, a number of operating experience issues will also be selected for review.

The inspection will include an information gathering site visit by the team leader and a senior reactor analyst, and two weeks of on-site inspection by the team. The inspection will consist of five NRC inspectors and two contractors, of which six will focus on engineering and one on operations. The current inspection schedule is as follows:

On-site Information Gathering Visit: May 30–June 1, 2017
Preparation Week: June 5–9, 2017
On-site Weeks: June 12–16 and June 26–30, 2017.

The purpose of the information gathering visit is to meet with members of your staff to identify potential risk-significant components, modifications, and operator actions. The lead inspector will also request a tour of the plant with members of your operations staff and probabilistic safety assessment staff. During the on-site weeks, several days of time will be needed on the plant-referenced simulator in order to facilitate the development of operator action-based scenarios. Additional information and documentation needed to support the inspection will be identified during the inspection, including interviews with engineering managers, engineers, and probabilistic safety assessment staff.

Our experience with these inspections has shown that they are extremely resource intensive, both for the NRC inspectors and the licensee staff. In order to minimize the inspection impact on the site and to ensure a productive inspection, we have enclosed a request for information needed for the inspection. The request has been divided into two groups. The first group lists information necessary for the information gathering visit and for general preparation. This information should be available to the regional office no later than May 15, 2017. Insofar as possible, this information should be provided electronically to the lead inspector. Since the inspection will be concentrated on high risk/low margin components and modifications, calculations associated with your list of high risk components and modifications should be available to review during the information gathering visit to assist in our selection of components based on available design margin.

The second group of documents requested, lists information necessary to aid the inspection team in tracking issues identified as a result of the inspection. It is requested that this information be provided to the lead inspector as the information is generated during the inspection. An additional request will be made by the team during the preparation week once the specific components and modifications have been selected. Additional requests by inspectors will also be made throughout the on-site weeks for specific documents needed to complete the review. It is important that all of these documents are up to date and complete in order to minimize the number of additional documents requested during the preparation and/or on-site portions of the inspection. In order to facilitate the inspection, we request that a contact individual be assigned to each inspector to ensure information requests, questions, and concerns are addressed in a timely manner.

The lead inspector for this inspection is Wayne Sifre. We understand that our licensing engineer contact for this inspection is Ms. K. Huffstatler. If there are any questions about the inspection or the requested materials, please contact the lead inspector by telephone at 817-200-1193 or by e-mail at Wayne.Sifre@nrc.gov.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS).

ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Thomas R. Farnholtz, Chief
Engineering Branch 1
Division of Reactor Safety

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

Enclosure:
Design Bases Assurance
Inspection Request for Information

RIVER BEND STATION - NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (05000458/2017007) AND INITIAL REQUEST FOR INFORMATION – February 27, 2017

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ADAMS ACCESSION NUMBER: ML17058A407

☑ SUNSI Review: By:	ADAMS: ☑ Yes ☐ No	☐ Non-Publicly Available ☑ Publicly Available	☑ Non-Sensitive ☐ Sensitive	Keyword: NRC-002

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NAME	WSifre	TFarnholtz				
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DATE	2/27/17	2/27/17				

OFFICIAL RECORD COPY

Initial Request for Information
Design Bases Assurance Inspection
River Bend Station

Inspection Report:	05000458/2017007
Information Gathering Dates:	May 30–June 1, 2017
Inspection Dates:	June 12–16 and June 26–30, 2017
Inspection Procedure:	IP 71111.21M, "Design Bases Assurance Inspection"
Lead Inspector:	Wayne Sifre, Senior Reactor Inspector

I. Information Requested Prior to Information Gathering Visit (May 30, 2017)

The following information (Section I of this enclosure) should be sent to the Region IV office in hard copy or electronic format (Certrec IMS preferred), to the attention of Wayne Sifre by May 15, 2017, to facilitate the reduction in the items to be selected for a final list during the preparation week, June 5, 2017. The inspection team will finalize its sample selections during the prep week and will provide an additional information request with specific items by sample. This information shall be made available by the first day of the on-site portion of the inspection. The specific items selected from the lists shall be available and ready for review on the day indicated in this request. *Please provide requested documentation electronically in "pdf" files, Excel, or other searchable formats, if possible. The information should contain descriptive names, and be indexed and hyperlinked to facilitate ease of use. Information in "lists" should contain enough information to be easily understood by someone who has knowledge of boiling water reactor technology. If requested documents are large and/or only hard copy formats are available, please inform the inspector(s), and provide subject documentation during the first day of the on-site inspection.

1. An Excel spreadsheet of equipment basic events (with definitions), including importance measures sorted by risk achievement worth and Fussell-Vesely from your internal events probabilistic risk assessment. Include basic events with risk achievement worth value of 1.3 or greater.

2. A list of the top 50 cut-sets from your PRA.

3. Copies of probabilistic risk assessment "system notebooks" and the latest probabilistic risk assessment summary document.

4. An Excel spreadsheet of probabilistic risk assessment human action basic events or risk ranking of operator actions from your site-specific PSA sorted by risk achievement worth and Fussell-Vesely. Provide copies of your human reliability worksheets for these items.

5. If you have an external events or fire PSA model, provide the information requested in items 1-4 for external events and fire.

6. Any pre-existing evaluation or list of components and associated calculations with low design margins.

7. A list of high large early release frequency impact events and associated components.

8. A list of high risk maintenance rule systems/components and functions; based on engineering or expert panel judgment.

9. A list of operating experience evaluations for the last 3 years.

10. A list of all time-critical operator actions in procedures.

11. A list of permanent and temporary modifications performed in the past five years to structure, systems, and components sorted by component identified in Item 1.

12. Post-modification testing, including performance characteristics affected, assumptions, and acceptance criteria associated with modifications provided in item 11.

13. Documents associated with modifications listed in item 11. Specifically, calculations, specifications, vendor manuals, updated final safety analysis report, Technical Specifications and Bases updates.

14. Updated procedures and training plans associated with the modifications listed in item 11.

15. Updated maintenance and surveillance activities and procedures associated with modifications listed in item 11.

16. A list of current “operator work arounds/burdens.”

17. A list of the design calculations that provide the design margin information for components included in Item 1. (Calculations for selected components should be available during the information gathering visit).

18. List of root cause evaluations associated with component failures or design issues initiated/completed in the last 5 years.

19. A copy of the current management and engineering organizational charts.

20. A copy of the River Bend Station individual plant examination of external events, if available electronically.

21. A list of any common-cause failures of components in the last 3 years.

22. An electronic copy of the design bases documents.

23. An electronic copy of the system health notebooks.

24. A copy of any internal/external self-assessments and associated corrective action documents generated in preparation for this inspection.

25. A copy of engineering/operations related audits completed in the last 2 years.

26. Structures, systems, and components in the Maintenance Rule (a)(1) category.

27. Site top 10 issues list, if available.

28. Procedures used to accomplish operator actions associated with the basic events in your PRA.

29. A list of licensee contacts for the inspection team with phone numbers.

30. Electronic copies of the Technical Specifications, Technical Specifications Bases, and the updated final safety analysis report.

31. One-line drawings of emergency core cooling system, ultimate heat sink, emergency feedwater, safety-related electrical systems.

II. Information Requested to be provided throughout the inspection.

1. Copies of any corrective action documents generated as a result of the team's questions or queries during this inspection.

2. Calculations and drawings associated with selected components.

3. Copies of the list of questions submitted by the team members and the status/resolution of the information requested (provide daily during the inspection to each team member).

Inspector Contact Information:

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