UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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August 5, 2004

Paul D. Hinnenkamp
Vice President - Operations
Entergy Operations, Inc.
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5485 US Highway 61N
St. Francisville, LA 70775

SUBJECT: RIVER BEND STATION - NRC INTEGRATED INSPECTION REPORT 05000458/2004003

Dear Mr. Hinnenkamp:

On June 30, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your River Bend Station facility. The enclosed integrated inspection report documents the inspection findings, which were discussed on that date with Mr. Tom Trepanier, General Manager, Plant Operations, 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.

This report documents three NRC identified findings of very low safety significance (Green). The three findings were determined to involve violations of NRC requirements. However, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these findings as noncited violations consistent with Section VI.A of the NRC Enforcement Policy. If you contest these noncited violations, 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; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the River Bend Station facility.

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).

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 05000458/2004003
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket:	50-458
License:	NPF-47
Report:	05000458/2004003
Licensee:	Entergy Operations, Inc.
Facility:	River Bend Station
Location:	5485 U.S. Highway 61 St. Francisville, Louisiana
Dates:	April 1 through June 30, 2004
Inspectors:	P. J. Alter, Senior Resident Inspector, Project Branch B M. O. Miller, Resident Inspector, Project Branch B R. E. Lantz, Senior Emergency Preparedness Inspector, Operations Branch P. C. Gage, Senior Operations Engineer, Operations Branch J. F. Drake, Operations Engineer, Operations Branch W. M. McNeill, Reactor Inspector, Engineering Branch D. E. Dumbacher, Project Engineer, Project Branch D
Approved By:	D. N. Graves, Chief Project Branch B Division of Reactor Projects

Enclosure

CONTENTS

SUMMARY OF FINDINGS

IR 05000458/2004003; 04/01/2004 - 06/30/2004; River Bend Station; Maintenance Rule Implementation, Operability Evaluations and Surveillance Testing

The report covered a 3-month period of routine baseline inspections by resident inspectors and announced baseline inspections by regional emergency planning inspectors and engineering and maintenance inspectors. Three NRC identified findings of very low safety significance (Green) were documented. The three findings were noncited violations (NCV). The significance of most findings is indicated by their color (Green, White, Yellow, Red) using inspection manual Chapter 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: Barrier Integrity

Green. The NRC inspectors identified a noncited violation of 10 CFR 50.65(a)(2). On May 15, 2003, the licensee failed to set goals and monitor the performance of the secondary containment system as required by 10 CFR 50.65(a)(1). As required by 10 CFR 50.65(a)(2), the licensee must demonstrate effective control of a structure's condition through appropriate preventive maintenance to not require paragraph (a)(1) monitoring. The licensee had no justification for not requiring (a)(1) monitoring, after they failed to demonstrate effective control of the performance of the secondary containment system through appropriate preventive maintenance. The inspectors considered this violation to be noncited consistent with Section VI.A.1 of the NRC Enforcement Policy. The licensee entered this noncited violation into its corrective action program as Condition Report CR-RBS-2004-01706.

The inspectors determined this violation was more than minor because the failure to identify functional failures resulted in the system not being evaluated for 10 CFR 50.65(a)(1) status and had a credible impact on safety. The licensee performed engineering evaluations which concluded that, had a design basis accident occurred while the condition existed, the main control room, exclusion area boundary, and low population zone doses would have remained within the limits of 10 CFR 50.67. The inspectors determined the safety significance of this violation to be very low by the Reactor Safety Significance Determination Process. The inspectors answered the Phase 1 question regarding containment as yes because the inspectors determined that this finding represented a degradation of the radiological barrier only; therefore, in accordance with Manual Chapter 0609, Appendix A, Attachment 1, this finding is of very low safety significance (Section 1R12).

Cornerstone: Mitigating Systems

- Green. The inspectors identified two examples of a noncited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to maintain the original design configuration of engineered safety feature switchgear. The inspectors found all of the heat dissipation louvers on top of the load centers and the relay control cabinets for both Divisions I and II auxiliary building 480 Vac engineered safety features switchgear covered with tape. Previously, the licensee had identified cardboard covering the ventilation louvers on breaker cubicles in the Division I engineered safety features 4160 Vac switchgear in the control building.

  The failure to maintain design control over Switchgear EJS-SWGR2A and -2B and ENS-SWGR1A was a performance deficiency. The violation was more than minor because it was associated with the mitigating systems cornerstone attribute for design control. It affects the mitigating system cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. This noncited violation was evaluated using Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." During the Phase 1 analysis, the issue was determined to have very low safety significance because it did not: (1) represent a design or qualification deficiency, (2) represent an actual loss of safety function of a system or a single train of a system for greater than the Technical Specification allowed out-of-service time, (3) represent an actual loss of safety function of non-Technical Specification trains of equipment per 10 CFR 50.65 for more than 24 hours, or (4) screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event. Since this violation of 10 CFR Part 50 Appendix B, Criterion III, was of very low safety significance and was entered in the licensee's corrective action program as CR-RBS-2004-0512, -1389, -1855, and -1856, it is being treated as a noncited violation consistent with the NRC Enforcement Policy, NUREG-1600.

  The inspectors also determined that on at least two occasions the licensee had the opportunity but failed to identify the tape covering the louvers on top of auxiliary building 480 Vac engineered safety features Switchgear EJS-SWGR2A. Therefore, the inspectors consider this finding to have problem identification and resolution crosscutting aspects for failure to identify a condition adverse to quality. Also the inspectors determined that the design engineering evaluation of as-found conditions for Division I engineered safety features 4160 Vac ENS-SWGR1A for past reportability was actually an evaluation of Division I 480 Vac engineered safety features EJS-SWGR1A and therefore a human performance error (Section 1R15).

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's performance of unacceptable preconditioning of Technical Specification emergency diesel generator surveillance testing. The inspectors found three unacceptable preconditioning activities

the licensee performed during the May and June 2004 emergency diesel generator monthly surveillance tests. The inspectors determined that this finding has problem identification and resolution aspects because the licensee identified some of these activities as unacceptable preconditioning in their evaluation of NRC Information Notice 97-16, "Preconditioning of Plant Structures, Systems, and Components Before ASME Code Inservice Testing or Technical Specification Surveillance Testing," dated June 9, 1997, yet failed to take actions to correct the test procedures.

The inspectors determined the unacceptable preconditioning of emergency diesel generator surveillance testing was a performance deficiency. The finding was more than minor because it was associated with the mitigating systems cornerstone attribute for procedure quality. The finding affected the cornerstone objective to maintain availability and reliability of systems that respond to events to prevent undesirable consequences. The inspectors reviewed the finding using Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." Based on the results of the Phase 1 screening of the finding, the inspectors determined that the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, was not an actual loss of safety function for a system or train, and was not risk significant due to a seismic, fire, flooding, or sever weather initiating event. The inspectors determined that unacceptable preconditioning of Technical Specification diesel generator surveillance testing was a violation of 10 CFR Part 50, Appendix B, Criterion V. Because the violation was of very low safety significance and was entered into the licensee's corrective action program as CR-RBS-2004-1839 and -1858, it is being treated as an noncited violation, consistent with Section VI.A of the NRC Enforcement Policy, NUREG 1600.

The inspectors identified crosscutting aspects related to problem identification and resolution. In their evaluation of NRC Information Notice 97-15, the licensee identified and evaluated some activities that precondition the emergency diesel generators during their prestart checks for surveillance testing, but failed to take appropriate actions to correct the procedures (Section 1R22).

B. Licensee-Identified Findings

None.

REPORT DETAILS

Summary of Plant Status: The licensee operated the reactor plant at 100 percent power from April 1 until May 7, 2004, with the exception of routine reductions in reactor power for control rod exercising and turbine testing. On May 7, 2004, the licensee reduced reactor power to 52 percent for a control rod pattern exchange and turbine valve testing. The licensee returned the plant to 100 percent power on May 8, 2004. On May 19, 2004, the licensee reduced reactor power to 75 percent in response to a problem with one of the reactor recirculation system flow control valves. The licensee returned the plant to 100 percent power on May 21, 2004. The licensee operated the reactor plant at 100 percent power for the remainder of the inspection period with the exception of routine reductions in reactor power for control rod exercising and turbine testing.

1. REACTOR SAFETY

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

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

On April 11 and 13, 2004, the inspectors observed and evaluated implementation of procedures in preparation for the arrival of severe thunderstorms and possible tornados. Specifically, the inspectors verified that actions taken were in accordance with Abnormal Operating Procedure AOP-0029, "Severe Weather Operation," Revision 14B, to maintain availability of essential systems and components during severe thunderstorm and tornado watches. Additionally, the inspectors walked down outside portions of the plant to ensure that essential plant equipment would not be affected by high winds and flying debris.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

.1 The inspectors performed three partial system walkdowns during this inspection period. On April 15, 2004, the inspectors walked down Division II standby service water (SSW) while the Division I SSW was out of service for testing. On April 15, 2004, the inspectors walked down the Division II emergency diesel generator (EDG) while the Division I EDG was out of service for testing. On April 27, 2004, the inspectors walked down residual heat removal Train A while residual heat removal Pump C was out of service to allow signature testing on its minimum flow valve. In each case, the inspectors verified the correct valve and power alignments by comparing positions of

valves, switches, and electrical power breakers to the procedures and drawings listed below and applicable sections of the Updated Safety Analysis Report (USAR).

- SOP-0053, “Standby Diesel Generator and Auxiliaries,” Revision 36
- SOP-0031, “Residual Heat Removal,” Revision 41
- SOP-0042, “Standby Service Water System,” Revision 21

.2 During the week of June 1, 2004, the inspectors conducted a complete system walkdown of the accessible portions of the high pressure core spray (HPCS) system. The inspectors verified that: (1) valve and control switch alignments were correct, (2) valves were locked as required, (3) the power supply lineup was correct, and (4) alarms and indications in the main control room were as specified in the following documents:

- USAR Section 6.3, “Emergency Core Cooling Systems”
- Technical Specifications Section 3.5, “Emergency Core Cooling Systems (ECCS) and Reactor Core Isolation Cooling (RCIC) System”
- Technical Specifications Section 3.8.1, “AC Sources - Operating”
- SOP-30, “High Pressure Core Spray,” Revision 20A
- PID-27-04A, “High Pressure Core Spray,” Revision 2A
- HPCS system health report and maintenance rule report

The inspectors also verified electrical power requirements, labeling, hangers and support installation, and associated support systems status. Operating pumps were examined to ensure that any noticeable vibration was not excessive, pump leakoff was not excessive, bearings were not hot to the touch, and the pumps were properly ventilated. The walkdowns also included evaluation of system piping and supports to ensure: (1) piping and pipe supports did not show evidence of water hammer, (2) oil reservoir levels appeared normal, (3) snubbers did not appear to be leaking hydraulic fluid, (4) hangers were within design limits, and (5) component foundations were not degraded.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

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; (4) the condition of passive fire protection features, such as electrical raceway fire barrier systems, fire doors, and fire barrier penetrations; and (5) any related compensatory measures. The areas inspected were:

- Control building, 116-foot elevation, ECCS Division II cable Chase I, fire Zone C-1C, on April 16, 2004
- Control building, 98-foot elevation, ECCS Division II cable Chase I, fire Zone C-1BC, on April 16, 2004
- Auxiliary building, 95-foot elevation, Division III HPCS piping area, fire Area AB-2/Z-2, on June 6, 2004
- Control building, 116-foot elevation, Division III HPCS 4160 Vac switchgear room, fire Area C-22, on June 15, 2004
- Control building, 116-foot elevation, Division III HPCS 125 Vdc switchgear room, fire Area C-24, on June 15, 2004
- Control building, 116-foot elevation, Division III HPCS cable chase, fire Area C-9, on June 16, 2004

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

- Pre-Fire Strategy Book
- USAR Section 9A.2, "Fire Hazards Analysis"
- River Bend postfire safe shutdown analysis
- RBNP-038, "Site Fire Protection Program," Revision 6A

.2 The inspectors observed an announced quarterly fire drill on April 16, 2004, in ECCS Division II cable Chase I, fire Zone C-1C, to evaluate the readiness of the licensee's personnel to fight fires. The inspectors: (1) observed the 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 fire preplan strategies; (3) observed firefighting directions and radio communications between the brigade leader, brigade members, and the control room; (4) reviewed the

fire drill scenario to determine whether objectives and acceptance criteria had been met; (5) observed the critique subsequent to the fire drill; (6) verified that the fire brigade members that wore corrective lenses had respirator glasses; and (7) reviewed the fire brigade drill critique items.

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 HPCS room on June 6, 2004. Specifically, the inspectors examined: (1) sealing of equipment below design flood level, (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"
- G13.18.12.3*15, "Internal Flooding Screening Analysis"
- 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 Program (71111.11)

a. Inspection Scope

On May 19, 2004, the inspectors observed simulator training of an operation's staff crew, as part of the operator requalification training program, to assess licensed operator performance. Emphasis was placed on observing biennial evaluation and operator activities associated with the emergency plan and plant experiences. In

addition, the inspectors compared simulator control panel configurations with the actual control room panels for consistency. The inspectors observed Exam Scenario RSMS-OPS-800, "Loss of all Feedwater/DBA LOCA," Revision 00.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

.1 Quarterly Maintenance Rule Implementation Inspection

a. Inspection Scope

The inspectors reviewed two system performance problems to assess the effectiveness of the licensee's maintenance efforts for structures, systems, and components (SSC) within the scope of the maintenance rule program. The inspectors verified the licensee's maintenance effectiveness by: (a) verifying the licensee's handling of SSC performance or condition problems, (b) verifying the licensee's handling of degraded SSC functional performance or condition, (c) evaluating the role of work practices and common cause problems, and (d) evaluating the licensee's handling of the SSC issues being reviewed under the requirements of the maintenance rule (10 CFR Part 50.65), 10 CFR Part 50, Appendix B, and the Technical Specifications. The following documents were reviewed as part of this inspection:

- CR-RBS-2004-0015, Division III service water low pressure trip unit malfunction
- CR-RBS-2004-0179, Division I EDG number 1 fuel injector line leak
- NUMARC 93-01, Revision 2, Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants
- Maintenance rule database (function list, performance criteria list, functional failure evaluations)

b. Findings

No findings of significance were identified.

2. Biennial Maintenance Rule Implementation Inspection

a. Inspection Scope

Periodic Evaluation Reviews

The inspectors reviewed the licensee's report documenting the performance of the last 10 CFR 50.65 periodic effectiveness assessment entitled “Maintenance Rule (a)(3) Periodic Assessment.” This periodic evaluation covered the period from January 1 to December 31, 2002.

The inspectors reviewed the licensee’s implementation of 10 CFR 50.65, “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,” (the Maintenance Rule). The inspectors verified the determination of the scope of the program, determination of the risk significance, and establishment of performance criteria. The inspectors verified the establishment of appropriate goals and corrective actions and the impact of risk monitoring. The inspectors reviewed the conclusion reached by the licensee with regard to the balance of reliability and unavailability for specific maintenance rule functions. The inspectors reviewed control room logs, clearance orders, and limiting condition of operation logs to determine availability for SSW. The inspectors reviewed the following four samples of performance problems:

- CR-RBS-2003-2624, feedwater system reliability
- CR-RBS-2003-2082, operation greater than maximum licensed power
- CR-RBS-2003-0865, secondary containment door failure
- CR-RBS-2003-0912, SSW availability

Identification and Resolution of Problems

The inspectors evaluated the use of the corrective action program within the maintenance rule program. The inspectors accomplished this by the examination of a sample of corrective action documents listed in the attachment. The inspectors did such to establish that the licensee entered the corrective action program at the appropriate threshold for the purpose of correction of generic issues or conditions identified during programmatic assessments, audits, or surveillances.

b. Findings

Introduction. The inspectors identified a Green noncited violation (NCV) of 10 CFR 50.65 (a)(2) associated with the loss of secondary containment due to an inoperative secondary containment door. The licensee failed to set goals and monitor the condition of secondary containment as required by 10 CFR 50.65(a)(1). In addition, they had no justification for not doing so, after they failed to demonstrate effective control of the

condition of the secondary containment through appropriate preventive maintenance. Per 10 CFR 50.65(a)(2), the licensee must demonstrate effective control of structure's condition through appropriate preventive maintenance to not require monitoring under Paragraph (a)(1). Therefore, the inspectors identified this as an NCV of 10 CFR 50.65(a)(2).

Description. On March 7, 2003, the door assist device failed after a technician entered secondary containment, resulting in the door not closing. The three containment doors have door assist devices because when the standby gas treatment system operates, it creates a negative pressure in the auxiliary building such that doors without assistance cannot be opened. The inspectors noted also that the licensee operates the standby gas treatment system to mitigate the consequences of an accident. The licensee documented in CR-RBS-20003-0865 that secondary containment Door PWR095-02 failed to close for 78 minutes. The door assist device would not reset and would not allow the door to close. When the licensee reviewed this event on May 15, 2003, for the purposes of functional failure determination, the structural engineering staff determined the event was not a functional failure. Station structural engineering staff reasoned that removing the door assist device restored secondary containment and, therefore, was not a functional failure. The inspectors questioned this determination because the loss of secondary containment lasted for 78 minutes, which was the time required to remove the door assist device. The licensee then agreed that a functional failure had occurred. The performance criteria for structures was contained in Procedure EDG-CS-003, "Maintenance Rule Structural Monitoring at River Bend Station," Revision 0. Table 5.9.1 of the procedure requires that, given a functional failure, an (a)(1) evaluation should be performed.

Analysis. The inspectors determined that this finding was greater than minor because it affects the reactor safety barrier cornerstone objective to maintain functionality of containment and was similar to the greater than minor Example 1.f. in Appendix E of Manual Chapter 0612.

The licensee reported this event to the NRC in Licensee Event Report 0500458/20003002-01. In that report, the station staff stated, "During the time the door was blocked open, the plant continued to operate normally. There were no actual consequences to the health and safety of the public. The licensee's engineering evaluations concluded that, had a design basis accident occurred while the condition existed, the main control room, exclusion area boundary, and low population zone doses would have remained within the limits of 10 CFR 50.67." The inspectors answered the Phase 1 question regarding containment as yes because the inspectors determined that this finding represented a degradation of the radiological barrier only; therefore, in accordance with Manual Chapter 0609, Appendix A, Attachment 1, this finding is of very low safety significance (Green).

Enforcement. Paragraph (a)(2) of 10 CFR 50.65 requires licensees to set goals and monitor the condition of secondary containment, as required by 10 CFR 50.65(a)(1), or to have a justification for not doing so. Per 10 CFR 50.65(a)(2), the licensee must demonstrate effective control of a structure's condition through appropriate preventive maintenance in order to not require monitoring under paragraph (a)(1). River Bend Station Procedure EDG-PR-001, "Maintenance Rule and Unavailability Monitoring Programs," Revision 10, Section 6.0, refers to the "Maintenance Rule Desk Top," Revision 1, Section 3.9, which states: structural engineering monitors structures under the maintenance rule. River Bend Station Procedure EDG-CS-003, "Maintenance Rule Structural Monitoring at River Bend Station," Revision 0, Table 5.9.1, requires, given a functional failure, that they should perform an (a)(1) evaluation. Contrary to the above, on May 15, 2003, the station staff failed to identify a functional failure and failed to perform the required (a)(1) evaluation when dispositioning the door assist device failure that resulted in a loss of secondary containment. The NRC identified this failure during this inspection and the River Bend Station staff documented the failure to identify this functional failure in CR-RBS-2004-01706. Because this failure to identify a functional failure is of very low safety significance and has been entered into the licensee's corrective action program, this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000458/2004003-01)

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

a. Inspection Scope

The inspectors reviewed four 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.

.1 Risk Assessment and Management of 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 04, for planned maintenance activities and emergent work involving SSC within the scope of the maintenance rule. Specific work activities evaluated were the April 6, 2004, risk assessment for preplanned maintenance on primary component cooling water Pump C and planned and emergent work for the week of June 21, 2004, during planned work activities of a Division I engineered system outage.

.2 Emergent Work Control

During emergent work, the inspectors verified that the licensee took actions to minimize the probability of initiating events, maintained the functional capability of mitigating systems, and maintained barrier integrity. The inspectors also reviewed the emergent work activities to ensure the plant was not placed in an unacceptable configuration. The emergent work activities evaluated:

- April 29, 2004, end of cycle - recirculation pump trip Relay C71A-K98 failed to trip during surveillance testing and was replaced while the unit was online

- May 20, 2004, a fuse in the control circuit for reactor recirculation flow control Valve A blew

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Nonroutine Plant Evolutions and Events (71111.14)

a. Inspection Scope

Unexpected opening of reactor recirculation flow control Valve B

The inspectors reviewed personnel performance during the May 29, 2004, unplanned power increase by interviewing the control room supervisor, shift manager, and control room operators. A blown fuse in the control circuit of recirculation system flow control Valve B caused it to open unexpectedly. The inspectors evaluated the initiating causes of the event as documented in CR-RBS-2004-1490. 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 reviewed the following procedures used and briefed by the operators during the event:

- Technical Specification 3.4.1, “Recirculation Loop Jet Pump Flow Mismatch”
- GOP-5, “Power Maneuvering,” Revision 14
- GOP-4, “Single Loop Operation,” Revision 17

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed three operability determinations that were selected on the basis of risk insights. The selected samples are addressed in the condition reports 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 as specified by Procedure RBNP-078, "Operability Determinations," Revision 7. The operability evaluations reviewed were associated with:

- CR-RBS-2004-1839, discovered tape covering ventilation louvers on top of safety related Switchgear EJS-SWGR2A and EJS-SWGR2B, reviewed on May 12, 2004

- CR-RBS-2003-0131, RCIC flow indication failure on remote shutdown panel, reviewed on May 13, 2004

- CR-RBS-2004-0179, Division I EDG fuel line failure, reviewed on June 18, 2004

b. Findings

Introduction. The inspectors identified two examples of a Green NCV of 10 CFR Part 50, Appendix B, Criterion III, for the licensee's failure to maintain the original design configuration of engineered safety feature switchgear. The inspectors found all of the heat dissipation louvers on top of the load centers and the relay control cabinets for both Divisions I and II auxiliary building 480 Vac engineered safety features switchgear covered with tape. Previously, the licensee had identified cardboard covering the ventilation louvers on breaker cubicles in the Division I engineered safety features 4160 Vac switchgear in the control building. Although this lack of configuration control did not directly cause the failure of any safety-related electrical control circuits, increased temperatures in the relay control cabinets and breaker cubicles could accelerate heat related aging of safety-related relays and other electrical components.

Description. On May 12, 2004, during a heavy rainstorm, as a followup to the roof leak onto Division I auxiliary building 480 Vac engineered safety features Switchgear EJS-SWG2A (previously documented as NCV 05000458/2004002-02), the inspectors looked for rainwater on top of EJS-SWGR2A. The inspectors found no water, but they did find tape covering what appeared to be louvers above the relay control cabinets at the top of the switchgear. The inspectors then looked on top of Division II auxiliary building 480 Vac engineered safety features Switchgear EJS-SWGR2B and found the same condition.

The inspectors contacted operations and engineering personnel to advise them of the tape covered louvers. An engineering supervisor contacted the original equipment

manufacturer who recommended removal of the tape. The inspectors asked the shift manager if the same condition existed on other 480 Vac engineered safety feature switchgear in the plant. Later that day, the shift manager reported that the tape was removed from Switchgear EJS-SWGR2A and -2B and that there were louvers but no tape on top of Divisions I and II 480 Vac engineered safety features EJS-SWGR1A and -1B in the control building. Design engineers performed a bounding analysis for EJS-SWGR2A and -2B and determined that temperatures would not exceed designed environmental qualification conditions for the worst case conditions of design basis accidents affecting the auxiliary building environment.

The inspectors also determined that on at least two occasions the licensee had the opportunity and failed to identify the tape covering the louvers on top of Switchgear EJS-SWGR2A: (1) when operators went on top of the switchgear to cover it with plastic sheeting during the auxiliary building roof leak on February 5, 2004; and (2) when engineering personnel inspected the switchgear on February 11, 2004, to perform an evaluation of its environmental conditions for the past reportability determination of EJS-SWGR2A. Therefore, the inspectors consider this finding to have problem identification and resolution crosscutting aspects for failure to identify a condition adverse to quality. The licensee documented this aspect of the issue in CR-RBS-2004-1855.

The inspectors found a second example of a failure to maintain design configuration control of engineered safety features switchgear during a review of the licensee's corrective action program. As documented in CR-RBS-2004-0512, on February 18, 2004, during an inspection of engineered safety features 4160 Vac Switchgear ENS-SWGR1A, maintenance electricians found cardboard taped to the bottom ventilation louvers in the back covers of the breaker cubicles for the Division I EDG and the low pressure core spray pump. The technicians removed the tape and cardboard from the two breaker cubicles and inspected the remainder of ENS-SWGR1A.

The inspectors determined that the design engineering evaluation of as-found conditions for Switchgear ENS-SWGR1A for the past reportability determination of CR-RBS-2004-0512 was actually an evaluation of Division I 480 Vac engineered safety features EJS-SWGR1A. The licensee documented this human performance error in CR-RBS-2004-1856.

Analysis. The failure to maintain design control over Switchgear EJS-SWGR2A and -2B and ENS-SWGR1A was a performance deficiency. The inspectors determined that the identified performance deficiency was not similar to the examples of minor issues identified in Manual Chapter 0612, Appendix E. The violation was more than minor because it was associated with the mitigating systems cornerstone attribute for design control. It affected the mitigating system cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined that the as-found condition of the heat dissipation louvers for the

relay control cabinets and the bottom ventilation louvers for the breaker cubicles affected the reliability of the relays and other electrical equipment therein by accelerating the heat related aging of those components due to high temperature conditions during the summer months.

The NCV was evaluated using Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." It screened out in the Phase 1 analysis as having very low safety significance, because it did not: (1) represent a design or qualification deficiency, (2) represent an actual loss of safety function of a system or a single train of a system for greater than the Technical Specification allowed out-of-service time, (3) represent an actual loss of safety function of non-Technical Specification trains of equipment per 10 CFR Part 50.65 for more than 24 hours, or (4) screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event. The licensee did a search of the work management system database and found no past relay failures in Switchgear EJS-SWGR2A or -2B that could be directly traced to overheating.

Enforcement. The inspectors determined these are two examples of a violation of 10 CFR Part 50, Appendix B, Criterion 3, "Design Control," which states, in part, that "Design changes, including field changes, shall be subject to design control measures . . . and be approved by the organization that approved the original design." There is no record of the use of tape on the heat dissipation louvers on top of Switchgear EJS-SWGR2A and -2B or the taped cardboard from the inside of the louvers in ENS-SWGR1A. Since this violation of 10 CFR Part 50, Appendix B, Criterion III, was of very low safety significance and was entered in the licensee's corrective action program as CR-RBS-2004-0512, -1389, -1855, and -1856, it is being treated as an NCV consistent with the NRC Enforcement Policy NUREG-1600 (NCV 05000458/2004003-02).

1R16 Operator Workarounds (IP 71111.16)

a. Inspection Scope

An operator workaround is defined as a degraded or nonconforming condition that complicates the operation of plant equipment and is compensated for by operator action. During the week of June 21, 2004, the inspectors reviewed the cumulative effect of the existing operator workarounds on: (1) the reliability, availability, and potential for misoperation of any mitigating system; (2) whether they could increase the frequency of an initiating event; and (3) their effects on the operation of multiple mitigating systems. In addition, the inspectors reviewed the cumulative effects of the operator workarounds on the ability of the operators to respond in a correct and timely manner to plant transients and accidents. The documents reviewed by the inspectors during this inspection were:

- "Operator Workaround - Control Room Deficiency Program Guidelines," Revision 11
- GOP-0005, "Power Maneuvering," Revision 14

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

a. Inspection Scope

The inspectors selected one permanent plant modification on SSW flow indicator circuits, installed on April 12, 2004. Work Order (WO) 50366955 added dampening circuits between the SSW flow transmitters' output and the input to the control room panel indicators. The inspectors verified that the modification preparation, staging, and implementation did not impair emergency or abnormal procedure actions, safety functions, or operator response to the loss of safety functions. The inspectors also verified that postmodification testing maintained the plant in a safe configuration during testing. The licensee's operability declaration was confirmed by: (1) verifying that unintended system interactions did not occur; (2) verifying SSC performance characteristics met the design basis; (3) validating the appropriateness of modification design assumptions; and (4) demonstrating that the modification test acceptance criteria were met.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed five WOs to ensure that testing activities were adequate to verify system operability and functional capability. The inspectors: (1) identified the safety functions for each system by reviewing applicable licensing basis and/or design-basis documents; (2) reviewed each maintenance activity to identify which maintenance functions may have been affected; (3) reviewed each test procedure to verify that the procedure did adequately test the safety functions that may have been affected by the maintenance activity; (4) ensured 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 WOs inspected are listed below:

- WO 50368042, Replace Division I hydrogen Igniter HCS-IGN04A; CR-RBS-2004–1073, hydrogen Igniter HCS-IGN1A failed during performance of STP-254-1401, conducted on April 8, 2004

- WO 00043406, Fire protection jockey Pump FPW-P3 failed to start automatically to maintain system pressure, conducted on April 26, 2004

- WO 00043616, Recirculation pump Trip B relay test following relay replacement, conducted on April 29, 2004

- WO 00036179, Calibration following the replacement of the RCIC pump discharge flow Transmitter E51-FTN003, conducted on May 3, 2004

- WO 00045114, Troubleshoot/repair ground on hydraulic recirculation system flow control Skid B, conducted on May 21, 2004

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors verified, by witnessing and reviewing test data, that 11 risk-significant system and component surveillance tests met Technical Specification, USAR, and procedure requirements. The inspectors ensured that the surveillance tests demonstrated that the systems were capable of performing their intended safety functions and provided operational readiness. The inspectors evaluated the surveillance tests for preconditioning; clear acceptance criteria; and range, accuracy, and current calibration of test equipment and also verified that equipment was properly restored at the completion of the testing. Specifically the inspectors observed and reviewed the following surveillance tests:

- STP-209-4210, “RSS/RCIC System Flow Channel Calibration,” Revision 9, performed on June 5, 2001

- STP-209-4210, “RSS/RCIC System Flow Channel Calibration,” Revision 10, performed on September 27, 2001

- STP-209-4210, “RSS/RCIC System Flow Channel Calibration,” Revision 10, performed on January 18, 2003

- COP-0430, “Determination of SLS Boron Concentration - Sodium Pentaborate,” Revision 14, performed on March, 30, 2004
- STP-251-3203, "Motor Driven Fire Pump Monthly Operability Test," Revision 12, performed on April 24, 2004
- STP-508-4813, “RPS Channel B Response Time Test,” Revision 2, performed on April 29, 2004
- STP-508-4523, “RPS/EOC-RPT-Turbine Control Valve Fast Closure, Valve Trip System Oil Pressure-Low, Channel Functional Test and Logic System Functional Test (C71-N005A, B, C, and D),” Revision 8A, performed on April 29, 2004
- STP-209-4210, “RSS/RCIC System Flow Channel Calibration,” Revision 11, performed on May 3, 2004
- STP-309-0201, “Division I Diesel Generator Operability Test,” Revision 24, performed on May 12, 2004
- STP-309-0203, “Division III Diesel Generator Operability Test, Revision 26, performed on June 18, 2004
- STP-309-2001, “Division II Diesel Generator Operability Test,” Revision 24, performed on June 27, 2004

b. Findings

Introduction. The inspectors identified a Green NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the licensee’s performance of unacceptable preconditioning of Technical Specification EDG surveillance tests. The inspectors found three activities that the licensee performed on May 12, 2004, as “prestart checks” prior to the Division I EDG monthly operability test that were unacceptable preconditioning. The inspectors also found the same unacceptable preconditioning activities during the June 23, 2004, Division II EDG monthly operability test and similar unacceptable preconditioning activities during the June 18, 2004, Division III EDG monthly operability test.

Description. During a review of STP-309-0201, “Division I Diesel Generator Operability Test,” Revision 24, the inspectors identified three activities that were unacceptable preconditioning. The activities were: (1) running the DC fuel oil booster pump prior to starting the EDG, (2) draining the rear air start distributor prior to starting the EDG, and (3) air rolling the diesel engine (preconditioning of the air start solenoids) prior to starting the EDG.

The inspectors reviewed NRC Inspection Manual, Part 9900, “Maintenance - Preconditioning of Structures, Systems, and Components before Determining Operability,” dated September 28, 1998, and found that these three activities met the criteria to be considered unacceptable preconditioning. The first criteria met was whether the practice bypasses or masks the as-found condition and makes it difficult to determine whether the EDG would perform its intended function during a loss of off-site power. The second criteria met was that the licensee stated that these activities were included in their surveillance test procedure (STP) for schedule convenience to assure these tasks would not be overlooked.

The inspectors interviewed the licensee staff, including the system engineer. The licensee had addressed each of these practices in OE\IN\9716.SA1 dated June 9, 1997, which was their evaluation of NRC Information Notice (IN) 97-16, “Preconditioning of Plant Structures, Systems, and Components Before ASME Code Inservice Testing or Technical Specification Surveillance Testing.” The licensee’s records and the inspector findings for each of these three practices were as follows:

1. The licensee recorded in OE\IN\9716.SA1 that, if the fuel lines were drained and the DC fuel oil booster pump was not manually started, the EDG start would still be assured as the fuel oil pumps would fill the lines within a few seconds. The licensee’s conclusion was that this activity could still be construed as preconditioning and should be considered for deletion. The inspectors found that this activity had not been deleted from the three EDG STPs. This practice was considered preconditioning because it pressurized the fuel line prior to starting the engine and there was no acceptance criteria to assure that the pressure in the fuel line had returned to its normal standby condition prior to starting the engine.

2. The licensee recorded in OE\IN\9716.SA1, that if the rear air start distributor was not periodically drained, oil will, over many starts and air rolls, accumulate in the lower pilot tubes which could lead to a slow or failed start. In 1986, a start failure occurred after two years of not draining oil accumulation. The licensee’s conclusion was that the air distributor oil draining activity does not constitute preconditioning or grooming. The inspectors found that because the start of the engine could be slowed or the engine could fail to start and because there was no threat of damaging the engine if this practice was discontinued and there are no acceptance criteria to establish how much oil may be drained without affecting operability, that this practice constitutes unacceptable preconditioning.

3. The licensee recorded in OE\IN\9716.SA1, that they would consider a failure of the diesel engine to air roll as a failure to start and would evaluate the failure per the criteria in Regulatory Guide 1.08, Revision 1, paragraph C22.e.(8). An example of such a failure was documented by CR-RBS-1995-1147. The inspectors found that the issue raised by IN 97-16 was not preconditioning of the diesel engine, but preconditioning the air start solenoids by air rolling the EDG If the air start

solenoids get clogged from oil and dust, then the engine will roll at a slower RPM or fail to start. IN 97-16 gives examples of such a failure. These possible outcomes were not addressed in the licensee's procedure. This makes it difficult to determine whether the EDG would have adequately performed its safety function.

The inspectors identified cross cutting aspects related to problem identification and resolution. In their evaluation of IN 97-16, the licensee identified and evaluated some activities that precondition the emergency diesel generators during their prestart checks for surveillance testing, but failed to take appropriate actions to correct the procedures. In at least one case, preconditioning air start solenoids during prestart air rolls of the diesel engine was not evaluated and as a result no corrective actions were recommended.

Analysis. The inspectors determined that unacceptable preconditioning of Technical Specification diesel generator surveillance testing was a performance deficiency. This finding does not have an immediate safety concern, did not have any actual safety consequences, and did not impact the NRC's ability to perform its regulatory function, and there were no willful aspects of this violation. There are no examples of minor violations in Manual Chapter 0612, Appendix E, that are similar to unacceptable preconditioning of safety related surveillance tests.

The finding was more than minor because it was associated with the mitigating systems cornerstone attribute for procedure quality. It affected the mitigating system cornerstone objective to maintain availability and reliability of systems that respond to events to prevent undesirable consequences. The inspectors reviewed the finding using Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." Based on the results of the Phase 1 screening of the finding, the inspectors determined that the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, was not an actual loss of safety function for a system or train, and was not risk significant due to a seismic, fire, flooding, or sever weather initiating event.

Enforcement. The inspectors determined that unacceptable preconditioning of Technical Specification diesel generator surveillance testing was a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," which states, in part, that "Activities affecting quality shall be prescribed by documented . . . procedures . . . of a type appropriate to the circumstances . . ." Contrary to this, the licensee included three prestart activities in STPs that were unacceptable preconditioning and therefore not appropriate to the circumstance. Because this violation was of very low safety significance and was entered into the licensee's corrective action program as CR-RBS-2004-1839 and -1858, it is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy, NUREG 1600 (NCV 05000458/2004003-03).

1R23 Temporary Plant Modifications (71111.23)

c. Inspection Scope

During the week of May 30, 2004, the inspectors reviewed the current temporary plant modifications made to the main turbine control system. 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 that the actual impact of the temporary modification on the affected system had been adequately verified. The inspectors reviewed the following documents as part of this inspection:

- Temporary Alteration 2003-0013, lift lead to disable "Fan Out" indication for + 22 Vdc house power supply on Panel H13-P821, installed June 12, 2003

- ER-RBS-2004-0022-000, maintain electrohydraulic control power supply Panel H13-P821 door open until Refueling Outage 12, dated February 2, 2004

d. Findings

No findings of significance were identified.

1EP1 Exercise Evaluation (71114.01)

a. Inspection Scope

The inspectors reviewed the objectives and scenario for the 2004 Biennial Emergency Preparedness Exercise to determine if the exercise would acceptably test major elements of the emergency plan. The scenario included loss of the engineered safety features primary injection capability and a subsequent loss of cooling water affecting the main turbine, which required a reactor trip. The reactor failed to trip by normal manual methods, but was tripped using alternate methods. A steam line break occurred and could not be isolated due to valve failures. Subsequent loss of other injection sources caused a loss of reactor coolant, uncovered core, and significant fuel damage. The licensee activated all of their emergency facilities to demonstrate the capability to implement the emergency plan. The NRC also participated in this exercise from the Region IV office and with a site team that responded to the facility Emergency Operations Facility.

The inspectors evaluated exercise performance by focusing on the risk-significant activities of classification, notification, protective action recommendations, and

assessment of offsite dose consequences in the simulator control room and three emergency response facilities: Technical Support Center, Operations Support Center, and Emergency Operations Facility.

The inspectors also assessed personnel recognition of abnormal plant conditions, the transfer of emergency responsibilities between facilities, communications, protection of emergency workers, emergency repair capabilities, and the overall implementation of the emergency plan to verify compliance with the requirements of 10 CFR Part 50.47(b), 10 CFR Part 50.54(q), and 10 CFR Part 50, Appendix E.

The inspectors attended the postexercise critiques in each of the above emergency response facilities to evaluate the initial licensee self-assessment of exercise performance. The inspectors also attended the formal presentation of critique items to plant management. The inspectors completed one sample during the inspection.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspectors reviewed Revision 26 to the River Bend Station Emergency Plan to determine if the revision decreased the effectiveness of the emergency plan. This revision removed requirements related to the postaccident sampling system, updated the evacuation time estimates, and made other administrative and editorial corrections.

The licensee evaluation of the revision was reviewed against the criteria of Procedure EP-305, "10 CFR Part 50.54(q) Review Program," Revision 1. The revision was compared to the previous revision, to the criteria of NUREG-0654, and to the requirements of 10 CFR 50.47(b) and 50.54(q) to determine if the revision decreased the effectiveness of the emergency plan. The inspectors completed one sample during the inspection.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

.1 Mitigating Systems Cornerstone

a. Inspection Scope

The inspectors sampled licensee submittals for the two PI listed below for the period from April 1, 2003, through March 31, 2004. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Indicator Guideline," Revision 2, were used to verify the basis in reporting for each data element.

- Safety system unavailability - emergency AC power system
- Safety system unavailability - heat removal system (RCIC)

The inspectors sampled portions of the operator logs, monthly reports, and PI technique sheets to determine whether the licensee accurately identified the required data for submittal to the NRC. The inspectors reviewed the information contained in licensee event reports submitted during the period and sampled the maintenance rule database, operator logs, and the limiting conditions for operation log to verify the accuracy of the data reported. The inspectors also reviewed the licensee's basis for crediting system availability and the calculation of the average system unavailability for the previous 12 quarters.

b. Findings

No findings of significance were identified.

.2 Emergency Preparedness Cornerstone:

The inspectors sampled submittals for the three PIs listed below for the period October 1, 2002, through March 31, 2004. The definitions and guidance of NEI 99-02 were used to verify the licensee's basis for reporting each data element in order to verify the accuracy of PI data reported during the assessment period.

- Drill and Exercise Performance
- Emergency Response Organization Participation
- Alert and Notification System Reliability

The inspectors reviewed a 100 percent sample of drill and exercise scenarios, licensed operator simulator training sessions, notification forms, and attendance and critique records associated with training sessions, drills, and exercises conducted during the

verification period. The inspectors reviewed the qualification, training, and drill participation records for a sample of 10 emergency responders. The inspectors reviewed alert and notification system maintenance records and procedures and a 100 percent sample of siren test results. The inspectors also interviewed licensee personnel that were responsible for collecting and evaluating the PI data. The inspectors completed three samples during this inspection.

b. Findings

No findings of significance were identified.

The inspectors identified one instance of an evaluation of a drill and exercise PI for the 2004 Biennial Exercise that did not follow the specific guidance of NEI 99-02. The declaration time noted on the short notification message form was 2 minutes later than the time the alert was announced in the simulator control room and approximately 4 minutes after the emergency director had decided that the alert emergency action level had been met. The licensee determined the notification opportunity to be successful because the notification was completed within 15 minutes of the time that the emergency director had decided that the alert emergency action level was met. The inspectors determined that this evaluation was an appropriate critique of the action of the emergency director with respect to a potential performance deficiency. However, the criteria for accuracy for notifications given in NEI 99-02, specifically, an accurate event declaration time, were not met. The licensee wrote CR-RBS-2004-1669 to enter the incorrect PI evaluation into their corrective action process. The licensee also stated that they would submit a frequently asked question to clarify the guidance for notification accuracy in NEI 99-02. Specifically, the licensee considers that small errors in the recorded declaration time, such as 1 or 2 minutes, should not be evaluated as a missed opportunity if the declaration was actually completed within 15 minutes of the availability of indications that an emergency condition existed and if the notification was completed within 15 minutes of the actual declaration time. This relaxation is given in the clarifying notes for minor inaccuracies in wind speed and direction, but is not given for notification accuracy with respect to declaration time.

4OA2 Identification and Resolution of Problems (71152)

1. Annual Emergency Preparedness Sample Review

a. Inspection Scope

The inspectors reviewed condition reports of performance and emergency facility problems documented in calendar years 2003 and 2004 in the licensee's corrective action program. The inspectors focused the review on problems observed during licensee drills and exercises and associated with emergency facility and emergency planning support equipment. The review was performed to identify past problems and

evaluate the effectiveness of corrective actions. The inspectors evaluated the action requests against the requirements of Procedure LI-102, "Corrective Action Process," Revision 4.

b. Findings and Observations

No findings of significance were identified.

2. Semiannual Review

a. Inspection Scope

Routinely the inspectors review the licensee's condition reports, system health reports, control room deficiency reports, the shift manager's tracking list, top ten issues lists, department PIs, department self-assessments, corporate program assessments, and quarterly trend and analysis reports to assess the licensee problem identification and resolution programs. On June 14, 2004, the inspectors conducted a semiannual review of the corrective action program to identify trends that might indicate the existence of more significant or repetitive safety issues.

b. Findings

No findings of significance were identified. The inspectors found that the licensee's process to identify, prioritize, evaluate, and correct problems was generally effective, thresholds for identifying issues were appropriately low, and corrective actions were adequate to address conditions adverse to quality. The inspectors found that management was aware of performance trends and was generally self-critical and proactive in dealing with human performance errors and problem identification and resolution aspects of NRC-identified and self-revealing findings.

3. Periodic review of the licensee's ability to identify and resolve problems: unexpected cycling of RCIC minimum flow valve during surveillance testing of the HPCS system

a. Inspection Scope

The inspectors selected CR-RBS-2002-0989, unexpected cycling of RCIC minimum flow valve during surveillance testing of the HPCS system, written on July 18, 2002, and closed on June 16, 2003, to evaluate the licensee's effectiveness in identifying and evaluating all aspects of the issue and the prioritization and effectiveness of corrective actions taken. The inspectors reviewed the following documents as part of this inspection:

- STP-203-6305, HPCS Quarterly Pump and Valve Operability Test, Revision 12, procedure action request dated October 10, 2002

- CR-RBS-1993-0022, during performance of STP-2003-6305, RCIC system high and low flow Rosemont transmitters went into a gross fail condition

- RBS-ER-1998-0580, revise documentation to reflect effective reduction of condensate storage tank reserve volume due to flow induced instrument error

- STP-203-6305, HPCS Quarterly Pump and Valve Operability Test, Revision 13, performed May 15, 2004

b. Findings and Observations

No findings of significance were identified. The inspectors determined that the licensee effectively evaluated the apparent cause of the problem and took prompt corrective actions to prevent recurrence of the problem during subsequent performances of the surveillance procedure.

4. Cross-Reference to Problem Identification and Resolution Findings Documented Elsewhere

Section 1R15 describes a failure of the licensee to identify a condition adverse to quality. On at least two occasions, operations and engineering personnel failed to recognize that tape was covering heat dissipation louvers on top of the relay control cabinets of the Division I auxiliary building engineered safety features 480 Vac switchgear.

Section 1R22 describes an issue where the licensee routinely performed unacceptable preconditioning of the EDGs prior to required surveillance testing. The licensee identified and evaluated some of these activities in their review of IN 97-16, but they failed to take appropriate actions to correct the problem. In at least one case, preconditioning air start solenoids during prestart air rolls of the diesel engine were not evaluated and, as a result, no corrective actions were recommended.

4OA4 Crosscutting Aspects of Findings

Cross-Reference to Human Performance Error Findings Documented Elsewhere

Section 1R15 describes a human performance error. Engineers performing a past operability assessment for reportability of the condition described in CR-RBS-2004-0512, evaluated the heat loads internal to Division I 480 Vac engineered safety features Switchgear EJS-SWGR1A instead of Division I 4160 Vac engineered safety features ENS-SWGR1A. As a result, the evaluation assumed the heat load from breakers for the control room ventilation system heater and a safety-related motor

control center rather than the heat load of the Division I EDG and the low pressure core spray pump breakers.

4OA5 Other Activities

Temporary Instruction (TI) 2515/156, Offsite Power System Operational Readiness

a. Inspection Scope

The inspectors collected data from licensee maintenance records, event reports, and corrective action documents and procedures and through interviews of station engineering, maintenance, and operations staff, as required by TI 2515/156. The data was gathered to assess the operational readiness of the offsite power systems in accordance with NRC requirements such as Appendix A to 10 CFR Part 50; General Design Criterion 17; Criterion XVI of Appendix B to 10 CFR Part 50, Plant Technical Specifications for offsite power systems; 10 CFR 50.63; 10 CFR 50.65 (a)(4); and licensee procedures. Documents reviewed for this TI are listed in attachment.

b. Findings

No findings of significance were identified. Based on the inspection, no immediate operability issues were identified. In accordance with TI 2515/156 reporting requirements, the inspectors provided the required data to the headquarters staff for further analysis.

4OA6 Management Meetings

Exit Meetings

On June 10, 2004, the inspectors presented the emergency preparedness inspection results to Mr. T. Trepanier, General Manager, Plant Operations, and other members of licensee management. The licensee acknowledged the findings presented.

On June 18, 2004, the inspectors presented the maintenance rule implementation inspection results to Mr. P. Hinnenkamp, Vice President, Operations, River Bend Station, and other members of licensee management. The licensee acknowledged the findings presented.

On June 30, 2004, the inspectors presented the integrated inspection results to Mr. T. Trepanier, General Manager, Plant Operations, 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.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

M. Boyle, Superintendent, Radiation Protection
D. Burnett, Superintendent, Chemistry
S. Belcher, Manager, Operations
C. Forpahl, Manager, Corrective Action and Assessment
J. Fowler, Manager, Quality Programs
T. Gates, Manager, System Engineering
H. Goodman, Manager, Nuclear Engineering
R. Goodwin, Manager, Training and Development
G. Hendl, Maintenance Rule Coordinator
P. Hinnenkamp, Vice President, Operations
A. James, Superintendent, Plant Security
R. King, Director, Nuclear Safety Assurance
J. Leavines, Manager, Emergency Planning
D. Lorfing, Acting Manager, Licensing
J. Malara, Director, Engineering
W. Mashburn, Manager, Programs and Components
J. McGhee, Manager, Plant Maintenance
T. Trepanier, General Manager, Plant Operations

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Opened and Closed

05000458/2004003-01	NCV	Failure to identify a functional failure
05000458/2004003-02	NCV	Failure to maintain design control condition of engineered safety features electrical switchgear
05000458/2004003-03	NCV	Unacceptable preconditioning of Technical Specification diesel generator surveillance testing

Closed

None

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 1R12: Maintenance Rule Implementation

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

River Bend maintenance rule function list

River Bend maintenance rule performance criteria list

River Bend Condition Reports

CR-RBS-2001-0518	CR-RBS-2003-0049	CR-RBS-2003-0415
CR-RBS-2002-1624	CR-RBS-2003-1247	CR-RBS-2003-2082
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LIST OF ACRONYMS

CFR	Code of Federal Regulations
CR-RBS	River Bend Station condition report
ECCS	emergency core cooling systems
EDG-	engineering department guide
EDG	emergency diesel generator
GOP-	general operating procedure
HPCS	high pressure core spray
IN	NRC Information Notice
NCV	noncited violation
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
PI	performance indicator
RBNP-	River Bend nuclear procedure
RCIC	reactor core isolation cooling
SSC	structures, systems or components
STP-	surveillance test procedure
SSW	standby service water
TI	temporary instruction
USAR	Updated Safety Analysis Report
WO	work order