



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064**

January 29, 2001

Randal K. Edington, Vice President - Operations  
River Bend Station  
Entergy Operations, Inc.  
P.O. Box 220  
St. Francisville, Louisiana 70775

SUBJECT: NRC INSPECTION REPORT NO. 50-458/00-18

Dear Mr. Edington:

On December 18, 2000, the NRC completed a team inspection at the River Bend Station. The preliminary results of the onsite inspection were discussed on December 1, 2000, with you and members of your staff. The enclosed report documents the inspection findings, which were discussed on December 18, 2000, with Mr. Dwight Mims during a telephonic exit meeting conducted to inform your staff of the results of the in-office review following the team's departure from the site.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, compliance with the Commission's rules and regulations, and the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

On the basis of the sample selected for review, there were no findings of significance identified during this inspection. The inspectors concluded that problems were properly identified, evaluated, and resolved within the problem identification and resolution programs. However, during the inspection, the inspectors observed examples of minor problems that included low initiative on the part of the chartered emergency diesel generator team and a minor human performance error that had a significant operability assessment impact.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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 Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

John L. Pellet, Chief  
Operations Branch  
Division of Reactor Safety

Entergy Operations, Inc.

-2-

Docket No.: 50-458

License No.: NPF-47

Enclosures:

NRC Inspection Report No.

50-458/00-18

w/Attachment 1 - Supplemental Information

Attachment 2 - NRC's Revised Reactor Oversight Process

cc w/enclosures:

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Ronald Wascom, Administrator  
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Electronic distribution from ADAMS by RIV:  
 Regional Administrator **(EWM)**  
 DRP Director **(KEB)**  
 DRS Director **(ATH)**  
 Senior Resident Inspector **(TWP)**  
 Branch Chief, DRP/B **(WDJ)**  
 Senior Project Engineer, DRP/B **(RAK1)**  
 Branch Chief, DRP/TSS **(PHH)**  
 RITS Coordinator **(NBH)**  
 Scott Morris **(SAM1)**  
 NRR Event Tracking System **(IPAS)**  
 RBS Site Secretary **(PJS)**

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SOE:OB	OE:OB	PE:PBB	RI:RBB	RI:RII
SLMcCrary/lmb*	GEWerner*	RVAzua*	SMSchneider*	EMDiPaolo*
/RA/	/RA/ E	/RA/ E	/RA/ E	/RA/ E
01/24/01	01/22/01	01/23/01	01/23/01	01/22/01
C:OB	C:PBB	C:OB		
JLPellet	GMGood	GFSanborn	WDJohnson	JLPellet
/RA/	/RA/	/RA/	/RA/	/RA/
01/26/01	01/26 & 01/29/01	01/29/01	01/26/01	01/29/01

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**ENCLOSURE**

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket No.: 50-458  
License No.: NPF-47  
Report No.: 50-458/00-18  
Licensee: Entergy Operations, Inc.  
Facility: River Bend Station  
Location: 5485 U.S. Highway 61  
St. Francisville, Louisiana  
Dates: November 27 through December 18, 2000  
Inspectors: S. L. McCrory, Senior Operations Engineer, Operations Branch  
G. E. Werner, Operations Engineer, Operations Branch  
R. V. Azua, Project Engineer, Projects Branch B  
S. M. Schneider, Resident Inspector, Projects Branch B  
E. M. DiPaolo, Resident Inspector, Browns Ferry, Region II  
Approved By: J. L. Pellet, Chief  
Operations Branch  
Division of Reactor Safety

## SUMMARY OF FINDINGS

### River Bend Station NRC Inspection Report No. 50-458/00-18

IR 05000458; on 11/27-12/18/2000; Entergy Operations, Inc.; River Bend Station. Identification and Resolution of Problems Report; Identification and Resolution of Problems; Mitigating Systems.

The inspection was conducted by a regional-based team inspection, which consisted of two resident inspectors, two regional operations engineers and one regional project engineer. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609.

#### Cornerstone: Identification and Resolution of Problems

- The licensee adequately identified problems and put them into the corrective action program. The licensee adequately used risk in prioritizing the extent to which individual problems would be evaluated and in establishing schedules for implementation of corrective actions. The licensee implemented corrective actions in a timely manner. Workers at the site expressed willingness to input safety issues into the problem identification and resolution program. However, the licensee's emergency diesel generator team, established to increase emphasis on emergency diesel generator reliability, was not involved in the recent operability assessment and subsequent root cause evaluations of an apparent concurrent inoperability of the Division I and II emergency diesel generators. This performance was not consistent with the expectation conveyed in a recent licensee response to agency concerns regarding the emergency diesel generator reliability at River Bend Station (Entergy Operations, Inc., Letter G9.5, G15.4.1 dated June 12, 2000). Further, the licensee's failure to make an early identification of the extent of condition was partly the result of a human performance error that reported the wrong piece of equipment as needing repair. The recent NRC Inspection Report 50-458/00-14 identified human performance errors as a cross-cutting finding at the site.

## Report Details

### 4. OTHER ACTIVITIES (OA)

#### **4OA2** Problem Identification and Resolution

##### a. Effectiveness of Problem Identification

##### (1) Inspection Scope

The inspectors reviewed items selected across the 7 cornerstones of safety to determine if problems were being properly identified, characterized, and entered into the corrective action program for evaluation and resolution. Specifically, the inspectors selected 114 condition reports that had been opened or closed or that related to issues of regulatory noncompliance since January 1, 2000. The inspectors also reviewed 12 licensee audits, 3 self-assessments and 1 third-party assessment of the corrective action program. The inspectors compared the audit and assessment results with self-revealing and NRC-identified issues to determine the effectiveness of the audits and self-assessments.

The inspectors evaluated the condition reports to determine the licensee's threshold for identifying problems and entering them into the corrective action program. Also, the licensee's efforts in establishing the scope of problems were evaluated by reviewing pertinent work requests, engineering modification packages, self-assessment results, action plans, and results from surveillance tests and preventive maintenance tasks. The condition reports and other documents listed in Attachment 1 were used to facilitate the review.

##### (2) Issues and Findings

The inspectors determined that the licensee was usually effective at identifying problems and entering them into the corrective action system. The licensee self-identified all but a few of the deficiencies also observed by external organizations (including the NRC) during the review period. The licensee conducted audits and assessments that were of good depth and identified issues similar to those that were self-revealing or raised during previous NRC inspections. Also, during this inspection, there were no instances identified where conditions adverse to quality were being handled outside the corrective action program. However, the inspectors reviewed an issue regarding human performance that the licensee had not fully recognized.

NRC Inspection Report 50-458/00-14 identified numerous examples of previous human performance problems. The report identified an adverse "cross-cutting" performance trend of a pattern of adverse human performance. The licensee had previously recognized an adverse human performance trend with regard to controlled access areas; however, it had not identified a broader adverse human performance trend.

The inspectors identified that the licensee had begun taking corrective actions to address numerous human performance errors. The licensee had begun administering “mock-up” training (human performance trainer), focusing on human performance traps, to all site personnel. The training drew on the experience from actual human performance errors at the site. The inspectors observed portions of the training and determined that it should be an effective tool to reduce some human performance errors.

In addition to the training, the licensee routinely analyzed human performance errors for adverse trends. The licensee observed 34 human performance errors during the third quarter of 2000, which was the lowest quarterly total during the past 2 years. However, this corresponded to a slight increase in the rate of human performance errors per 10,000 work-hours, to which the licensee applied additional management attention.

The inspectors identified an additional example of a human performance error with a notable impact that the licensee had not fully recognized. An equipment operator identified an indication deficiency on the Division I emergency diesel generator (EDG) and prepared a maintenance action item to correct the deficiency. However, the operator incorrectly entered the equipment designation for the Division II EDG on the maintenance action item. This error substantially contributed to the delay in the discovery of the extent of condition and exacerbated the operability determination. (See Section 4OA2.c.(2)(i) for a additional information on the event.) At the time of the inspection, the licensee was aware of the human performance error, but had not identified it as significant to the event sequence.

The inspectors determined that the additional example did not change the previous finding and concluded that there were no findings with regard to this area of licensee performance in this inspection.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope:

The inspectors reviewed approximately 114 condition reports, and supporting documentation, including root cause evaluations, to assess whether the licensee's evaluation of the problems identified and considered the full extent of conditions, generic implications, common causes, and previous occurrences. In addition, the inspectors reviewed the licensee's evaluation of selected industry experience information, including operating event reports and NRC and vendor generic notices, to assess if issues applicable to River Bend Station were appropriately addressed. A listing of the specific documents reviewed during the inspection is attached to the report.

(2) Issues and Findings:

The inspectors determined that the licensee adequately prioritized and evaluated issues. The licensee performed thorough root-cause evaluations. The inspectors noted that the licensee's prioritization process treated a broader range of conditions as “significant” than would have resulted from a determination of “significant” solely within the context of



10 CFR Part 50, Appendix B, Criterion XVI. The inspectors observed no adverse impact on the licensee's treatment of conditions that corresponded to significant conditions adverse to quality, as defined in the regulations. The inspectors observed two issues of minor significance related to prioritization and evaluation of issues.

Within the radiation protection human performance area, the inspectors identified that evaluation of Condition Reports 1999-1890, 2000-0748, 2000-0762 did not have any radiation protection review or input into the resolution. Condition Reports 2000-0748 and 2000-0762 showed that radiation protection personnel and/or equipment were important to ensure that maintenance and operations personnel wore the correct monitoring equipment prior to entering high radiation areas or the correct protective clothing for contaminated areas. However, the licensee limited the scope and responsibility of the condition reports to the maintenance and operations departments without involvement of radiation protection personnel. The licensee recognized and responded to a broader human performance issue in this area in Condition Report 2000-0836. The licensee's corrective actions for Condition Report 2000-0836 provided for radiation protection personnel training, procedures, and equipment upgrades that resulted in fewer human performance errors of this nature. The inspectors' review of these previously dispositioned issues identified no additional compliance issues.

The inspectors observed an instance in which the licensee's incorporation of industry operating experience information was protracted. NRC Information Notice 2000-01, issued February 11, 2000, identified a potentially generic concern that reactor core isolation cooling (RCIC) system performance could be affected by resetting the turbine trip and throttle valve with the steam admission valve open and a flow demand present. Although, the River Bend Station's current method of restarting the RCIC system was adequate, system engineering's review of the information notice, as documented in Evaluation 00-2060, identified a number of procedural enhancements to the RCIC system operation to minimize the possibility of a turbine overspeed trip on restart following a turbine trip. System engineering completed its review of the information notice in June 2000, however, the operations department had not completed its review of the procedural changes at the time of the inspection due to miscommunications between operating experience personnel and the operations reviewer. The inspectors concluded that this example was an isolated case and not representative of the licensee's performance in this area.

c. Effectiveness of Corrective Actions

(1) Inspection Scope:

The inspectors reviewed condition reports and self-assessments to verify that corrective actions relating to the issues were identified and implemented in a timely manner commensurate with safety, including corrective actions to address common cause or generic concerns. The inspectors also conducted walkdowns and interviewed plant personnel to independently verify and assess the effectiveness of corrective actions implemented by the licensee. The inspectors included the following specific focus areas within the scope of this review:

- Inadvertent engineered safeguard feature actuations/isolations
- EDG reliability
- Radiation worker and radiation protection technician conscientiousness
- Human performance in procedural adherence, use, or skill-of-the-craft

A listing of specific documents reviewed during the inspection is included as Attachment 1 to this report.

(2) Issues and Findings:

(i) Emergency Diesel Generator Team Activities

The inspectors determined that although performance data demonstrated that EDG reliability had improved, the licensee's performance to ensure high levels of EDG reliability did not meet the expectations communicated to the NRC. The licensee established these expectations through various interactions and communications with the NRC between December 9, 1999, and June 15, 2000. As part of the licensee's corrective actions, the licensee chartered a multi-disciplined EDG team to provide an additional layer of oversight dedicated to the review and assessment of EDG performance and trends.

The inspectors determined that the EDG team had become largely inactive and had not met most of its chartered responsibilities since June 19, 2000. Several operators and maintenance personnel stated that they were unaware of the EDG team's existence. The EDG team leader stated that he did not know how the existence or purpose of the team was communicated to affected organizations, if at all, or whether an increased sensitivity to EDG issues had been communicated to the organizations involved in identifying and reporting EDG problems (e.g., maintenance or operations departments).

The inspectors noted particularly the EDG team's lack of involvement in the licensee's investigations and evaluations of the events and conditions reported in Licensee Event Report 2000-014-0. This licensee event report reported that the Division I and II EDGs were concurrently inoperable for a period of about 9 hours on August 30, 2000. The licensee event report described a complex degraded condition in the Division I EDG that had not been previously encountered and which raised operability concerns during a seismic event. The licensee conducted extensive seismic testing that eventually demonstrated that the Division I EDG would have remained operable during a credible seismic event. When interviewed, the EDG team leader stated that the team had not been involved in the event investigation and evaluation and would wait until the root cause evaluation was issued and then review it.

The inspectors discussed their observations with a licensee representative who stated that licensee management had recognized the lapse of involvement by the EDG team. Further, he indicated that licensee management had conveyed its concern to the team leader that the team was not meeting management expectations. The lack of activity of the EDG team reduced the agency's confidence in the licensee's efforts to maintain high EDG reliability. However, the inspectors determined that this issue did not have an actual or credible impact on safety.

(ii) Operator Aids

The inspectors reviewed the licensee's corrective actions for Non-Cited Violation 50-458/9913-01 for failure to follow Procedure OSP-0001, "Control of Operator Aids," as documented in Condition Report 1999-1646. The Non-Cited Violation identified several permanently attached instructional and warning labels that were not controlled, as required by procedure. The licensee's corrective action included performing plant walkdowns to identify operator aids that did not meet the requirements of Procedure OSP-0001. The licensee identified approximately 165 nonconforming operator aids and completed the walkdowns on May 2, 2000. Subsequent to the licensee's walkdown, the resident inspectors discovered additional uncontrolled operator aids in the control room that existed prior to May 2, 2000, and challenged the licensee's efforts to identify the extent of the condition. The licensee continued to look for uncontrolled operator aids, but identified no additional ones.

Although the licensee continued to resolve the operator aids identified during the walkdown, the inspectors found that the licensee's corrective actions did not identify a final corrective action or completion date for resolving all of the identified walkdown operator aids. This was also identified by the licensee during a licensee audit of corrective actions related to Non-Cited Violations documented in Condition Report 2000-1459. Not identifying final corrective actions for the operator aids did not meet management expectations or the guidance of Procedure RBNP-030, "Initiation and Processing of Condition Reports," Revision 14 (the procedure in effect when Condition Report 1999-1646 was initiated). The procedure indicated that the final disposition of the condition report should identify the final corrective action for the reported condition and provide a specified time frame for completion of the final corrective action; however, the procedure did not make this action a firm requirement. At the end of the inspection, the operations manager acknowledged the need to identify the final corrective action and completion date in Condition Report 2000-1646.

The inspectors determined that the licensee's corrective action effectiveness with respect to the EDG team and operator aids fell short of the licensee's expectations, but that these were exceptions to the licensee's overall performance in implementing effective corrective actions. The team determined that there were no findings in this inspection area.

d. Assessment of Safety Conscious Work Environment

(1) Inspection Scope:

The inspectors interviewed approximately 35 individuals from the licensee's staff, which represented a cross-section of functional organizations and supervisory and non-supervisory personnel. During these interviews, the inspectors solicited feedback on the licensee's employees' willingness to raise safety concerns to the licensee or the NRC.

The NRC had previously identified a concern toward employees raising issues to the NRC within the licensee's security organization (ADAMS Accession ML003765534). As a followup to that concern, the inspectors conducted interviews with three security guards from the licensee's security staff to assess the current climate for raising safety concerns or other issues within the security organization.

(2) Issues and Findings:

The inspectors found no evidence of a continuing environment concern within the licensee's security organization. All of the security officers interviewed stated unreserved willingness to raise issues within the licensee's organization or to the NRC. The officers praised the current environment of openness and concern for employee identified issues.

The other licensee's staff interviewed by the inspectors expressed attitudes and perceptions that re-enforced those communicated by the security staff. The inspectors determined that there was no evidence of conditions to impede the candid and open expression of safety concerns among the employees at the River Bend Station.

**40A3** Event Follow-up

(Closed) Licensee Event Report 50-458/00-12: Manual Reactor Scram Initiated in Response to Decreasing Main Condenser Vacuum. This event was discussed in NRC Inspection Report 50-458/00-13, which characterized the issue as a Non-Cited Violation of Criterion V of Appendix B to 10 CFR Part 50 was identified for failure to provide off-gas procedures with instructions appropriate to the circumstances. No new issues were revealed by the licensee event report and review.

**40A6** Meetings, including Exit

The inspectors debriefed Mr. Randal K. Edington, Vice President, Operations, and members of the licensee's staff on the preliminary inspection findings at the conclusion of the onsite inspection on December 1, 2000. The licensee's management acknowledged the findings presented.

A telephonic exit meeting was held on December 18, 2000, with Mr. Dwight Mims, General Manager, Plant Operations, and other licensee staff members, during which the lead inspector characterized the results of the in-office review following the inspectors's departure from the site.

The inspectors asked the licensee's management whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

Licensee

V. Bacanskas, Senior Lead Technical Specialist and Diesel Team Leader  
R. Beauchamp, Training  
B. Brown, Security Officer  
J. Campbell, Senior Nuclear Engineer  
G. Canfield, Maintenance Specialist  
D. Chase, Operations  
J. Clark, Assistant Operations Manager  
M. Davis, Nuclear Technical Specialist  
B. Fichtenkort, Senior Engineer  
T. Gates, Engineering  
D. Hartz, Operating Experience Coordinator  
D. Heath, Radiological Controls  
T. Hoffman, Supervisor - Engineering  
H. Holmes, ALARA Coordinator  
M. Hubbard, Mechanical Maintenance Supervisor  
J. Huddleston, Engineering  
R. King, Director - Nuclear Safety & Assurance  
J. Leavines, Manager - Licensing  
R. Lundholm, System Engineering Supervisor  
S. Martin, Engineering  
C. Maxson, Work Planning Supervisor  
J. McGhee, Manager - Operations  
C. Miller, Superintendent, Maintenance Composite Teams  
D. Mims, General Manager - Plant Operations  
T. Moffitt, Engineering  
J. Murphy, Mechanical Maintenance Coordinator  
R. Northrup, Operations  
A. Shahkarami, System Engineering Manager  
S. Smith, Security Officer  
W. Spell, Supervisor Health Physics Shift  
B. Stuart, Engineering  
W. Trudell, Manager - Corrective Actions & Assessments  
J. Vukovics, Reactor Engineer  
H. Webb, Security Officer  
D. Wells, Employee Concerns  
M. Wesberry, Electrical Maintenance Supervisor  
D. Williamson, Senior Licensing Specialist  
M. Wyatt, Manager - Planning & Scheduling / Outage

ITEM CLOSED

Closed

50-458/00-012      LER      Manual Reactor Scram Initiated in Response to Decreasing Main Condenser Vacuum (Section 4OA3).

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:

Condition Reports

1996-1581	1999-0911	2000-0187	2000-0869	2000-1463
1996-1952	1999-0912	2000-0200	2000-0904	2000-1486
1997-0025	1999-0932	2000-0321	2000-0911	2000-1506
1998-0465	1999-1076	2000-0564	2000-0941	2000-1547
1998-0591	1999-1175	2000-0606	2000-0969	2000-1553
1998-0794	1999-1201	2000-0613	2000-0974	2000-1565
1999-0156	1999-1204	2000-0617	2000-0981	2000-1577
1999-0224	1999-1455	2000-0626	2000-1010	2000-1584
1999-0329	1999-1514	2000-0642	2000-1086	2000-1618
1999-0366	1999-1522	2000-0650	2000-1134	2000-1657
1999-0381	1999-1646	2000-0688	2000-1199	2000-1661
1999-0407	1999-1890	2000-0704	2000-1248	2000-1663
1999-0551	1999-1966	2000-0736	2000-1272	2000-1721
1999-0630	1999-1983	2000-0748	2000-1327	2000-1754
1999-0710	1999-2010	2000-0750	2000-1336	2000-1764
1999-0721	1999-2018	2000-0762	2000-1350	2000-1788
1999-0832	2000-0030	2000-0783	2000-1405	2000-1793
1999-0842	2000-0059	2000-0785	2000-1459	2000-1813
1999-0843	2000-0104	2000-0836	2000-1139	2000-1842
1999-0894	2000-0133	2000-0855	2000-1459	2000-2060
1999-0903	2000-0154			

Procedures

ADM-022, "Conduct of Operations," Revision 28  
ADM-0023, "Conduct of Maintenance," Revision 15  
ADM 0037, "Equipment Identification and Labeling," Revision 6A  
ARP 2134, "MTS & FWP Trip Reactor Water High Level 8," Revision 12  
ARP 2332, "HPCS Injection Shutoff High Rx Water Level 8," Revision 12A  
CPN LI-102, "Corrective Action Process," Revision 0  
EDG-PR-001, "Maintenance Rule Program," Revision 4  
EDG-PE-002 "Guideline for Performing 10 CFR Part 21 Applicability Reviews," Revision 0

ENG-3-033, "Modification Design Control Plan," Revision 4  
ENG-3-037, "Engineering Request Process," Revision 5A  
LI-102, "Corrective Action Process," Revision 0  
LI-106, "NRC Correspondence," Revision 0  
OE-100, "Operating Experience Program," Revision 0  
OSP-0001, "Control of Operator Aids," Revision 10  
PEP-0219, "Reliability Monitoring Program," Revision 3  
PSP-4-500, "Training Program (Administration)," Revision 15  
RBNP-002, "Root Cause Determination Guidance"  
RBNP-010, "Configuration Management," Revision 9  
RBNP-030, "Initiation and Processing of Condition Reports," Revision 14  
RBNP-062, "River Bend Industry Events and Analysis Program," Revision 06  
RBNP-066, "Accuracy of Communication with the NRC," Revision 2  
RBNP-069, "Significant Event Evaluation," Revision 1  
RBNP-078, "Operability Determinations," Revision 5  
RSP-0200, "Radiation Work Permits," Revision 20  
RSP-0217, "Access Control," Revision 12  
SOP-0035, "Reactor Core Isolation Cooling System," Revision 20A

#### Assessments and Audits

Self Assessment - Inappropriate Corrective Action & Condition Report Closure, 7/26/00

Self Assessment - CR Disposition Corrective Actions, 9/12/00

Self Assessment - CA&A review process established during RF-9, 4/10/00

INPO Facilitated Assistance Visit - Corrective Action Program, 7/26/00

QA Surveillance Report 001001, "Follow Up on Condition Report Corrective Actions Associated With Refueling Outage Eight," 1/15/00

QA Surveillance Report 003003, "Follow-up on Corrective Actions Associated With the Diesel Fuel Oil Pump Coupling Issue," 3/27/00

QS-2000-RBS-004, "Surveillance for Corrective Action Six-Month Effectiveness Review," 8/29/00

QS-2000-RBS-011, "A Review of Condition Report Disposition Extension," 8/21/00

QA Audit 00-02-I-STP, "Surveillance Test Program Audit," 4/6/00

QA Audit 00-02-I-AA/FFD, "RBS Quality Assurance Audit of the Fitness for Duty and Access Authorization Programs," 6/12/00

QA Audit 00-02-I-PFPP, "RBS Quality Assurance Audit of the Plant Fire Protection Program," 5/4/00

QA Audit 00-02-I-SEC, "RBS QA Audit of Security," 3/22/00

QA Audit 00-04-I-MAINT, "Quality Assurance Audit of the Maintenance and M&TE Programs," 7/10/00

QA-6-2000-RBS-1, "RBS Quality Assurance Audit of the Radiological Environmental Monitoring Program, the Offsite Dose Calculation Manual, and the Environmental Protection Plan," 7/27/00

QA-7-2000-RBS-1, "Quality Assurance Audit of the Emergency Plan," 10/16/00

QA-13-2000-ECH-2, "Audit of River Bend Station Quality Audit Inspection and NDE Programs," 9/6/00

River Bend Station Radiation Protection Assessment/Audit (00-01-I-RP)

ALARA Planning and Controls Self Assessment, 6/26/00

Access to Radiologically Significant Areas Self Assessment, 8/22/00

NRC Performance Indicator Tracking and Reporting Process Self Assessment, 8/7-15/00

Radiation Protection Self Assessment Report, "Access to Radiologically Significant Areas," 08/22/00

Radiation Protection Department Functional Self-Assessment, "NRC Performance Indicator Tracking and Reporting Process "

ALARA Planning and Controls Self Assessment, June 26-29, 2000

#### Engineering and Maintenance Requests

ER-RB-2000-0599-000, Replace steam jet air ejector intercooler drain steam traps, 8/3/00

ER-RB-2000-0759-000, Indication to Operations to indicate grid voltage, 10/25/00

MAI 337206, Remote synchronizing selector switch off light not working (EGS-PNL1B), 8/17/00

MAI 337360, Remote synchronizing switch light has a bad socket (EGS-PNL1A), 8/22/00

Security Shop WO 003060, "Replace program chip in Metal Detector 1 with new revision," 7/31/00

#### Operational Experience Reviews

Evaluation No. 00-2060, 2/29/00 (NRC Information Notice (IN) 2000-01)

IN 2000-03 disposition, 3/6/00

Evaluation 00-2065, 3/6/00 (NRC IN 2000-04)

Evaluation 00-2099, 3/29/00 (NRC IN 2000-06)

Evaluation 00-2117, 4/17/00 (NRC IN 2000-07)

Evaluation 00-2138, 5/17/00 (NRC IN 2000-08)

Evaluation 00-2176, 7/24/00 (NRC IN 2000-10)



OPX 2000-0003, 8/12/00 (NRC IN 2000-11)  
OPX 2000-0007, 9/26/00 (NRC IN 2000-12)  
OPX 2000-0009, 10/2/00 (NRC IN 2000-13)  
OPX 2000-0010, 10/2/00 (NRC IN 2000-14)  
OPX 2000-0004, 8/17/00 (NRC Part 21 Notice 2000-18)

### Licensee Event Reports

50-458/00-012-00  
50-458/00-014-00

### Miscellaneous

Action Plan for Security, 3/14/00  
"Security Training and Qualification Plan," Revision 13a  
"Operations Standards and Expectations," 1/24/00  
Entergy Corporate Policy PL-150, Condition Reporting, 6/01/00  
EOI Letter, "Security Force Follow-up Interview Feedback," 9/12/00  
"Handling Employee Concerns" presentation, 5/4/00  
Siren Maintenance and Battery Replacement record, generated 11/27/00  
Entergy Letter, "Response to NRC Request in IR 50-458/00-02," 6/15/00  
River Bend Business Plan, 6/6/00  
River Bend Station Nuclear Safety Assurance Focus 2000 Department Plan, Revision 0, 4/00  
Operator Aid Log Index, Walkdown Identified Log, 11/21/00  
Condenser Air Removal and Offgas System Health Report, 11/15/00  
MAR-R00-0759, disposition of 10 CFR Part 21 material, 6/19/00  
Operating Experience Open Action Summary, 11/28/00  
Operating Experience Open and Closed Action Summary, 11/28/00  
Operating Experience Condition Report Detail, 11/28/00  
Licensee evaluation of General Electric Service Information Letter 217, 6/8/87  
License Operator Requalification Training Lesson Plan Number RBS-1-LEC-LOR-01012.00, 10/20/00  
Engineering Evaluation and Assistance Request 89-E0218, 3/14/90  
"Riverbend Nuclear Power Station Uprate Power System Study," 3/99  
10 CFR Part 21 2000-02-0 through 2000-19-0 Summary Report  
Emergency Diesel Generator Maintenance Rule Performance Criteria  
Emergency Diesel Generator Maintenance Rule Functions  
Emergency Diesel Generator System Health Report, 8/17/00  
Licensee Reply to NRC information request in IR 50-458/00-02, 6/15/00  
Division I, II, and III Emergency Diesel Generator Functional Failure History  
River Bend Station Emergency Diesel Generator Team Charter, 6/12/00  
Emergency Diesel Generator Team Meeting Minutes, 6/20/00  
River Bend Station Site Radiological Improvement Plan  
River Bend Station Executive Trending Summary 4<sup>th</sup> Quarter 1999 and 1<sup>st</sup> Quarter 2000  
River Bend Station Executive Trend Report - 2<sup>nd</sup>, and 3<sup>rd</sup> Quarters 2000  
"Welcome to Human Performance Day, Third Quarter, September 13, 2000  
2000 CRs associated with nonsafety-related equipment problems that induced plant transient/ response  
Yr 2000 CRs associated with RP program, RP workers, and RP technicians  
Licensee List of Components that were in 10CFR50.65(a)(1) Status.  
List of Open Maintenance Action Items  
List of Closed Maintenance Action Items from 01/01/00 to Present

Information Request 1 - River Bend Inspection 00-18 (IP 71152)

Summary list of all currently open/active items for:

- condition reports of significant conditions adverse to quality
- operator work-arounds
- engineering review requests
- maintenance requests
- temporary modifications
- procedure change requests
- training needs request/evaluation
- control room and safety system deficiencies

Summary list of all items completed/resolved/closed since 1/1/00 for:

- condition reports of significant conditions adverse to quality
- operator work-arounds
- engineering review requests
- maintenance requests
- temporary modifications
- procedure change requests
- training needs request/evaluation
- control room and safety system deficiencies

All quality assurance audits and surveillances of corrective action activities since 1/1/00.

All corrective action activity and functional area self-assessments and Non-NRC third party assessments since 1/1/00.

Corrective action performance trending/tracking information generated since 1/1/00 and broken down by functional organization. This information should include a breakdown of the organizational sources of condition report generation and a breakdown of assignment of responsibility for condition report resolution.

Current revision of the following procedures:

- RBNP-030, "Initiation and Processing of Condition Reports"
- RBNP-069, "Significant Event Evaluation"
- RBNP-078, "Operability Determinations"
- ENG-3-006, "Modification Design Control Plan Definitions, Residual Processes and Guidance"
- RBNP-100, "Modification Process Roles and Responsibilities"
- ENG-3-037, "Engineering Request Process"
- ENG-3-033, "Modification Design Control Plan"
- ADM-0023, "Conduct of Maintenance"
- "RBS On-Line Maintenance Guidelines"
- ADM-0028, "Corrective Maintenance"
- RBNP-062, "River Bend Industry Events and Analysis Programs"
- "Corrective Action Process Binder"

Corporate Policy PL-150, "Condition Reporting"  
RBNP-010, "Configuration Management"  
RBNP-022, "Root Cause Analysis Program"  
Entergy Root Cause Analysis Desk Guide

Any additional governing procedures/policies/guidelines for:

Condition Reporting  
Corrective Action Program  
Root Cause Evaluation/Determination  
Operator Work-Arounds  
Work Requests  
Engineering Requests  
Temporary Modifications  
Procedure Change Requests  
Deficiency Reporting and Resolution  
Training Needs Request/Evaluation

Information Request 2 - River Bend Inspection 00-18 (IP 71152)

**NCVs and Inspection Findings**

The following Condition Reports are related to NCVs and inspection findings. For each Condition Report please provide the following:

- Full text of the condition report
- Any "Roll-up" or "Aggregating" Conditions Reports related to the specific findings or condition report.
- Root Cause analysis report (if applicable)
- Risk significance assessments
- Probable Cause evaluation (if applicable)
- Approved corrective actions
- Basis for extending originally approved due dates
- Evidence of corrective action completion (work packages, design change documentation, temporary modifications, training lesson plans/material, training attendance records, procedure revisions, etc.)

1999-0832	2000-0564	2000-0762	2000-0969
1999-1557	2000-0606	2000-0785	2000-1010
1999-1890	2000-0613	2000-0869	2000-1139
1999-2010	2000-0626	2000-0855	2000-1199
2000-0104	2000-0642	2000-0904	2000-1405
2000-0133	2000-0688	2000-0911	2000-1459
2000-0154	2000-0736	2000-0941	
2000-0200	2000-0748	2000-0947	

**NOTE:** Please provide the same information as above for LER 50-458/0010.

**Generic Communications**

For each of the Generic Communications (applicable to River Bend) listed below please provide the following:

- j. Full text of the condition report (please indicate any findings that did not result in a condition report or corrective actions)
- k. Any "Roll-up" or "Aggregating" Conditions Reports related to the generic communication or condition report.
- l. Root Cause analysis report (if applicable)
- m. Risk significance assessments
- n. Probable Cause evaluation (if applicable)
- o. Approved corrective actions
- p. Basis for extending originally approved due dates
- q. Evidence of corrective action completion (work packages, design change documentation, temporary modifications, training lesson plans/material, training attendance records, procedure revisions, etc.)

Part 21 Reports

Part 21 Reports 2000-02-0 through 2000-19-0.

NRC Information Notices:

2000-01	2000-06	2000-10	2000-13
2000-03	2000-07	2000-11	2000-14
2000-04	2000-08	2000-12	

Information Request 3 - River Bend Inspection 00-18 (IP 71152)

**Condition Reports**

For each of the Condition Reports listed below please provide the following to the inspector indicated: *(NOTE - If you believe that the agency has already comprehensively reviewed the problem resolution aspects of any issues related to these condition reports, you may bring that to our attention, and we will re-assess the need for further review.)*

- Full text of the condition report
- Any "Roll-up" or "Aggregating" Conditions Reports related to the specific findings or condition report.
- Root Cause analysis report (if applicable)
- Risk significance assessments
- Probable Cause evaluation (if applicable)
- Approved corrective actions
- Basis for extending originally approved due dates
- Evidence of corrective action completion (work packages, design change documentation, temporary modifications, training lesson plans/material, training attendance records, procedure revisions, etc.)

**Greg Werner**

1998-1377	1999-0860	2000-0971	2000-1618
1999-0551	1999-1204	2000-1363	2000-1788
1999-0721	1999-1646	2000-1463	
1999-0727	2000-0783		

**Max Schneider**

1999-0156	1999-0710	1999-1202	2000-1088
1999-0224	1999-0843	1999-1298	2000-1104
1999-0295	1999-0894	1999-1514	2000-1248
1999-0329	1999-0903	1999-1983	2000-1470
1999-0366	1999-0911	1999-2018	2000-1564
1999-0374	1999-0912	2000-0750	2000-1663
1999-0380	1999-1138	2000-0911	2000-1754
1999-0407	1999-1175	2000-0997	2000-1813
1999-0630	1999-1201	2000-1047	

**Ray Azua**

1996-1581	1998-0794	1999-1135	2000-1336
1996-1952	1999-0381	2000-0704	2000-1721
1997-0025	1999-0842	2000-0974	2000-1793
1997-0081	1999-0932	2000-1134	
1998-0591	1999-1076	2000-1327	

**Gene DiPaolo**

1999-0932	2000-0247	2000-1553	2000-1712
1999-1646	2000-0536	2000-1572	2000-1764
1999-1999	2000-1506	2000-1583	2000-1842

**Steve McCrory**

2000-0981	2000-1486		
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**Other Information**

Please provide the additional information requested below to the inspector identified.

**Greg Werner**

- Any additional CRs associated with rad worker, RP technicians, and RWP or RP problems, especially during the unplanned outage (Aug?).
- Any program or trending CRs associated with RP program, rad workers, or RP techs
- Status of RP performance improvement efforts covered in the presentation to the DRS Division Director in April 2000.
- Summary of all CRs associated with Human Performance issues → i.e., procedural adherence and personnel errors/skill of the craft since 1/1/00, and any trending information on these issues for 1999 and 2000.
- Procedure that describes use and dispositioning of Human Performance Error Review process.
- RWP 00-1608-00, Rev 0. This RWP was referenced in CR 2000-0564.

- Summary information for all CRs associated with improper use/control of operator aids since 1/1/00.
- Procedure for "Access Control" which was in use on March 16,2000 (when CR 2000-0642 occurred).
- OSP-0001, "Control of Operator Aids"

### **Max Schneider**

- The facility response to the following excerpt from the most recent inspection of your corrective action activities (Inspection Report 50-458/00-02):

"We are particularly concerned about continuing problems affecting emergency diesel generators, including the ability of your staff to recognize, assess (e.g., perform technically adequate operability evaluations), and correct these problems. We note that the issues documented in this report represent a third occurrence within the past 2 years of conditions affecting emergency diesel generator operability, which resulted in violations of the applicable emergency diesel generator technical specifications (refer to EA 98-478 and EA 99-158). While issues affecting emergency diesel generator reliability and availability were discussed during a management meeting conducted in the Region IV Office on December 9, 1999, the emergency diesel generator issues documented in this report were not discussed at that meeting. Accordingly, within 30 days of the date of this letter, we request a response to this letter that outlines your current and future activities to address and correct emergency diesel generator operability, reliability, and availability issues (including applicable support and subsystems that have the potential to affect emergency diesel generator operability)."

- Current status of actions related to CR 2000-1459 for timeliness/effectiveness of corrective actions.
- Maintenance rule listing and system health report for the EDGs.
- Copies of ER-99-450 and ER-99-0349.

### **Ray Azua**

- PEP-0219, "Reliability Monitoring Program"
- EDG-PR-001, "Maintenance Rule Program"
- RBNP-002, "Root Cause Determination Guidance"
- RBNP-030, " Corrective Action Guidance"  
*(Note: For procedures that have been canceled, voided, or otherwise replace by different procedures, please provide the last revision that was used.)*

### **Gene DiPaolo**

- Results of most recent grid stability study for power uprate
- IN 2000-08 operating experience evaluation (due 11/17/00)
- IN 2000-11 operating experience evaluation (due 11/3/00)
- MAR-R00-0759

- Part 21 2000-18 evaluation - CR-OPX-2000-0004
- ER-00-0599 summary description
- Description of CRs associated with GE Mageblast breakers since 1/1/99
- Operations Standards and Expectations
- Nuclear Management Manual, Company Policy No. PL-125, Employee Concerns Policy
- ADM-0022, Conduct of Operations, Section 5.7.3
- OSP-0001, Control of Operator Aids

## ATTACHMENT 2

### **NRC'S REVISED REACTOR OVERSIGHT PROCESS**

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

<b>Reactor Safety</b>	<b>Radiation Safety</b>	<b>Safeguards</b>
<ul style="list-style-type: none"><li>•Initiating Events</li><li>•Mitigating Systems</li><li>•Barrier Integrity</li><li>•Emergency Preparedness</li></ul>	<ul style="list-style-type: none"><li>•Occupational</li><li>•Public</li></ul>	<ul style="list-style-type: none"><li>•Physical Protection</li></ul>

To monitor these seven cornerstones of safety, the NRC used two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plan, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.