



Entergy

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River Bend Station
5485 U.S. Highway 61N
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Tel 225-381-4157

William F. Maguire
Site Vice President

RBG-47713

October 4, 2016

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

Subject: Licensee Event Report 50-458 / 2016-007-01
River Bend Station – Unit 1
Docket No. 50-458
License No. NPF-47

RBF1-16-0122

Dear Sir or Madam:

In accordance with 10 CFR 50.73, enclosed is the subject Licensee Event Report. This is a supplement to the LER originally submitted on July 25, 2016. New information is annotated by change bars in the right margin.

This document contains no commitments. If you have any questions, please contact Tim Schenk at 225-381-4177.

Sincerely,

WFM / dhw

Enclosure

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

IE22
NRR

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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
Ji Young Wiley
P.O. Box 4312
Baton Rouge, LA 70821-4312



LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

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 and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollections.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOF-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.

1. FACILITY NAME

River Bend Station - Unit 1

2. DOCKET NUMBER

05000 458

3. PAGE

1 OF 3

4. TITLE

Operations Prohibited by Technical Specifications Due to Failure to Implement Required Actions Within Completion Time

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		
05	25	2016	2016	007	01	10	04	2016	FACILITY NAME	DOCKET NUMBER		
										05000		
9. OPERATING MODE			11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)									
1			<input type="checkbox"/> 20.2201(b)			<input type="checkbox"/> 20.2203(a)(3)(i)			<input type="checkbox"/> 50.73(a)(2)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
			<input type="checkbox"/> 20.2201(d)			<input type="checkbox"/> 20.2203(a)(3)(ii)			<input type="checkbox"/> 50.73(a)(2)(ii)(B)		<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
			<input type="checkbox"/> 20.2203(a)(1)			<input type="checkbox"/> 20.2203(a)(4)			<input type="checkbox"/> 50.73(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(ix)(A)	
			<input type="checkbox"/> 20.2203(a)(2)(i)			<input type="checkbox"/> 50.36(c)(1)(i)(A)			<input type="checkbox"/> 50.73(a)(2)(iv)(A)		<input type="checkbox"/> 50.73(a)(2)(x)	
10. POWER LEVEL 100			<input type="checkbox"/> 20.2203(a)(2)(ii)			<input type="checkbox"/> 50.36(c)(1)(ii)(A)			<input type="checkbox"/> 50.73(a)(2)(v)(A)		<input type="checkbox"/> 73.71(a)(4)	
			<input type="checkbox"/> 20.2203(a)(2)(iii)			<input type="checkbox"/> 50.36(c)(2)			<input type="checkbox"/> 50.73(a)(2)(v)(B)		<input type="checkbox"/> 73.71(a)(5)	
			<input type="checkbox"/> 20.2203(a)(2)(iv)			<input type="checkbox"/> 50.46(a)(3)(ii)			<input type="checkbox"/> 50.73(a)(2)(v)(C)		<input type="checkbox"/> 73.77(a)(1)	
			<input type="checkbox"/> 20.2203(a)(2)(v)			<input type="checkbox"/> 50.73(a)(2)(i)(A)			<input type="checkbox"/> 50.73(a)(2)(v)(D)		<input type="checkbox"/> 73.77(a)(2)(i)	
			<input type="checkbox"/> 20.2203(a)(2)(vi)			<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)			<input type="checkbox"/> 50.73(a)(2)(vii)		<input type="checkbox"/> 73.77(a)(2)(ii)	
			<input type="checkbox"/> 50.73(a)(2)(i)(C)			<input type="checkbox"/> OTHER		Specify in Abstract below or in NRC Form 366A				

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT

Kristi Huffstatler, Manager - Regulatory Assurance (acting)

TELEPHONE NUMBER (Include Area Code)

(225) 378-3305

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
na									

14. SUPPLEMENTAL REPORT EXPECTED

☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☒ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

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

On May 25, 2016, it was determined that there had been a violation of Technical Specifications during a recent planned maintenance outage of the Division 1 diesel generator (DG). During that outage, three material deficiencies of various subcomponents were discovered while conducting maintenance tasks. The initial operability screening of each deficiency determined that the as-found condition did not, by itself, cause the DG to be inoperable. However, the associated condition report for each item was flagged as "inoperable." These determinations should have, thus, caused the operators to invoke the requirements of the TS to perform common cause evaluations to assure that the same conditions did not exist on the operable Division 2 DG. This action was not performed. Human performance evaluations of the operators involved in the condition report screening concluded that a cognitive, undocumented decision was made that the individual deficiencies did not meet the threshold of requiring a common cause evaluation. This event constituted operations prohibited by Technical Specifications, and is being reported in accordance with 10 CFR 50.73 (a)(2)(i)(B). The investigation of this event discovered a previous similar occurrence during a planned maintenance outage of the Division 2 DG in February 2014 which constituted operations prohibited by Technical Specifications, but which was not reported at the time. That event was later determined to have not defeated the safety function of the DG, and was, thus, of minimal significance with respect to the health and safety of the public

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

(See NUREG-1022, R.3 for instruction and guidance for completing this form
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1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
River Bend Station - Unit 1	05000- 458	2016	007	01

NARRATIVE**REPORTED CONDITION**

On May 25, 2016, it was determined that there had been a violation of Technical Specifications during a recent planned maintenance outage of the Division 1 diesel generator (DG)[EK]. During that outage, three material deficiencies of various subcomponents were discovered while conducting maintenance tasks. These discoveries should have caused the operators to invoke the requirements of the TS to perform common cause evaluations to assure that the same conditions did not exist on the operable Division 2 DG. This action was not performed.

This condition constituted operations prohibited by Technical Specifications, and is being reported in accordance with 10 CFR 50.73 (a)(2)(i)(B).

INVESTIGATION

The material deficiencies found during the DG outage involved two minor air leaks on pressure switches in the engine air start subsystem and a DG governor drive coupling that was not in compliance with design drawings. Condition Reports were initiated in accordance with the corrective action program, and these CRs underwent the initial operability assessment. The CRs were individually flagged by the operations shift managers (OSM) as conditions that would cause the DG to be inoperable. Since the DG was already inoperable for the planned maintenance outage, the CRs were added to the work tracking system to assure that the conditions would be corrected prior to restoring the DG to an operable status.

Limiting Condition for Operation (LCO) 3.8.1 was already in effect for the maintenance outage. One of the Required Actions of this LCO specifies that a common cause evaluation will be performed for material defects discovered to potentially have an adverse effect on the operability of the DG. This evaluation is meant to assure that the same condition does not exist on the other DG. The TS requires that this evaluation be completed within 24 hours. Although there were discussions between OSM and the maintenance staff at the time, there was no documentation of the conclusions.

Human performance evaluations were conducted with the OSMs involved in the processing of the Condition Reports written on each of the deficiencies. Following are the conclusions:

- With regard to the air leaks, the OSM reasoned that the leaks had likely been induced by the maintenance activities, since the system had been depressurized and then restored to normal pressure prior to discovery of the leak. No leakage had been reported prior to this activity.
- Regarding the condition of the DG governor drive coupling, the initial assessment concluded that the coupling had been in the as-found configuration since the DGs were installed during plant construction. This was seen as significant evidence that the as-found condition did not adversely affect the ability of the DG to perform its design safety function.

CORRECTIVE ACTIONS TO PREVENT RECURRENCE

The causal analysis of this event has been reviewed as operational experience by each of the active OSMs. A training analysis is being conducted to define and correct knowledge gaps that contributed to this event.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

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River Bend Station - Unit 1	05000- 458	YEAR 2016	- SEQUENTIAL NUMBER 007	- REV NO. 01

NARRATIVE**PREVIOUS OCCURRENCE EVALUATION**

In the last three years, River Bend Station has reported the following incidents of operations prohibited by Technical Specifications:

- LER 050-458 / 2016-03-00 (report date 3/17/16) – This event involved a postulated malfunction in a reactor control rod drive mechanism, not a human performance deficiency. The investigation of this event will be completed during the next refueling outage.
- LER 050-458 / 2015-06-00 (report date 9/14/2015) – This event involved the use of superseded vendor manual data in the initial troubleshooting of an abnormal system response during surveillance testing. Later analysis confirmed that the affected subcomponent should have been declared inoperable at the time of discovery.
- LER 050-458 / 2015-03-00 (report date 7/9/2015) – This event involved the mis-positioning of a manual valve in the Division 2 containment penetration leakage control system. The investigation found that operators failed to adequately apply configuration control requirements regarding that valve.
- LER 050-458 / 2015-01-00 (report date 4/16/2015) – This event involved a deficient surveillance test procedure.
- LER 050-458 / 2014-03-00 (report date 8/11/2014) – This event involved the concurrent inoperability of redundant channels of an RPS trip function due to a common cause malfunction in channels containing a certain type of relay.

While the second and third items above were related to human performance deficiencies, neither of them were attributed to a root cause involving errors in the application of Technical Specifications requirements.

The causal analysis of this event discovered a prior similar occurrence that was not reported at the time. On February 18, 2014, during a maintenance outage of the Division 2 DG, it was discovered that a support clamp on a section of fuel oil piping was missing. At that time, a CR was initiated (and flagged as "inoperable"), and the condition was added to the work tracking system to assure that it would be corrected prior to restoration of the DG to an operable status. However, no action was taken to confirm that a similar condition did not exist on the operable Division 1 DG. The missing clamp was replaced on February 19, and the DG was restored to an operable status on February 21. On March 11, an evaluation of the as-found condition concluded that the safety function of the Division 2 DG had not been compromised by that condition.

SAFETY SIGNIFICANCE

Approximately four days following the discovery of the air leaks and the governor drive coupling configuration, DG system engineers documented operability evaluations which concluded that none of these conditions posed any potential challenge to the ability of the DG to fulfill its safety function. It was confirmed that no similar conditions were present on the Division 2 DG. The air leaks were repaired and the governor drive coupling assembly was corrected prior to restoration of the Division 1 DG to an operable status. This event had no significance with respect to the health and safety of the public.

(NOTE: Energy Industry Identification System component function identifier and system name of each component or system referred to in the LER are annotated as (**XX**) and [XX], respectively.)