Entergy

Entergy Operations, Inc.
River Bend Station
5485 U. S. Highway 61N
St. Francisville, LA 70775
Tel 225 381 4374
Fax 225 381 4872
eolson@entergy.com

Eric W. Olson
Site Vice President

RBG-47406

November 6, 2013

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: Licensee Event Report 50-458 / 2013-002-00
River Bend Station – Unit 1
Docket No. 50-458
License No. NPF-47

RBF1-13-0142

Dear Sir or Madam:

In accordance with 10 CFR 50.73, enclosed is the subject Licensee Event Report. This document contains no commitments. If you have any questions, please contact Mr. Joseph Clark at 225-381-4177.

Sincerely,

Eric W. Olson

EWO/dhw

Enclosure

IE22
NRR

cc: U. S. Nuclear Regulatory Commission
Region IV
1600 East Lamar Blvd.
Arlington, TX 76011-4511

NRC Sr. Resident Inspector
P. O. Box 1050
St. Francisville, LA 70775

INPO
(via ICES reporting)

Central Records Clerk
Public Utility Commission of Texas
1701 N. Congress Ave.
Austin, TX 78711-3326

Department of Environmental Quality
Office of Environmental Compliance
Radiological Emergency Planning and Response Section
JiYoung Wiley
P.O. Box 4312
Baton Rouge, LA 70821-4312

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2013

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
River Bend Station – Unit 1	05000 - 458	1 OF 3

4. TITLE

Potential Loss of Safety Function of Secondary Containment Due to Employee Leaving a Door Unsecured

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
									n/a	05000
09	19	2013	2013	-002	-00	11	6	2013	FACILITY NAME n/a	DOCKET NUMBER 05000

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*			
1	☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
10. POWER LEVEL	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
100	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☒ 50.73(a)(2)(v)(C)	☐ OTHER
	☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER *(Include Area Code)*
Joseph A. Clark, Manager – Licensing	225-381-4177

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
n/a									

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO				

ABSTRACT *(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)*

On September 19, 2013, at approximately 1437 CDT, with the plant operating at 100 % power, a door in the secondary containment pressure boundary was left unsecured by an employee entering the building. Upon closing the door, the employee mistakenly rotated the handwheel slightly, caused the latch bolts to extend partially. The latch bolts then contacted the outside of the keepers in the door frame, blocking the door open. The employee did not notice that the door was slightly open when he rotated the handwheel to the "closed" position, and then did not properly confirm its security prior to leaving the area. A security officer responded to the resultant alarm, and fully closed the door approximately four minutes later. This event was caused by improper use of human performance techniques by the employee, in that he failed to confirm that he had operated the door correctly. This event is being reported in accordance with 10 CFR 50.73(a)(2)(v) as a condition that could have caused the loss of the safety function of the secondary containment pressure boundary. Since the plant's safety analysis does not assume the function of secondary containment for the first 30 minutes of the design basis accident, safety function was actually maintained. This event was of minimal significance with regard to the health and safety of the public.

REPORTED CONDITION

On September 19, 2013, at approximately 1437 CDT, with the plant operating at 100% power, a door (**DR**) in the auxiliary building (NF) pressure boundary was left unsecured by an employee entering the building. Upon closing the door, the employee mistakenly rotated the handwheel slightly, caused the latch bolts to extend partially. The latch bolts then contacted the outside of the keepers in the door frame, blocking the door open. The employee did not notice that the door was slightly open when he rotated the handwheel to the "closed" position, and then did not properly challenge the door to confirm its security prior to leaving the area. A security officer responded to the resultant alarm, and fully closed the door approximately four minutes later.

This event is being reported in accordance with 10 CFR 50.73(a)(2)(v) as an event that could have caused the loss of the safety function of the secondary containment pressure boundary.

BACKGROUND

The auxiliary building is part of the secondary containment pressure boundary. The event for which credit is taken for secondary containment is a loss of coolant accident. The secondary containment performs no active function in response to this limiting event; however, its leak tightness is required to ensure that the release of radioactive materials from the primary containment is restricted to those leakage paths and associated leakage rates assumed in the accident analysis, and that fission products entrapped within the secondary containment structures will be treated prior to discharge to the environment.

The access doors in the auxiliary building pressure boundary have no redundancy. That is, each passageway contains only one door, not two doors in an airlock arrangement. As such, one unsecured door compromises the integrity of the pressure boundary.

CAUSAL ANALYSIS

This event occurred as two employees were entering the building to perform an inspection. The first person, a radiation protection technician, opened the door and entered the building. The second person, a contract engineer, followed the technician and assumed responsibility for securing the door. The engineer had attended a pre-job brief for his task, including both a general discussion of door safety and operating experience related specifically to the subject door. Prior to entering the auxiliary building, the radiation protection technician observed that the engineer properly operated other doors.

A human performance error review identified a perceived time pressure and overconfidence as the applicable error traps. Since two individuals traversed the door during one entry, the contract engineer felt time pressure to close the door before the security alarm time delay was exceeded. After closing the door and checking that the handwheel was locked, the engineer displayed overconfidence by assuming the door was properly secured without pushing against the door to verify the latch bolts were engaged. The engineer stated that he was aware that verification of door security includes challenging the handwheel by attempting to rotate it, as well as challenging the door by pushing or pulling on it.

CORRECTIVE ACTION TO PREVENT RECURRENCE

The following actions have been completed to prevent a recurrence of this event. These actions are documented in the station's corrective action program.

1. A briefing memorandum was issued by the plant manager to all site personnel.

2. A stand-down was conducted by the site engineering department, as well as the contractor's organization, to review the event and its causes.

3. Focused observations were conducted in the plant to confirm that all door operations were being performed in accordance with site standards and expectations.

SAFETY SIGNIFICANCE

The River Bend Updated Safety Analysis Report describes the sequence of events postulated to occur following a loss of coolant accident (LOCA). Part of that analysis is a projection of the maximum radiation dose received by a person at the site boundary. The LOCA dose calculation assumes that the standby gas treatment system is initiated 20 minutes into the event, and that secondary containment is at the required negative pressure within 30 minutes, such that filtration may be credited. As such, the safety function of secondary containment is maintained as long as the boundary is secured (or capable of being secured) within 20 minutes of the time of the security alarm. Since the subject door was secured within approximately four minutes of the time of the alarm, the safety function of secondary containment was actually maintained. This event was of minimal significance with respect to the health and safety of the public.

(NOTE: Energy Industry Component Identification codes are annotated as (**XX**).)