UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 E. LAMAR BLVD., SUITE 400
ARLINGTON, TEXAS 76011-4005

July 14, 2011

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

SUBJECT: RIVER BEND STATION – INITIAL INFORMATION REQUEST FOR NRC TRIENNIAL BASELINE COMPONENT DESIGN BASES INSPECTION NRC INSPECTION REPORT 05000458/2011008

Dear Mr. Perito:

On September 26, 2011, reactor inspectors from the U.S. Nuclear Regulatory Commission's (NRC) Region IV office will begin a triennial baseline Component Design Bases Inspection at the River Bend Station. A six-person team will perform this inspection using NRC Inspection Procedure 71111.21, "Component Design Bases Inspection."

The inspection focuses on components and operator actions issues that have high risk and low design margins. The samples reviewed during this inspection will be identified during an information gathering visit and during 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 3-weeks of onsite inspection by the team. The inspection will consist of four NRC inspectors and two contractors, of which three will focus on engineering and one on operations. The current inspection schedule is as follows:

Onsite information gathering visit: September 6-9, 2011
Preparation Week: September 19-23, 2011
Onsite weeks: September 26-30 and October 17-28, 2011

The purpose of the information gathering visit is to meet with members of your staff to identify potential risk-significant components 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 onsite 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 three 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 August 29, 2011. 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, calculations associated with your list of high risk components 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 is those items that the team will need access to during the preparation week in order to finalize the samples to be inspected. The third group 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. Additional requests by inspectors will be made throughout all three onsite weeks for specific documents needed to complete the review of that component/selection. 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 the onsite 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 Gerond A. George. We understand that our licensing engineer contact for this inspection is Kristi Huffstatler. If there are any questions about the inspection or the requested materials, please contact the lead inspector at (817) 276-6562 or via e-mail at Gerond.George@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 A. Farnholtz, Chief
Engineering Branch 1
Division of Reactor Safety

Docket: 50-458

License: NPF-47

Enclosure:
Information Request for River Bend Station Component Design Basis Inspection
cc w/enclosure:

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ADAMS: ☐ No ☑ Yes	☑ SUNSI Review Complete	Reviewer Initials: GAG
	☑ Publicly Available	☑ Non-Sensitive
Category A.	☐ Non-publicly Available	☐ Sensitive
KEYWORD:		

DRS/EB1/SRI	DRS/EB1/BC		
GGeorge	TFarnholtz		
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7/12/11	7/13/11		

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INFORMATION REQUEST FOR RIVER BEND STATION COMPONENT DESIGN BASES INSPECTION (CDBI)

Inspection Report:	05000298/2011008
Information Gathering Dates:	September 6-9, 2011
On-site Inspection Dates:	September 26-30 and October 18-28, 2011
Inspection Procedure:	IP 71111.21, "Component Design Bases Inspection"
Lead Inspector/Team Leader:	Gerond George 817-276-6562 Gerond.George@nrc.gov

I. Information Requested Prior to the information Gathering Visit (August 29, 2011):

The following information (Section I of this enclosure) should be sent to the Region IV office in hard copy or electronic format (compact disc, preferred), in care of Gerond A. George, by August 29, 2011, to facilitate the reduction in the items to be selected for a final list during the preparation week of September 19, 2011. The inspection team will finalize the selected list during the prep week using the additional documents requested in Section II of this enclosure. 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 only hard copy formats are available, please inform the inspector(s), and provide subject documentation during the first day of the onsite inspection.

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

2. Provide a list of the top 500 cut-sets from your PRA.

3. Copies of PRA "system notebooks," and the latest PRA summary document.

4. An excel spreadsheet of PRA human action basic events or risk ranking of operator actions from your site specific PSA sorted by RAW and FV. 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, (i.e., pumps closest to the design limit for flow or pressure, diesel generator close to design required output, heat exchangers close to rated design heat removal, etc.).

7. List of high risk maintenance rule systems/components and functions; based on engineering or expert panel judgment.

8. A list of operating experience evaluations for the last 2 years.

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

10. A list of permanent and temporary modifications sorted by component identified in Item 1.

11. List of current "operator work arounds/burdens."

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

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

14. Current management and engineering organizational charts.

15. River Bend Station IPEEE, if available electronically.

16. Mechanical piping drawings for:

    Engineered safety features
    Emergency core cooling systems
    Emergency diesel generators

17. Electrical one-line drawings for:

    Offsite power/switchyard supplies
    Normal AC power systems
    Emergency AC/DC power systems including
    120VAC power, and
    125VDC/24VDC safety class systems

18. List of any common-cause failures of components in the last 3 years.

19. An electronic copy of the Design Bases Documents.

20. An electronic copy of the System Health notebooks.

21. System Description Manuals with simplified drawings of plant systems.

II. Information Requested to be Available on First Day of Preparation Week (September 19, 2011)

1. List of condition reports (corrective action documents) associated with each of the selected components for the last 5 years.

2. The corrective maintenance history associated with each of the selected components for the last 2 years.

3. Copies of calculations associated with each of the selected components (if not previously provided), excluding data files. Please review the calculations and also provide copies of reference material (such as drawings, engineering requests, and vendor letters).

4. Copies of operability evaluations associated with each of the selected components and plans for restoring operability, if applicable.

5. Copies of selected operator work-around evaluations associated with each of the selected components and plans for resolution, if applicable.

6. Copies of any open temporary modifications associated with each of the selected components, if applicable.

7. Trend data on the selected electrical/mechanical components' performance for last 3 years (for example, pumps' performance including in-service testing, other vibration monitoring, oil sample results, etc., as applicable).

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

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

10. List of motor operated valves (MOVs) in the program, design margin and risk ranking.

11. List of air operated valves (AOVs) in the valve program, design and risk ranking.

12. Structure, system and components in the Maintenance Rule (a)(1) category.

13. Site top 10 issues list.

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

15. List of licensee contacts for the inspection team with pager or phone numbers.

III. 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. 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).

3. Reference materials (available electronically and as needed during all onsite weeks):

   General set of plant drawings
   IPE/PRA report
   Procurement documents for components selected
   Plant procedures (normal, abnormal, emergency, surveillance, etc.)
   Technical Specifications
   Updated Final Safety Analysis Report
   Vendor manuals

Inspector Contact Information:

Gerond A. George
Senior Reactor Inspector
(817) 276-6562
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