



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

May 6, 2005

Paul D. Hinnenkamp
Vice President - Operations
Entergy Operations, Inc.
River Bend Station
5485 US Highway 61N
St. Francisville, Louisiana 70775

**SUBJECT: RIVER BEND STATION - NRC INTEGRATED INSPECTION
REPORT 05000458/2005002**

Dear Mr. Hinnenkamp:

On March 31, 2005, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your River Bend Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on April 4, 2005, 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 inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings of significance were identified. However, one licensee-identified violation which was determined to be of very low safety significance is listed in Section 4OA7 of this report. If you contest this noncited violation, you should provide a response within 30 days 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 Region IV; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at River Bend Station.

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 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 Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Entergy Operations, Inc.

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Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

David N. Graves, Chief
Project Branch B
Division of Reactor Projects

Docket: 50-458
License: NPF-47

Enclosure:
NRC Inspection Report 05000458/2005002
w/Attachment: Supplemental Information

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SISP Review Completed: **_dng_** ADAMS: : Yes No Initials: _____
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RIV:SRI:DRP/B	RI:DRP/B	C:DRS/OB	C:DRS/EB	C:DRS/PSB
PJAlter	MOMiller	ATGody	JAClark	MPShannon
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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 50-458

License: NPF-47

Report: 05000458/2005002

Licensee: Entergy Operations, Inc.

Facility: River Bend Station

Location: 5485 U.S. Highway 61
St. Francisville, Louisiana

Dates: January 1 through March 31, 2005

Inspectors: P. J. Alter, Senior Resident Inspector, Project Branch B
M. O. Miller, Resident Inspector, Project Branch B
L. C. Carson II, Senior Health Physicist, Plant Support Branch
(Sections 2OS2 and 4OA7)

Approved By: D. N. Graves, Chief
Project Branch B
Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000458/2005002; 01/01/2005 - 03/31/2005; River Bend Station; Routine Integrated Inspection Report

The report covered a 3-month period of routine baseline inspections by resident inspectors and an announced baseline inspection by a radiation protection inspector. No findings of significance were identified. However, one licensee-identified violation which was determined to be of very low safety significance is listed in Section 4OA7 of this report. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (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

No findings of significance were identified.

B. Licensee-Identified Violations

One violation of very low safety significance, which was identified by the licensee, has been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. This violation and corrective actions are listed in Section 4OA7 of this report.

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REPORT DETAILS

Summary of Plant Status: The plant was operated at 100 percent power from January 1-15, 2005, with the exception of regularly scheduled power reductions for control rod pattern adjustments and turbine testing. On January 15, the operators manually shut down the reactor in response to an indicated problem with the main generator voltage regulator. The plant was restarted on January 16 and reached 100 percent power on January 18. On February 16, plant power was reduced to 85 percent to secure one main circulating water pump for maintenance. The plant was shut down on February 19 to replace the circulating water pump power supply and make repairs to other plant equipment. The plant was restarted on February 26. Power ascension was stopped at 38 percent power due to feedwater regulating valve problems. On March 1, the plant was shut down to make repairs to two feedwater valves. The plant was restarted on March 5 and reached 100 percent power on March 8. On March 19, power was reduced to 64 percent to perform reactor power suppression testing to locate a leaking fuel bundle. The plant was returned to 100 percent power on March 21. On March 25, power was lowered to 78 percent to remove a reactor feed pump from service. Following replacement of the feed pump's seals, the plant was returned to 100 percent power on March 28 and continued to operate at 100 percent with the exception of regularly scheduled power reductions for control rod pattern adjustments and turbine testing for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed three partial system walkdowns in preparation for a reactor startup. On January 15, 2005, the inspectors walked down residual heat removal System A in the standby low pressure coolant injection alignment, reactor core isolation cooling (RCIC) system, and high pressure core spray system. In each case, the inspectors verified the correct valve and power alignments by comparing positions of valves, switches, and electrical power breakers to the system operating procedures (SOP).

- SOP-0032, "Residual Heat Removal System," Revision 43
- SOP-0035, "Reactor Core Isolation Cooling System," Revision 24
- SOP-0030, "High Pressure Coolant Injection System," Revision 21

b. Findings

No findings of significance were identified.

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1R05 Fire Protection (711111.05)

a. Inspection Scope

.1 The inspectors walked down accessible portions of six areas described below to assess: (1) the licensee's control of transient combustible material and ignition sources; (2) fire detection and suppression capabilities; (3) manual firefighting equipment and capability; and (4) the condition of passive fire protection features, such as, electrical raceway fire barrier systems, fire doors, and fire barrier penetrations. The areas inspected were:

- Standby cooling tower, 137-foot elevation, standby service water Pump A transformer room, Fire Area PH-1/Z-2, on January 25, 2005
- Standby cooling tower, 118-foot elevation, standby service water Pump A room, Fire Area PH-1/Z-1, on January 25, 2005
- Standby cooling tower, 118-foot elevation, standby service water Pump B room, Fire Area PH-2/Z-1, on January 25, 2005
- Auxiliary building, 70-foot and 78-foot elevations, RCIC pump room, Fire Area AB-4/Z-1 and Z-2, on January 26, 2005
- Auxiliary building, 70-foot elevation, residual heat removal Pump A room, Fire Area AB-5, on January 26, 2005
- Auxiliary building, 70-foot and 95-foot elevations, residual heat removal Pump C room, Fire Areas AB-4/Z-1 and Z-2, on January 26, 2005

The inspectors reviewed the following documents during the fire protection inspections:

- Pre-Fire Plan/Strategy Book
- Updated Safety Analysis Report (USAR) Section 9A.2, "Fire Hazards Analysis"
- River Bend Station postfire safe shutdown analysis
- RBNP-038, "Site Fire Protection Program," Revision 6A

.2 The inspectors observed one preplanned and announced fire drill on March 3, 2005, on control building 116-foot elevation, in the vicinity of risk-important reactor protection system electrical protection assemblies, to evaluate the readiness of licensee personnel to fight fires. The inspectors: (1) observed firefighting equipment brought to the scene to evaluate whether sufficient equipment was available at the fire scene for the simulated fire; (2) observed the drill to evaluate fire brigade members when they donned protective clothing, entered the fire area, and implemented appropriate firefighting strategies and tactics; (3) observed firefighting directions and radio communications between the brigade leader, brigade members, and the control room; and (4) reviewed the results of the critique subsequent to the fire drill. The inspectors reviewed the following documents as part of the inspection:

- Fire brigade attendance and exam grade sheet, dated March 3, 2005
- Fire brigade drill critique items, dated March 3, 2005
- Fire drill chronology/sequence of events, dated March 3, 2005

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors conducted a periodic flooding assessment to verify that the licensee's flooding mitigation plans and equipment were consistent with design requirements and risk analysis assumptions. The inspectors conducted a walkdown of the RCIC pump room on March 5, 2005. Specifically, the inspectors examined: (1) sealing surfaces of watertight doors, (2) sealing of penetrations in floors and walls, (3) operable sump pumps and level alarm circuits, (4) interconnections with common drain systems, and (5) sources of potential internal flooding from plant systems. The inspectors reviewed the following documents during the inspection as the bases for acceptability of the plant configuration:

- River Bend Station individual plant examination of external events
- USAR Section 3.4.1, "Flood Protection"
- Engineering Calculation G13.18.12.3*15, "Internal Flooding Screening Analysis"
- Engineering Calculation G13.2.3 PN-317, "Max Flood Elevations for Moderate Energy Line Cracks in Cat I Structures"

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

The inspectors reviewed the "Just-in-Time" simulator training given to the operating crew, on February 18, 2005, prior to the reactor shutdown for Planned Outage 01-05. "Just-in-Time" training was part of the operator requalification training program. The inspectors interviewed the operators, instructors, and reactor engineer who participated in the simulator training session. The inspectors assessed the applicability of the training given for the planned evolutions to be performed during the shutdown, cooldown, and transition to shutdown cooling. Emphasis was placed on training of high risk operator actions, such as: downshifting of the reactor recirculation pumps to slow

speed, turbine control valve testing and preparation for the manual reactor scram, and plant stabilization following the scram. The inspectors also reviewed the planned shutdown briefing package for the lessons learned used from industry and plant experiences. The following documents were reviewed as part of this inspection:

- February 18, 2005, plant shutdown milestones and power profile, dated February 17, 2005
- Permanent record copy of simulator instructor guide of shutdown training for "Planned Outage 01-05," RSTG-LOR-JIT003, dated February 18, 2004
- "Plant Shutdown Briefing PO-01-05," dated February 18, 2005
- Permanent record copy of "Class Roster/Sign In Sheet" for RSTG-LOR-JIT003, dated March 24, 2005

f. Findings

No findings of significance were identified.

1R12 Maintenance Implementation (71111.12)

a. Inspection Scope

The inspectors reviewed two maintenance rule evaluations of: (a) a process radiation monitor performance problem and (b) plant level performance criteria to assess the effectiveness of the licensee's maintenance efforts for structures, systems, or components (SSC) within the scope of the maintenance rule program. The inspectors verified the licensee's maintenance effectiveness by: (1) verifying the licensee's handling of SSC performance or condition problems, (2) verifying the licensee's handling of degraded SSC functional performance or condition, (3) evaluating the role of work practices and common cause problems, and (4) evaluating the licensee's handling of the SSC issues being reviewed under the requirements of the maintenance rule (10 CFR 50.65), 10 CFR Part 50, Appendix B, and the Technical Specifications. The evaluations were documented in the following condition reports (CR):

- CR-RBS-2004-3129, Adverse trend in performance of off-gas posttreatment radiation monitors, reviewed on February 2, 2005
- CR-RBS-2005-0292, Plant level performance criteria exceeded by three automatic scrams during 2004, reviewed on February 23, 2005

The following documents were reviewed as part of this inspection:

- NUMARC 93-01, Revision 2, Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants

- Off-gas radiation monitors maintenance rule function list
- Maintenance rule plant performance criteria list
- Off-gas radiation monitors maintenance rule performance evaluations

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors reviewed maintenance activities to verify the performance of assessments of plant risk related to planned and emergent maintenance work activities. The inspectors verified: (1) the adequacy of the risk assessments and the accuracy and completeness of the information considered, (2) management of the resultant risk and implementation of work controls and risk management actions, and (3) effective control of emergent work, including prompt reassessment of resultant plant risk.

On a routine basis, the inspectors verified performance of risk assessments, in accordance with Administrative Procedure ADM-096, "Risk Management Program Implementation and On-Line Maintenance Risk Assessment," Revision 4, for planned maintenance activities and emergent work involving SSC within the scope of the maintenance rule. Specific work activities evaluated included planned and emergent work for the weeks of:

- February 7, 2005, main generator hydrogen leak into stator cooling water system
- February 14, 2005, circulating water pump power supply transformer problems and main generator exciter rectifier cooling water leak
- March 7, 2005, Division III loss of offsite power and loss of coolant accident logic system functional testing
- March 14, 2005, discovery of a small reactor fuel element leak

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Nonroutine Plant Evolutions (71111.14)

c. Inspection Scope

.1 January 15, 2005, Manual Reactor Scram

The inspectors reviewed personnel performance following a manual reactor scram in response to a main generator voltage regulator ground fault alarm on January 15, 2005. The inspectors evaluated the initiating causes of the scram as documented in the scram event report presented to the onsite review committee on January 15, 2005. In addition, the inspectors reviewed operator logs and plant computer data to determine what occurred and that operators responded in accordance with plant procedures and training. The inspectors also reviewed the following procedures used by the operators during the event:

- AOP-0001, "Reactor Scram," Revision 20
- AOP-0002, "Main Turbine/Generator Trips," Revision 16
- AOP-0003, "Automatic Isolations," Revision 21
- EOP-1, "RPV Control," Revision 20
- STP-50-700 Data Sheet 1, "RCS/RPV Heatup/Cooldown Rate," Revision 16A
- GOP-0003, "Scram Recovery," dated January 15, 2005

.2 Plant Shutdown for Balance of Plant System Maintenance

The inspectors observed operations personnel performance during a plant shutdown conducted to allow for repairs to the main generator exciter rectifier cooling water leak and main circulating water power supply transformer replacement on February 18, 2005. The inspectors reviewed the plan for the shutdown and attended the prejob briefing given in the main control room. The inspectors also reviewed the following procedures used by the operators during the evolution:

- C SOP-0045, "13.8KV System," Revision 15
- C SOP-0003, "Reactor Recirculation System," Revision 32
- C GOP-0002, "Power Decrease/Plant Shutdown," Revision 31
- C EOP-1, "RPV Control," Revision 20

.3 Plant Startup from Planned Outage

On February 26, 2005, the inspectors observed operations personnel performance during plant startup following a planned outage to perform maintenance on balance of plant equipment. The inspectors reviewed the plan for the startup and attended the prejob briefing given in the main control room. The inspectors also reviewed the following procedures used by the operators, during the evolution:

- C GOP-0001, "Plant Startup," Revision 46
- C SOP-0009, "Reactor Feedwater System," Revision 31
- C SOP-0046, "4.16KV System," Revision 25
- C GOP-0003, "Scram Recovery," dated February 19, 2005

.4 Plant Shutdown due to Feedwater Regulating Valve Problems

On February 28, 2005, the inspectors observed operations personnel performance during a plant shutdown conducted to allow repairs to two feedwater valves. The inspectors reviewed the plan for the shutdown and attended the prejob briefing given in the main control room. The inspectors also reviewed the following procedures used by the operators, during the evolution:

- C AOP-0001, "Reactor Scram," Revision 20
- C AOP-0002, "Main Turbine/Generator Trips," Revision 16
- C GOP-0003, "Scram Recovery," dated February 28, 2005

.5 Feedwater System Transients

On March 16 and 28, 2005, the inspectors observed operator response to two feedwater system transients involving inadvertent opening of a reactor feed pump minimum flow valve and a feedwater heater level control power failure. In each case, the plant experienced a partial loss of feedwater heating. The inspectors observed the recognition of the transient condition by the control room operators and the immediate and subsequent actions taken. The inspectors also reviewed the following procedures used by the operators, during the transients:

- C AOP-0006, "Condensate/Feedwater Failures," Revision 15
- C AOP-0007, "Loss of Feedwater Heating," Revision 22A

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

- .1 The inspectors reviewed two operability determinations selected on the basis of risk insights. The selected samples are addressed in the CRs listed below. The inspectors assessed: (1) the accuracy of the evaluations; (2) the use and control of compensatory measures, if needed; and (3) compliance with Technical Specifications, the Technical Requirements Manual, the USAR, and other associated design-basis documents. The inspectors' review included a verification that the operability determinations were made in accordance with Procedure RBNP-078, "Operability Determinations," Revision 7. The operability evaluations reviewed were associated with:

- CR-RBS-2005-00263, reactor water cleanup system differential flow Channel A, reviewed on January 27, 2005
- CR-RBS-2005-00330, containment atmosphere Monitor CMS-PR2A blank screen, reviewed on January 31, 2005

.2 Inservice Inspection (ISI) Program

The inspectors reviewed two operability determinations that involved deviations from ISI program requirements as committed to in the USAR. The issue was identified by the licensee in CR-ECH-2004-00517. The deviations occurred when nondestructive weld examinations were not conducted within the required intervals for Class 1 high stress and no break zone welds. The inspectors reviewed: (1) classification of risk and evaluation of impact on baseline risk, (2) plans and actions taken to regain compliance with ISI program requirements, and (3) compliance with Technical Specifications, the Technical Requirements Manual, the USAR, and other associated design-basis documents. The operability evaluations reviewed were documented in CR-RBS-2005-00065 and CR-RBS-2005-00067.

The welds omitted from the inspection program were not required to be included by the ASME code, but the licensee had committed to include them as part of the ISI program. The licensee took appropriate corrective actions, which included evaluating the risk significance of the missed inspections, placing the welds into the inspection program, and making plans to inspect the welds at the next available opportunity.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed four work orders (WO) to ensure that testing activities were adequate to verify system operability and functional capability. The inspectors: (1) identified the safety function(s) for each system by reviewing applicable licensing basis and/or design-basis documents; (2) reviewed each maintenance activity to identify which maintenance function(s) may have been affected; (3) reviewed each test procedure to verify that the procedure did adequately test the safety function(s) that may have been affected by the maintenance activity; (4) reviewed that the acceptance criteria in the procedure were consistent with information in the applicable licensing basis and/or design-basis documents; and (5) identified that the procedure was properly reviewed and approved. The four WOs inspected are listed below:

- WO 61036, repack of reactor water cleanup system Valves WCS-V218, 219, 220, and 221, conducted on February 22, 2005
- C WO 57133, replacement of the internals of RCIC turbine exhaust check valve, conducted on February 27, 2005
- STP-209-0602, "RCIC System Flow Test," Revision 12, following replacement of the internals of RCIC turbine exhaust check valve, conducted on February 28, 2005

- WO 61457, replacement of the reactor water cleanup system letdown flow Transmitter E31-FTN075A, conducted on March 2, 2005.

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities (71111.20)

a. Inspection Scope

The inspectors reviewed the shutdown outage protection plans and risk assessments for two forced outages and one planned outage, as listed below, to confirm that the licensee had appropriately considered risk, industry experience, and previous site-specific problems in developing and implementing a plan that assured repairs of secondary plant systems were conducted in accordance with station procedures.

- Forced outage to troubleshoot main generator voltage regulator ground detector, beginning January 15, 2005
- Planned outage to replace two balance of plant power supply transformers, beginning February 19, 2005
- Forced outage to repair two feedwater valves, beginning March 1, 2005

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors verified, by reviewing test data, that six risk-significant system and component surveillance tests met Technical Specification, USAR, and procedure requirements. The inspectors ensured that surveillance tests demonstrated that the systems were capable of performing their intended safety functions and provided operational readiness. The inspectors specifically: (1) evaluated surveillance tests for preconditioning; (2) evaluated clear acceptance criteria, range, accuracy and current calibration of test equipment; and (3) verified that equipment was properly restored at the completion of the testing. The inspectors reviewed the following surveillance test procedures (STP):

- C STP-000-6800, "Miscellaneous Power Operated Valves Cold Shutdown Operability Test," Revision 4A, performed March 2, 2005
- C STP-207-4219, "RWCU System Isolation Differential Flow Timer Channel Calibration and LSFT (E31-R615B)," Revision 13B, performed on March 3, 2005

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- C STP-402-4202, "Main Control Room A/C Train B Operability Test," Revision 7, performed on March 3, 2005
- C STP-051-4548, "ECCS Reactor Vessel Pressure Low/SRV Actuation Instrumentation Channel Functional Test," Revision 9, performed on March 3, 2005
- C STP-207-5521, "RWCU Isolation - Equipment Area Temperature High Channel Functional Test," Revision 1E, performed on March 3, 2005
- C STP-508-4204, "Drywell Pressure - High Channel Calibration and Logic System Functional Test (C71-N050B)," Revision 14B, performed on March 4, 2005

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

During the week of January 24, 2005, the inspectors reviewed the current temporary plant modifications made to the reactor water cleanup system letdown line flow transmitter and the high differential flow logic. Specifically, the inspectors: (1) reviewed the temporary modification and its associated 10 CFR 50.59 screening against the system's design-basis documentation, including the USAR and Technical Specifications; (2) verified that the installation of the temporary modification was consistent with the modification documents; (3) verified that plant drawings and procedures were updated; and (4) reviewed the postinstallation test results to confirm the actual impact of the temporary modification on the reactor water cleanup differential flow detection system had been adequately verified. The inspectors reviewed temporary alteration Package TA-2005-0003-00, "Eliminate RWCU Condenser Flow Input to RWCU Differential Flow Trip," installed on January 27, 2005.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS2 ALARA Planning and Controls (71121.02)

a. Inspection Scope

The inspector assessed licensee performance with respect to maintaining individual and collective radiation exposures as low as is reasonably achievable (ALARA). The

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inspector used the requirements in 10 CFR Part 20 and the licensee's procedures required by Technical Specifications as criteria for determining compliance. The inspector interviewed licensee personnel and reviewed the following:

- Ten outage or on-line maintenance work activities scheduled during the inspection period and associated work activity exposure estimates which were likely to result in the highest personnel collective exposures
- Five work activities of highest exposure significance completed during the last outage
- ALARA work activity evaluations, exposure estimates, and exposure mitigation requirements
- Intended versus actual work activity doses and the reasons for any inconsistencies
- Interfaces between operations, radiation protection, maintenance, maintenance planning, scheduling, and engineering groups
- Integration of ALARA requirements into work procedure and radiation work permit documents
- Person-hour estimates provided by maintenance planning and other groups to the radiation protection group with the actual work activity time requirements
- Shielding requests and dose/benefit analyses
- Dose rate reduction activities in work planning
- Postjob (work activity) reviews
- Assumptions and basis for the current annual collective exposure estimate, the methodology for estimating work activity exposures, the intended dose outcome, and the accuracy of dose rate and person-hour estimates
- Method for adjusting exposure estimates, or re-planning work, when unexpected changes in scope or emergent work were encountered
- Workers use of the low dose waiting areas
- First-line job supervisors' contribution to ensuring work activities are conducted in a dose efficient manner
- Exposures of individuals from selected work groups

- Records detailing the historical trends and current status of tracked plant source terms and contingency plans for expected changes in the source term due to changes in plant fuel performance issues or changes in plant primary chemistry
- Source-term control strategy or justifications for not pursuing such exposure reduction initiatives
- Specific sources identified by the licensee for exposure reduction actions and priorities established for these actions, and results achieved against them since the last refueling cycle
- Self-assessments and audits related to the ALARA program since the last inspection
- Resolution through the corrective action process of problems identified through postjob reviews and postoutage ALARA report critiques
- Corrective action documents related to the ALARA program and followup activities such as initial problem identification, characterization, and tracking

The inspector completed 8 of the required 15 samples and 13 of the optional samples.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA6 Meetings, Including Exit

Exit Meetings

On March 4, 2005, the inspector presented the results of the radiation safety inspection to Mr. Paul Hinnenkamp and other members of the River Bend Station staff who acknowledged the findings. The inspector confirmed that proprietary information was not provided or examined during the inspection.

On April 4, 2005, the inspectors presented the integrated inspection results to Mr. Paul Hinnenkamp and other members of licensee management. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee-Identified Violations

The following finding of very low safety significance was identified by the licensee and is a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a noncited violation.

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- Technical Specification 5.4.1.a requires that written procedures be established, implemented, and maintained covering the activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A, Section 7(e), requires procedures for a radiation work permit program. Procedure RP-105, Revision 4, "Radiation Work Permits" Section 5.7.1, required, in part, that radiation work permit deviations be used to change protective requirements on a case-by-case basis. Radiation Work Permit 2004-1800, Task-4, Worker Instruction 15 required the installation of the drywell head shadow shielding prior to the drywell head lift. On October 22, 2004, without a radiation work permit deviation, the licensee lifted the drywell head and placed it on the refueling floor before the temporary shadow shielding was installed. This event was described in CR-RBS-2004-03162 and CR-RBS-2005-00378. The finding had a very low safety significance because it did not involve: (1) an ALARA finding, (2) an overexposure, (3) a substantial potential for an overexposure, or (4) an impaired ability to assess dose.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

L. Ballard, Manager, Quality Programs
M. Boyle, Manager, Radiation Protection
D. Burnett, Superintendent, Chemistry
C. Bush, Manager, Outage
J. Clark, Assistant Operations Manager - Training
T. Coleman, Manager, Planning and Scheduling/Outage
C. Forpahl, Manager, Corrective Actions and Assessments
T. Gates, Manager, System Engineering
R. Godwin, Manager, Training and Development
H. Goodman, Manager, Design Engineering
P. Hinnenkamp, Vice President - Operations
B. Houston, Manager, Plant Maintenance
G. Huston, Assistant Operations Manager - Shift
A. James, Superintendent, Plant Security
R. King, Director, Nuclear Safety Assurance
J. Leavines, Manager, Emergency Planning
D. Lorfing, Manager, Licensing
J. Malara, Director, Engineering
W. Mashburn, Manager, Programs and Components
P. Page, Supervisor, ALARA
C. Stafford, Manager, Operations
T. Trepanier, General Manager - Plant Operations

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

None.

LIST OF DOCUMENTS REVIEWED

The following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings:

Section 1R15.2: Operability Evaluations (71111.15)

Program Section CEP-ISI-003, "ASME Section XI, Division 1, Inservice Inspection Program," Revision 1G

ADM-0096, "Risk Management Program Implementation and On-Line Maintenance Risk Assessment," Revision 04

CR-ECH-2004-00517, Discrepancies between the information contained in calculation PX-1095, Revision 1F and the ISI program, dated November 9, 2004

Entergy Engineering Manual, CE-P-05.12, "PSA Applications Procedure," Revision 02

CR-RBS-2005-00065, No break zone welds per PX-1095 calculation which require an NDE examination to be performed, dated January 10, 2005

CR-RBS-2005-00067, ISI Section XI welds per PX-1095 calculation which require an NDE examination to be performed, dated January 10, 2005

Program Section CEP-IST-4, "Standard on Inservice Testing," Revision 0/Change 0B

Radiation Work Permit 2005-1023, "ISI weld inspection, including support activities," Revision 0

Drawing 2402-1252, Gulf States - River Bend 10 inch Nozzle N6, Revision 01

Technical Requirements Manual, Section 5.5.6, "Inservice Inspection and Testing Programs"

Section 2OS1: Access Control to Radiologically Significant Areas (IP71121.01)

Radiation Work Permits

2004-1028	Reverse Osmosis project
2004-1627	Perform test on G33-MOVF004
2004-1800	RF-12 Refueling Activities
2004-1912	RF-12 Remove/Replace 16 SRVs
2004-1915	RF-12 Remove/Replace LPRMs, Including all Support Activities
2004-1936	RF-12 Installation/Removal of Temporary Shielding in the Drywell
2004-1953	RF-12 ISI Welds Inside Bioshield on N2 Nozzles, Including Support Activities

Shielding Requests

03-37, 03-38, 03-40 04-39, 04-39A, 04-41

Procedures

ADM-0046 Shielding Control Program, Revision 6
DC-141 EN-S Nuclear Management Manual, Attachment 9.2, Revision 1
PL-182 Radiation Protection Expectations and Standards, Revision 1
RP-105 Radiation Work Permits, Revision 4
RP-107 Radiation Protection Glossary, Revision 2
RP-109 Hot Spot Program, Revision 0
RP-110 ALARA Program, Revision 2

Condition Reports (CR-RBS-)

2003-1213

2004-0641, 2004-0996, 2004-1249, 2004-1287, 2004-1811, 2004-1974, 2004-1991,
2004-2318, 2004-2379, 2004-2467, 2004-2472, 2004-2506, 2004-2534, 2004-2759,
2004-3077, 2004-3162, 2004-3325, 2004-3551, 2004-3585, 2004-3623

2005-00113, 2005-0354, 2005-00378, 2005-00412

Self-Assessments/Audits

LO-RLO-2003-00067
LO-RLO-2004-00170
QS-2003-RBS-009
QS-2003-ENS-1
QS-2004-RBS-005
QS-2005-RBS-002
RBS-RP-2003

Other

ALARA Committee Minutes from March 1, 2004, to February 7, 2005

Miscellaneous

RBS Five Year ALARA Plan 2005-2009
2004-2005 Summary River Bend Radiation Protection

LIST OF ACRONYMS

ALARA	as low as is reasonably achievable
ADM	administrative procedure
AOP	abnormal operating procedure
CFR	<i>Code of Federal Regulations</i>
CR-ECH	Entergy condition report
CR-RBS	River Bend Station condition report
EOP	emergency operating procedure
ISI	inservice inspection
NRC	U.S. Nuclear Regulatory Commission
RBNP	River Bend nuclear procedure
RCIC	reactor core isolation cooling system
RCS	reactor coolant system
SOP	system operating procedures
SSC	structures, systems, or components
STP	surveillance test procedure
USAR	Updated Safety Analysis Report
WO	work order