



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

August 21, 2007

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

SUBJECT: RIVER BEND STATION - NRC RADIATION SAFETY TEAM INSPECTION  
REPORT 05000458/2007010

Dear Mr. Venable:

On July 13, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your River Bend Station. The enclosed report documents the inspection findings, which were discussed at the conclusion of the inspection with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The team reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, the team evaluated the inspection areas within the Radiation Protection Strategic Performance Area that are scheduled for review every two years. These areas are:

- Radiation Monitoring Instrumentation
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems
- Radioactive Material Processing and Transportation
- Radiological Environmental Monitoring Program and Radioactive Material Control Program

This inspection report documents one NRC-identified finding of very low safety significance (Green). However, because the finding was of very low safety significance and it was entered into your corrective action program, the NRC is treating this finding as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. If you contest the noncited violation in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011-4005; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington DC 20555-001; and the NRC Resident Inspector at the River Bend Station facility.

Entergy Operations, Inc.

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In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) 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/**

Michael P. Shannon, Chief  
Plant Support Branch  
Division of Reactor Safety

Dockets: 50-458  
Licenses: NPF-47

Enclosure:  
NRC Inspection Report 05000458/2007010  
w/attachment: Supplemental Information

cc:

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 Senior Project Engineer, DRP/C (**WCW**)  
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**ROPreports**  
 RBS Site Secretary (**LGD**)

SUNSI Review Completed:  LTR  ADAMS:  Yes  No Initials:  LTR   
 Publicly Available  Non-Publicly Available  Sensitive  Non-Sensitive

RIV:PSB\SHP	PSB\HP	PSB\HP	PSB\HP	PSB\SHP
LTRicketson:	BDBaca	GLGuerra	DLStearns	LCCarsonII
<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>
08/07/07	08/21/07	08/21/07	08/15/07	08/07/07
C:PSB	DRP/C	C:PSB		
MPShannon	MCHay	MPShannon		
<b>/RA/</b>	<b>WCWalker for</b>	<b>/RA/</b>		
08/17/07	08/21/07	08/21/07		

**U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV**

Docket: 50-458  
License: NPF-47  
Report: 05000458/2007010  
Licensee: Entergy Operations, Inc.  
Facility: River Bend Station  
Location: 5485 U.S. Highway 61  
St. Francisville, Louisiana  
Dates: July 9 - 13, 2007  
Inspectors: Larry Ricketson, P.E., Senior Health Physicist, Plant Support Branch  
Louis C. Carson II, Senior Health Physicist, Plant Support  
Bernadette Baca, Health Physicist, Plant Support Branch  
Gilbert L. Guerra, C.H.P., Health Physicist, Plant Support Branch  
Donald L. Stearns, Health Physicist, Plant Support Branch  
  
Accompanied By: David C. Graves, Health Physicist, Plant Support Branch  
Approved By: Michael P. Shannon, Chief  
Plant Support Branch  
Division of Reactor Safety

## SUMMARY OF FINDINGS

IR 05000458/2007010; 07/09/2007 - 07/13/07; River Bend Station; Access Control To Radiologically Significant Areas; Radiation Safety Team

The report covered a 5-day period of inspection on site by a team of five region-based inspectors. A finding of very low safety significance (Green) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process". Findings for which the Significance Determination Process does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

### A. NRC-Identified and Self-Revealing Findings

Cornerstone: Occupational Radiation Safety

- Green. The team identified a noncited violation of 10 CFR 20.1902(a) because the licensee failed to post radiation areas in the radwaste building with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, Radiation Area." The licensee posted radiation area signs only at the entrances to the different elevations of the building, instead of at the discrete radiation areas, even though most of the radwaste building was not a radiation area. Dose rates in unposted radiation areas were as high as 15 millirems per hour. As corrective action, the licensee posted the discrete areas. Additional corrective action is still being evaluated.

The finding was greater than minor because it was associated with one of the cornerstone attributes (exposure control and monitoring) and the finding affected the Occupational Radiation Safety cornerstone objective, in that, uninformed workers could unknowingly accrue additional radiation dose. Using the Occupational Radiation Safety Significance Determination Process, the team determined that the finding was of very low safety significance because it did not involve: (1) ALARA planning and controls, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an impaired ability to assess dose. Also, this finding had a cross-cutting aspect in the area of human performance and component of work control because the licensee did not coordinate work activities by incorporating actions to address the need to keep personnel apprised of plant conditions that may affect work activities. (H3.b)(Section 2OS1)

### B. Licensee Identified Violations

None

## REPORT DETAILS

### 2. RADIATION SAFETY

**Cornerstones: Occupational Radiation Safety [OS] and Public Radiation Safety [PS]**

#### 2OS1 Access Control To Radiologically Significant Areas (71121.01)

##### a. Inspection Scope

This area was inspected to assess the licensee's performance in implementing physical and administrative controls for airborne radioactivity areas, radiation areas, high radiation areas, and worker adherence to these controls. The team used the requirements in 10 CFR Part 20, the technical specifications, and the licensee's procedures required by technical specifications as criteria for determining compliance. During the inspection, the team interviewed the radiation protection manager, radiation protection supervisors, and radiation workers. The team performed independent radiation dose rate measurements and reviewed the following item:

- Controls (surveys, posting, and barricades) of radiation areas

The team completed 1 of the required 21 samples.

##### b. Findings

Introduction. A Green noncited violation of 10 CFR 20.1902(a) was identified for the failure to post radiation areas in the radwaste building with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, Radiation Area."

Description. While making observations in the radwaste building on July 10, 2007, the team identified localized radiation areas in walkways in front of high radiation area and locked high radiation area doors which were not posted as radiation areas. The general area dose rates in front of Door RW106-G2 and RW65-G8 were 6 mrem/hr and 15 mrem/hr, respectively. The only radiation area signs to warn workers prior to entering the radiation areas were at the entrances to the different elevations of the radwaste building. The radwaste building is a large area and according to the licensee's surveys, only a small part of the total area had dose rates exceeding 5 millirems per hour.

Analysis. The team reviewed the applicable guidance in NUREG/CR-5569, Revision 1, Health Physics Positions 036, "Posting of Entrances to a Large Room or Building as a Radiation Area," and 066, "Guidance for Posting Radiation Areas." Because the area was large and very little of it was a radiation area, the team concluded that posting only the entrances to the area, rather than the discrete areas, was not sufficient to inform radiation workers of radiological hazards in their work areas.

The failure to post a radiation area is a performance deficiency. The finding was greater than minor because it was associated with one of the cornerstone attributes (exposure control and monitoring) and the finding affected the Occupational Radiation Safety cornerstone objective, in that, uninformed workers could unknowingly accrue additional

radiation dose. Because the finding involved the potential for unplanned, unintended dose resulting from conditions that were contrary to NRC regulations, the finding was evaluated using the Occupational Radiation Safety Significance Determination Process. The team determined that the finding was of very low safety significance because it did not involve: (1) ALARA planning and controls, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an impaired ability to assess dose. Also, this finding had a cross-cutting aspect in the area of human performance and component of work control because the licensee did not coordinate work activities by incorporating actions to address the need to keep personnel apprised of plant conditions that may affect work activities. (H3.b)

Enforcement. Part 20.1003 of Title 10 of the Code of Federal Regulations defines a radiation area as an area, accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 5 millirem in an hour at 30 centimeters from the radiation source or from any surface that the radiation penetrates. Part 20.1902(a) of Title 10 of the Code of Federal Regulations states that the licensee shall post each radiation area with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, Radiation Area." However, on July 10, 2007, the team identified radiation areas in the radwaste building that were not conspicuously posted. As corrective action, the licensee posted the discrete areas. Additional corrective action is still being evaluated. Because the failure to conspicuously post radiation areas was determined to be of low safety significance and was entered into the licensee's corrective action program as Condition Report CR-RB-2007-03038, this violation is being treated as a noncited consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000458/2007010-01, Failure to Conspicuously Post a Radiation Area.

## 2OS3 Radiation Monitoring Instrumentation and Protective Equipment (71121.03)

### a. Inspection Scope

This area was inspected to determine the accuracy and operability of radiation monitoring instruments that are used for the protection of occupational workers and the adequacy of the program to provide self-contained breathing apparatus (SCBA) to workers. The team used the requirements in 10 CFR Part 20 and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed:

- Calibration of area radiation monitors associated with transient high and very high radiation areas and post-accident monitors used for remote emergency assessment
- Calibration of portable radiation detection instrumentation, electronic alarming dosimetry, and continuous air monitors used for job coverage
- Calibration of whole body counting equipment and radiation detection instruments utilized for personnel and material release from the radiologically controlled area
- Self-assessments, audits, and licensee event reports



- Corrective action program reports since the last inspection
- Licensee action in cases of repetitive deficiencies or significant individual deficiencies
- Calibration expiration and source response check currency on radiation detection instruments staged for use
- The licensee's capability for refilling and transporting SCBA air bottles to and from the control room and operations support center during emergency conditions, status of SCBA staged and ready for use in the plant and associated surveillance records, and personnel qualification and training
- Qualification documentation for onsite personnel designated to perform maintenance on the vendor-designated vital components, and the vital component maintenance records for SCBA units

The team completed nine of the required nine samples.

b. Findings

No findings of significance were identified.

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (71122.01)

a. Inspection Scope

This area was inspected to ensure that the gaseous and liquid effluent processing systems are maintained so that radiological releases are properly mitigated, monitored, and evaluated with respect to public exposure. The team used the requirements in 10 CFR Part 20, 10 CFR Part 50 Appendices A and I, the Offsite Dose Calculation Manual, and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed:

- Radiological effluent release reports since the last inspection, changes to the Offsite Dose Calculation Manual, radiation monitor setpoint calculation methodology, anomalous sampling results, effluent radiological occurrence performance indicator incidents, program for identifying contaminated spills and leakage and the licensee's process for control and assessment, self-assessments, audits, and licensee event reports
- Gaseous and liquid release system component configurations
- Routine processing, sample collection, sample analysis, and release of radioactive liquid and gaseous effluent

- The licensee's understanding of the location and construction of underground pipes and tanks and storage pools that contain radioactive contaminated liquids; the technical bases for onsite monitoring, the licensee's capabilities of detecting spills or leaks and identifying groundwater radiological contamination both on site and beyond the owner-controlled area
- Changes made by the licensee to the Offsite Dose Calculation Manual, the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection
- Monthly, quarterly, and annual dose calculations
- Surveillance test results involving air cleaning systems and stack or vent flow rates
- Instrument calibrations of discharge effluent radiation monitors and flow measurement devices, effluent monitoring system modifications, effluent radiation monitor alarm setpoint values, and counting room instrumentation calibration and quality control
- Interlaboratory comparison program results
- Licensee event reports, special reports, audits, self-assessments and corrective action reports performed since the last inspection

Either because the conditions did not exist or an event had not occurred, no opportunities were available to review the following items:

- Abnormal releases

The team completed 11 of the required 11 samples.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

a. Inspection Scope

This area was inspected to verify that the licensee's radioactive material processing and transportation program complies with the requirements of 10 CFR Parts 20, 61, and 71 and Department of Transportation regulations contained in 49 CFR Parts 171-180. The team interviewed licensee personnel and reviewed:

- The radioactive waste system description, recent radiological effluent release reports, and the scope of the licensee's audit program

- Liquid and solid radioactive waste processing systems configurations, the status and control of any radioactive waste process equipment that is not operational or is abandoned in place, changes made to the radioactive waste processing systems since the last inspection, and current processes for transferring radioactive waste resin and sludge discharges
- Radio-chemical sample analysis results for radioactive waste streams and use of scaling factors and calculations to account for difficult-to-measure radionuclides
- Shipping records for non-excepted package shipments
- Licensee event reports, special reports, audits, state agency reports, self-assessments and corrective action reports performed since the last inspection

Either because the conditions did not exist or an event had not occurred, no opportunities were available to review the following items:

- Shipment packaging, surveying, labeling, marking, placarding, vehicle checking, driver instructing, and disposal manifesting

The team completed six of the required six samples.

b. Findings

No findings of significance were identified.

2PS3 Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program (71122.03)

a. Inspection Scope

This area was inspected to ensure that the REMP verifies the impact of radioactive effluent releases to the environment and sufficiently validates the integrity of the radioactive gaseous and liquid effluent release program; and that the licensee's surveys and controls are adequate to prevent the inadvertent release of licensed materials into the public domain. The team used the requirements in 10 CFR Part 20, Appendix I of 10 CFR Part 50, the Offsite Dose Calculation Manual, and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed

- Annual environmental monitoring reports and licensee event reports
- Selected air sampling and thermoluminescence dosimeter monitoring stations
- Collection and preparation of environmental samples
- Operability, calibration, and maintenance of meteorological instruments

- Each event documented in the Annual Environmental Monitoring Report which involved a missed sample, inoperable sampler, lost thermoluminescence dosimeter, or anomalous measurement
- Significant changes made by the licensee to the Offsite Dose Calculation Manual as the result of changes to the land census or sampler station modifications since the last inspection
- Calibration and maintenance records for air samplers, composite water samplers, and environmental sample radiation measurement instrumentation, quality control program, interlaboratory comparison program results, and vendor audits
- Locations where the licensee monitors potentially contaminated material leaving the radiological controlled area and the methods used for control, survey, and release from these areas
- Type of radiation monitoring instrumentation used to monitor items released, survey and release criteria of potentially contaminated material, radiation detection sensitivities, procedural guidance, and material release records
- Licensee event reports, special reports, audits, self-assessments and corrective action reports performed since the last inspection

The team completed 10 of the required 10 samples.

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES**

4OA2 Problem Identification and Resolution

a. Inspection Scope

The team evaluated the effectiveness of the licensee's problem identification and resolution process with respect to the following inspection areas:

- Radiation Monitoring Instrumentation (Section 2OS3)
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (Section 2PS1)
- Radioactive Material Processing and Transportation (Section 2PS2)

- Radiological Environmental Monitoring Program and Radioactive Material Control Program (Section 2PS3)

b. Findings and Observations

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting Summary

On July 13, 2007, the team presented the inspection results to Mr. J. Venable, Senior Vice President, Operations, and other members of the staff, who acknowledged the findings. The team confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

#### Licensee

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R. Anthony, Supervisor, Health Physics  
T. Baccus, Senior Health Physicist, Radiation Protection  
B. Biggs, Technical Specialist, Licensing  
T. Griffiths, Measuring & Test Equipment Supervisor  
D. Heath, Supervisor, Health Physics (Radwaste/Shipping)  
R. Heath, Supervisor, Chemistry  
B. Houston, Manager, Radiation Protection  
K. Huffstatler, Technical Specialist, Licensing  
J. Hurley, Supervisor, Health Physics  
M. Laiche, Senior Health Physicist, Radiation Protection  
B. Michura, Master Nuclear Environmental Technician, Chemistry  
B. Olinde, Superintendent, Instruments and Calibration  
M. Reeves, Studsvik Transportation Representative  
D. Sandlin, Engineer, Systems Engineering  
W. Spell, Senior Environmental Specialist, Chemistry  
S. Zabaski, Senior Health Physics/Chemistry Specialist, Chemistry  
M. Vierra, Technical Specialist, Health Physics

#### NRC

M. Miller, Resident Inspector  
D. Bollock, Project Engineer

### LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

#### Opened

None

#### Opened and Closed During this Inspection

05000458/2007010-01	NCV	Failure to Failure to Conspicuously Post Radiation Areas (Section 20S1)
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## LIST OF DOCUMENTS REVIEWED

### **Section 2OS1: Access Controls to Radiologically Significant Areas (71121.01)**

#### Condition Reports

CR-RBS-2007-03028  
CR-RBS-2007-03038

#### Procedures

EN-RP-108, "Radiation Protection Posting," Revision 4

#### Surveys

Survey RBS-0707-0110 7/11/07  
Survey RBS-0707-0102 7/11/07  
Survey RBS-0707-0100 7/11/07  
Survey RBS-0706-0138 6/8/07  
Survey RBS-0705-0280 5/20/07  
Survey RBS-0705-0012 5/1/07  
Survey RBS-0705-0011 5/1/07

### **Section 2OS3: Radiation Monitoring Instrumentation and Protective Equipment**

#### Procedures

ADM-0045, System Management and Utilization of the DRMS, Revision 5  
ARP-RMS-DSPL230, DRMS RM-11 CRT Alarm Response  
EN-RP-301, Radiation Protection Instrument Control, Revision 0  
EN-RP-303, Source Checking of Radiation Protection Instrumentation, Revision 8  
RP-304, Operation of Counting Equipment, Revision 2  
EN-RP-306, Operation and Calibration of the Eberline PM-7, Revision 0  
EN-RP-307, Operation and Calibration of the Personal Contamination Monitors, Revision 0  
EN-RP-308, Operation and Calibration of the Gamma Scintillation Tool Monitors, Revision 0  
RHP-0106, Calibration of the Canberra Fastscan and Accuscan II Whole Body Counters, Revision 2  
RPP-0034, Operation of the General Atomics Digital Radiation Monitoring System CRT, Revision 8

RPP-0036, Calibration of DRMS Area Monitors and Determination of Alert and High Alarm Setpoints, Revision 5A

Condition Reports

CR-RBS-04294

Audit and Assessments

QA-14-2007-RBS-1, Quality Assurance Audit of Radiation Protection, April 20, 2007  
LO#2007-00068, "Radiation Protection Program, April 2-6, 2007

Calibration Records

Calibration of the Canberra Accuscan II Whole Body Counting System at River Bend Station, System #96-5818, March 17, 2006

Calibration of the Canberra Accuscan II Whole Body Counting System at River Bend Station, System #96-5818, March 14, 2007

Calibration of the Canberra Fastscan Whole Body Counting System at River Bend Station, System #96-9762, March 17, 2006

Calibration of the Canberra Fastscan Whole Body Counting System at River Bend Station, System #96-9762, March 14, 2007

2006 B2.28CALDAT-00761: AMP-100, February 6, 2007

2007 B2.28CALDAT-00433: R0-7, January 17, 2007

2007 B2.28CALDAT-00618: R0-7, February 1, 2007

2007 B2.28CALDAT-00806: SAC-4, January 30, 2007

2007 B2.28CALDAT-01141: BC-4, February 7, 2007

2007 B2.28CALDAT-01775: RO-20, March 6, 2007

**Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems**

Procedures

COP-0046, "Sampling Gaseous Effluents Via the Wide Range Gas Monitors," Revision 11

COP-0050, "Grab Sampling Gaseous Streams," Revision 8

RSP-0008, "Offsite Dose Calculation Manual (ODCM)," Revision 13

EN-MA-105, Control of Measuring and Test Equipment, Revision 2

MCP-4201, DRMS Low Range Area Monitor Calibration, Revision 4



MCP-4203, DRMS High Range Calibration Area Monitor Calibration, Revision 4C

MCP-4206, DRMS-Particulate and Gas Monitor Calibration, Revision 3B

STP-511-4201, Main Steam Line Radiation High High Channel Calibration and Logic System Functional Test, Revision 16

STP-511-4214, RMS-Main Plant Exhaust Duct Noble Gas Activity Channel Calibration RMS-RE125, Revision 9

STP-511-4249, RMS-Primary Containment Area Radiation Monitor Channel Calibration RMS-RE16A, Revision 301

STP-511-4280, RMS-Liquid Radwaste Effluent Line Radiation Monitor Channel Functional Test RMS-RE107, Revision 9F

STP-511-4515, RMS-Main Plant Exhaust Duct Noble Gas Activity Channel Calibration RMS-RE126, Revision 6D

STP-511-4580, RMS-Liquid Radwaste Effluent Line Radiation Monitor Channel Functional Test RMS-RE107, Revision 8

Work Orders, Calibration Records and Surveillance Test Results

W.O.-0116572, MCP-4201, DRMS Low Range Area Monitor Calibration, RE-204

W.O.-0116572, MCP-4201, DRMS Low Range Area Monitor Calibration, RE-149

W.O.-50688322, STP-511-4515, RMS-Main Plant Exhaust Duct Noble Gas Activity Channel Calibration RMS-RE126

W.O.-50990918, STP-511-4214, RMS-Main Plant Exhaust Duct Noble Gas Activity Channel Calibration RMS-RE125

W.O.-50992632, STP-511-4201, Main Steam Line Radiation High High Channel Calibration and Logic System Functional Test

W.O.-51000668, MCP-4201, DRMS Low Range Area Monitor Calibration, RE-126

W.O.-51013232, STP-511-4249, RMS-Primary Containment Area Radiation Monitor Channel Calibration RMS-RE16A

WO-51014558, STP-511-4580, Liquid Radwaste Effluent Line Radiation Monitor Channel Functional Test RMS-RE-107

W.O.-51039002, STP-511-4201, Main Steam Line Radiation High High Channel Calibration and Logic System Functional Test

WO-51097711, STP-511-4580, RMS-Liquid Radwaste Effluent Line Radiation Monitor Channel  
Functional Test RMS-RE107

Corrective Action Documents

CR-RBS-2003-02084, CR-RBS-2004-00362, CR-RBS-2004-01219, CR-RBS-2005-01485,  
CR-RBS-2006-00038, CR-RBS-2006-00085, CR-RBS-2006-00125, CR-RBS-2006-00147,  
CR-RBS-2006-00539, CR-RBS-2006-00634, CR-RBS-2006-00918, CR-RBS-2006-01498,  
CR-RBS-2006-02291, CR-RBS-2006-02299, CR-RBS-2006-02316, CR-RBS-2006-02459,  
CR-RBS-2006-02547, CR-RBS-2006-03707, CR-RBS-2007-00550, CR-RBS-2007-01620,  
CR-RBS-2007-CR-RBS-2007-03034

Audits and Assessments

QA-6-2005-RBS-1, Quality Assurance Audit of Effluents and Environmental Monitoring,  
September 11, 2005

QA-2006-2-RBS-1, Quality Assurance Audit of Chemistry, December 13, 2006

Release Permits

Radioactive Liquid Effluent Discharge Permit 2006086  
Radioactive Liquid Effluent Discharge Permit 2006108  
Radioactive Liquid Effluent Discharge Permit 2007032  
Radioactive Liquid Effluent Discharge Permit 2007042  
Gamma Spectrum 070710002 Main Plant Charcoal Canister  
Gamma Spectrum 070710003 Main Plant Particulate Filter  
Gamma Spectrum 070710004 Fuel Building Charcoal Canister  
Gamma Spectrum 070710005 Fuel Building Particulate Filter  
Gamma Spectrum 070710014 Radwaste Building Charcoal Canister  
Gamma Spectrum 070710015 Radwaste Building Particulate Filter

Miscellaneous

Site Hydrogeologic Assessment for River Bend Station, January 2007  
2005 River Bend Station Annual Radioactive Effluent Release Report  
2006 River Bend Station Annual Radioactive Effluent Release Report  
Groundwater Protection and Monitoring, Entergy Nuclear Fleet, Revision 1, April 16, 2007  
Results of Radiochemistry Cross Check Program 3<sup>rd</sup> Quarter 2005  
Results of Radiochemistry Cross Check Program 3<sup>rd</sup> Quarter 2006

## **Section 2PS2: Radioactive Material Processing and Transportation**

### Condition Reports

CR-ECH-2005-00594	CR-RBS-2005-03943
CR-ECH-2005-00595	CR-RBS-2005-04027
CR-ECH-2005-00606	CR-RBS-2005-04038
CR-ECH-2006-00087	CR-RBS-2005-04044
CR-ECH-2006-00174	CR-RBS-2006-00913
CR-ECH-2007-00013	CR-RBS-2006-02996
CR-ECH-2007-00089	CR-RBS-2006-03729
CR-ECH-2007-00097	CR-RBS-2006-04568
LO-OPX-2006-00279	CR-RBS-2007-00489
LO-OPX-2005-00357	CR-RBS-2007-00499
LO-OPX-2006-00369	CR-RBS-2007-01234
CR-RBS-2007-02197	

### Assessments

QA-15-2005-ENS-1	Radwaste Quality Assurance Audit Report
QS-2006-RBS-003	Radiation Protection 2005 QA Audit Follow-up

### Training Lesson Plans

RLP-RPCT-SHIP	Radiation Protection Technician DOT Hazmat/Radioactive Material Shipping
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### Procedures

EN-RW-101	Radioactive Waste Management Rev. 1
EN-RW-102	Radioactive Shipping Procedure Rev. 4
EN-RW-103	Radioactive Waste Tracking Procedure Rev. 1
EN-RW-104	Scaling Factors Rev. 2
EN-RW-105	Process Control Program Rev. 0
EN-RW-106	Integrated Transportation Security Plan Rev. 0
EN-EV-106	Waste Management Program Rev. 0
ENS-EV-114	Hazardous Materials Packaging and Shipping Rev. 2
RWS-0304	Radioactive Waste Handling and Control Rev. 15

### Shipment Records

RBS-2006-040  
RBS-2006-048  
RBS-2006-70  
RBS-2007-04  
RBS-2007-36  
RBS-2007-39

## **Section 2PS3: Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program**

### Audits

LO-RBS-2007-00068

### Condition Reports

CR-ECH-2006-00030, CR-ECH-2006-00062, CR-ECH-2007-00072, CR-ECH-2007-00251, CR-RBS-2005-04049, CR-RBS-2006-00302, CR-RBS-2006-01124, CR-RBS-2006-02358, CR-RBS-2006-03037, CR-RBS-2006-04233, CR-RBS-2007-00917, CR-RBS-2007-01016, CR-RBS-2007-01550, CR-RBS-2007-02171, LO-ELO-2006-00129

### Procedures

EN-CY-102 Laboratory Analytical Quality Control, Revision 1  
EN-CY-109 Sampling and Analysis of Groundwater Monitoring Wells, Revision 0  
EN-EV-116 Radiological Environmental Analytical Services, Revision 2  
EN-RP-100 Radworker Expectations, Revision 0  
EN-RP-103 Access Control, Revision 2  
EN-RP-121 Radioactive Material Control, Revision 0  
EN-RP-121 Radioactive Material Control, Revision 1  
EN-RP-143 Source Control, Revision 1  
EN-RP-304 Operation of Counting Equipment, Revision 2  
ESP-8-005 Assessment of the Reliability of Results of the Radiological Environmental Monitoring Program, Revision 10  
ESP-8-021 Sampling Water for Radiological Environmental Monitoring, Revision 12  
ESP-8-022 Monitoring of Sanitary and Storm Sewers for Radioactivity, Revision 9  
ESP-8-023 Sampling of Airborne Radioiodine and Particulates for Radiological Monitoring, Revision 14  
ESP-8-028 Deployment and Retrieval of Environmental Thermoluminescence Dosimeters, Revision 12  
ESP-8-032 Analysis of Gross Alpha and Gross Beta activity on Particulate Filters, Revision 10  
ESP-8-034 Gamma Dose Estimation from Environmental Thermoluminescence Dosimeters, Revision 9  
ESP-8-036 Gamma Isotopic Analysis for the Environmental Samples, Revision 10  
ESP-8-037 Preparation of Environmental Samples for Gamma Isotopic Analysis, Revision 9  
ESP-8-043 Calibration and Instrument Performance Assessment of the Packard Model 2700 Liquid Scintillation Analyzer, Revision 9  
ESP-8-050 Conduct of the Radiological Environmental Monitoring Program (REMP), Revision 13  
ESP-8-051 Land Use Census, Revision 8  
ESP-8-052 Interlaboratory Comparison Program for Radiological Environmental Monitoring, Revision 9  
ESP-8-054 Calibration of the Environmental Gamma Ray Spectroscopy System, Revision 11  
ESP-8-066 Operations of the Canberra Model S5XLB Low Background Counting System, Revision 0

RHP-036 40CFR190 Dose Determination, Revision 00A  
RPP-005 Management of Radiological Postings, Revision 26  
RPP-006 Performance of Radiological Surveys, Revision 21  
RPP-118 Calibration and Maintenance of Portable Radiological Air Samplers, Revision 3  
RSP-008 Offsite Dose Calculation Manual, Revision 13  
RSP-216 Radioactive Source Control, Revision 7

Miscellaneous

2005 and 2006 River Bend Station Annual Radiological Environmental Operating Reports  
2005 and 2006 Radioactive Effluent Release Report  
2005 and 2006 River Bend Station Interlaboratory Comparison Results  
Calibration Records for Environmental Gamma Spectroscopy Detectors 1, 2, 4, and 5  
Calibration Records for Environmental Air Samplers 0042, 0236, 1081, and 1286  
Daily Source Check Records for Contamination Monitors  
Environmental Counting Instrument Quality Control Records for Serial Numbers 103867,  
4953367, 8841116, 8841128, 10943415  
Groundwater Protection and Monitoring, Entergy Nuclear Fleet Project Plan, Revision 1