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

September 1, 2010

James R. Douet
Vice President Operations
Entergy Operations, Inc.
Grand Gulf Nuclear Station
P.O. Box 756
Port Gibson, MS 39150

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN – GRAND GULF NUCLEAR STATION

Dear Mr. Douet:

On August 11, 2010, the NRC staff completed its performance review of Grand Gulf Nuclear 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 Grand Gulf Nuclear 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: 50-416
License: NPF-29

Enclosure:
Grand Gulf Nuclear Station Inspection/Activity Plan

cc w/Enclosure.
Senior Vice President
Entergy Nuclear Operations
P.O. Box 31995
Jackson, MS 39286-1995

Senior Vice President and COO
Entergy Operations, Inc
P.O. Box 31995
Jackson, MS 39286-1995

Vice President, Oversight
Entergy Operations, Inc
P.O. Box 31995
Jackson, MS 39286-1995

Chief, Energy and Transportation Branch
Environmental Compliance and
Enforcement Division
Mississippi Department of
Environmental Quality
P.O. Box 2249
Jackson, MS 39225-2249

Interim County Administrator
Claiborne County
Board of Supervisors (James Johnston)
510 Market Street
Port Gibson, MS 39150

Manager, Licensing
Sr. Site Executive
Entergy Nuclear Operations
P.O. Box 31995
Jackson, MS 39286-1995

Senior Manager, Nuclear Safety & Licensing
Licensing /Regulatory Affairs
Entergy Nuclear Operations
P.O. Box 31995
Jackson, MS 39286-1995

Manager, Licensing
Entergy Operations, Inc
Grand Gulf Nuclear Station
P.O. Box 756
Port Gibson, MS 39150

Attorney General
Department of Justice
State of Louisiana
P.O. Box 94005
Baton Rouge, LA 70804-9005

Office of the Governor
State of Mississippi
P. O. Box 139
Jackson, MS 39205-0139

Attorney General
Assistant Attorney General
State of Mississippi
P.O. Box 220
Jackson, MS 39205

State Health Officer
State Health Board
P.O. Box 1700
Jackson, MS 39215

Associate General Counsel
Entergy Nuclear Operations
P.O. Box 31995
Jackson, MS 39286-1995

Louisiana Dept. of Environmental Quality
Radiological Emergency Planning and
Response Division
P.O. Box 4312
Baton Rouge, LA 70821-4312

Chief, Technological Hazards
Branch
FEMA Region VI
800 North Loop 288
Federal Regional Center
Denton, TX 76209

Joseph A. Aluise
Associate General Council – Nuclear
Entergy Services, Inc
639 Loyola Avenue
New Orleans, LA 70113

Chief
Technological Services Branch
FEMA Region IV
3003 Chamblee-Tucker Road
Atlanta, GA 30341

Electronic distribution by RIV:
Regional Administrator (Elmo.Collins@nrc.gov)
Deputy Regional Administrator (Chuck.Casto@nrc.gov)
DRP Acting Director (Tony.Vegel@nrc.gov)
DRP Acting Deputy Director (Troy.Pruett@nrc.gov)
DRS Director (Roy.Caniano@nrc.gov)
DRS Acting Deputy Director (Jeff.Clark@nrc.gov)
Senior Resident Inspector (Rich.Smith@nrc.gov)
Resident Inspector (Andy.Barrett@nrc.gov)
Branch Chief, DRP/C (Vincent.Gaddy@nrc.gov)
Senior Project Engineer, DRP/C (Bob.Hagar@nrc.gov)
Project Engineer, DRP/C (Rayomand.Kumana@nrc.gov)
GG Administrative Assistant (Alley.Farrell@nrc.gov)
Public Affairs Officer (Victor.Dricks@nrc.gov)
Public Affairs Officer (Lara.Uselding@nrc.gov)
Project Manager (Alan.Wang@nrc.gov)
Branch Chief, DRS/TSB (Michael.Hay@nrc.gov)
RITS Coordinator (Marisa.Herrera@nrc.gov)
Regional Counsel (Karla.Fuller@nrc.gov)
Congressional Affairs Officer (Jenny.Weil@nrc.gov)
OEMail Resource
ROPreports Resource
Regional State Liaison Officer (Bill.Maier@nrc.gov)
Regional Administrator Secretary (Lucy.Owen@nrc.gov)
Branch Chief, DRS/Engineering Branch 1 (Thomas.Farnholtz@nrc.gov)
Branch Chief, DRS/Engineering Branch 2 (Neil.OKeefe@nrc.gov)
Branch Chief, DRS/Operations Branch (Mark.Haire@nrc.gov)
Branch Chief, DRS/Plant Support Branch 1 (Michael.Shannon@nrc.gov)
Branch Chief, DRS/Plant Support Branch 2 (Greg.Werner@nrc.gov)
Deputy Assistant for Operations, OEDO (James.Andersen@nrc.gov)
Director, DIRS, NRR (Frederick.Brown@nrc.gov)
Deputy Director, DIRS, NRR (Michael.Cheok@nrc.gov)
Deputy Director, DORL, NRR (Robert.Nelson@nrc.gov)
Director, DORL, NRR (Joseph.Giitter@nrc.gov)
LPL4 Branch Chief, DORL (Michael.Markley@nrc.gov)
OEDO RIV Coordinator (Margie.Kotzalas@nrc.gov)
mortensengk@INPO.org

R:_Reactors\EOC and Midcycle\Midcycle Assessment Letters\2010

ADAMS: □ No x Yes	x SUNSI Review Complete	Reviewer Initials: VGG
	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	8/24/10	

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

Grand Gulf
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
			EP-1	**- BIENNIAL EP PROGRAM INSPECTION**	1
1	11/15/2010	11/19/2010	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	11/15/2010	11/19/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	11/15/2010	11/19/2010	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	11/15/2010	11/19/2010	IP 71151-EP01	Drill/Exercise Performance	
1	11/15/2010	11/19/2010	IP 71151-EP02	ERO Drill Participation	
1	11/15/2010	11/19/2010	IP 71151-EP03	Alert & Notification System	
1	12/06/2010	12/10/2010	IP 7111402	Alert and Notification System Testing	
			RS12MCA	**- RADIATION SAFETY**	2
1	02/14/2011	02/18/2011	IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
1	02/14/2011	02/18/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	02/14/2011	02/18/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1	02/14/2011	02/18/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	02/14/2011	02/18/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			EB2-05T	**- TRIENNIAL FIRE PROTECTION**	1
1	04/04/2011	04/09/2011	IP 7111105T	Fire Protection [Triennial]	
1	04/18/2011	04/22/2011	IP 7111105T	Fire Protection [Triennial]	
			EXAM	**- INITIAL OPERATOR EXAM**	4
1	10/31/2011	11/04/2011	X02479	INITIAL EXAM - GRAND GULF (12/2011)	
1	12/05/2011	12/09/2011	X02479	INITIAL EXAM - GRAND GULF (12/2011)	
			RS678	**- RADIATION SAFETY**	3
1	08/15/2011	08/19/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	08/15/2011	08/19/2011	IP 71124.07	Radiological Environmental Monitoring Program	
1	08/15/2011	08/19/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			EP1	**- BIENNIAL EP EXERCISE INSPECTION**	3
1	09/12/2011	09/16/2011	IP 7111401	Exercise Evaluation	
1	09/12/2011	09/16/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	09/12/2011	09/16/2011	IP 71151-EP01	Drill/Exercise Performance	
1	09/12/2011	09/16/2011	IP 71151-EP02	ERO Drill Participation	
1	09/12/2011	09/16/2011	IP 71151-EP03	Alert & Notification System	
			TSB-52B	**- BIENNIAL PI&R**	1
1	10/03/2011	11/21/2011	IP 71152B	Identification and Resolution of Problems	

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