UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

September 1, 2010

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

SUBJECT: MIDCYCLE PERFORMANCE REVIEW AND INSPECTION PLAN – RIVER BEND STATION

Dear Mr. Perito:

On August 11, 2010, the NRC staff completed its performance review of River Bend Station. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from July 1, 2009, through June 30, 2010. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only—Security-Related Information" will include the security cornerstone review and resultant inspection plan.

Plant performance for the most recent quarter at River Bend Station was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through December 31, 2011. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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).

If circumstances arise which cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at (817) 860-8144 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

Vincent G. Gaddy

Vincent G. Gaddy, Chief
Reactor Projects Branch C
Division of Reactor Projects

Docket: 50-458
License: NPF-47

Enclosure:
River Bend Station Inspection/Activity Plan

cc w/Enclosure.
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R:_Reactors\EOC and Midcycle\Midcycle Assessment Letters\2010

ADAMS: □ No x Yes	x SUNSI Review Complete	Reviewer Initials:
	x Publicly Available	x Non-Sensitive
	□ Non-publicly Available	□ Sensitive

BC:DRP:C	D:DRS	D:DRP	
VGGaddy	RJCaniano/JClark for	AVegel	
/RA/	*/RA/*	*/RA/*	
8/16/10	8/18/10	8/25/10	

OFFICIAL RECORD COPY T=Telephone E=E-mail F=Fax

River Bend
Inspection / Activity Plan
09/01/2010 - 12/31/2011

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			RS12	**- OCCUPATIONAL RADIATION SAFETY**	2
1	08/30/2010	09/03/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	08/30/2010	09/03/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1	08/30/2010	09/03/2010	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	08/30/2010	09/03/2010	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			EXAM	**- INITIAL EXAM**	3
1	10/25/2010	10/29/2010	X02452	INITIAL EXAM- RB (11/2010)	
1	12/06/2010	12/17/2010	X02452	INITIAL EXAM- RB (11/2010)	
			EXAM	**- INITIAL OPERATOR EXAM**	4
1	03/21/2011	04/25/2011	X02468	INITIAL EXAM - RIVER BEND (04/2011)	
1	04/18/2011	04/29/2011	X02468	INITIAL EXAM - RIVER BEND (04/2011)	
			RS123	**- RADIATION SAFETY**	2
1	01/24/2011	01/28/2011	IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
1	01/24/2011	01/28/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	01/24/2011	01/28/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1	01/24/2011	01/28/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	01/24/2011	01/28/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	01/24/2011	01/28/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			PSB2-08G	**- INSERVICE INSPECTION**	3
1	01/18/2011	01/28/2011	IP 7111108G	Inservice Inspection Activities - BWR	
			EP1	**- BIENNIAL EP PROGRAM INSPECTION**	1
1	03/21/2011	03/25/2011	IP 7111402	Aiert and Notification System Testing	
1	03/21/2011	03/25/2011	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	03/21/2011	03/25/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	03/21/2011	03/25/2011	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	03/21/2011	03/25/2011	IP 71151-EP01	Drill/Exercise Performance	
1	03/21/2011	03/25/2011	IP 71151-EP02	ERO Drill Participation	
1	03/21/2011	03/25/2011	IP 71151-EP03	Alert & Notification System	
			EB1-07	**- TRIENNIAL HEAT SINK PERFORMANCE**	1
1	03/14/2011	03/18/2011	IP 7111107T	Heat Sink Performance	
			TSB-52B	**- BIENNIAL PI&R**	1
1	05/02/2011	05/20/2011	IP 71152B	Identification and Resolution of Problems	
			RP678	**- RADIATION SAFETY TEAM**	3
1	09/12/2011	09/16/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	09/12/2011	09/16/2011	IP 71124.07	Radiological Environmental Monitoring Program	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

River Bend
Inspection / Activity Plan
09/01/2010 - 12/31/2011

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			RP678	**- RADIATION SAFETY TEAM**	3
1	09/12/2011	09/16/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			EB1-21	**- COMPONENT DESIGN BASIS INSPECTION**	1
1	09/26/2011	10/28/2011	IP 7111121	Component Design Bases Inspection	

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This report shows only on-site and announced inspection procedures.