



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION IV  
1600 E LAMAR BLVD  
ARLINGTON, TX 76011-4511

August 31, 2016

Mr. William F. Maguire  
Site Vice President  
Entergy Operations, Inc.  
River Bend Station  
5485 U.S. Highway 61N  
St. Francisville, LA 70775

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR RIVER BEND STATION (REPORT 05000458/2016005)**

Dear Mr. Maguire:

On August 10, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of River Bend Station. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2015, through June 30, 2016. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined the performance at River Bend Station during the most recent quarter was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because the Unplanned Scrams with Complications PI was a White input in the Initiating Events Cornerstone from the fourth quarter of 2014 through the third quarter of 2015, and a supplemental inspection in accordance with Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," has not been completed.

On August 12, 2016, your staff notified the NRC of your readiness for a supplemental inspection to review the actions taken to address the performance issues associated with this PI. Therefore, in addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with IP 95001 in September 2016. The supplemental inspection will provide assurance that the root causes and contributing causes of risk-significant performance issues are understood, that the extent of condition and extent of cause of risk significant performance issues are identified, and that the corrective actions for risk-significant performance issues are sufficient to address the root and contributing causes and prevent recurrence.

Additionally, one finding in the Mitigating Systems Cornerstone, as described in our letter (ML15253A352) dated September 10, 2015, was a White input beginning in the second quarter of 2015. On April 13, 2016, the NRC issued supplemental inspection report 05000458/2016010 (ML16146A792), which stated that the performance issue will remain open beyond the normal four quarters and will not be removed from consideration in the NRC's assessment program until the identified weaknesses involving the extent of condition evaluation are addressed and corrected. On May 25, 2016, your staff notified the NRC of your readiness to resume the

supplemental inspection to review the actions taken to address the inadequate extent of condition evaluation. On June 29, 2016, the NRC completed the supplemental inspection in accordance with IP 95001. Based on the results of this inspection, as documented in supplemental inspection report 05000458/2016011 (ML16223A956) dated August 10, 2016, the White finding is no longer considered as an Action Matrix input as of the end of the second quarter of 2016.

The NRC identified the first occurrence of a cross-cutting theme in the Human Performance area. Specifically, there were twenty findings issued during the assessment period which had a cross-cutting aspect in Human Performance. The NRC will continue to monitor your staff's effort and progress in addressing human performance until the theme criterion is no longer met.

The enclosed inspection plan lists the inspections scheduled through June 30, 2018. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

The NRC staff received the River Bend Station Final Compliance letter for Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," and Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." The NRC staff issued the River Bend Station Safety Evaluation on August 11, 2016, and will confirm full implementation of the orders mentioned above by performing Temporary Instruction 191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In Staff Requirements Memorandum – SECY 16-0009, "Recommendations Resulting from the Integrated Prioritization and Re-Baselining of Agency Activities," the Commission approved the NRC staff recommendation to discontinue the formal mid-cycle assessment process beginning in calendar year 2017. This will be the final mid-cycle assessment letter. The staff will continue to conduct quarterly assessment meetings and communicate changes in the assessment of licensee performance in accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of

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NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Greg Warnick at 817-200-1144 with any questions you have regarding this letter.

Sincerely,

***/RA/***

Troy Pruett, Director  
Division of Reactor Projects

Docket No. 50-458  
License No. NPF-47

Enclosure:  
River Bend Station Inspection/  
Activity Plan

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**River Bend**  
**Inspection / Activity Plan**  
**07/01/2016 - 06/30/2018**

| Unit Number  | Planned Dates<br>Start | End        | Inspection Activity | Title  | No. of Staff<br>on Site |
|--|------------------------|------------|---------------------|--|-------------------------|
| <b>EXAM - INITIAL EXAM</b>                             |                        |            |                     |  | <b>4</b>                |
| 1  | 08/15/2016             | 08/19/2016 | X02575              | INITIAL EXAM RIVER BEND STATION UNIT 1 (09/2016)                     |                         |
| 1  | 09/12/2016             | 09/16/2016 | X02575              | INITIAL EXAM RIVER BEND STATION UNIT 1 (09/2016)                     |                         |
| <b>EP-2 - EP PERFORMANCE INDICATORS</b>                |                        |            |                     |  | <b>2</b>                |
| 1  | 06/27/2016             | 07/01/2016 | IP 71151-EP01       | Drill/Exercise Performance   |                         |
| 1  | 06/27/2016             | 07/01/2016 | IP 71151-EP02       | ERO Readiness  |                         |
| 1  | 06/27/2016             | 07/01/2016 | IP 71151-EP03       | Alert & Notification System Reliability                              |                         |
| <b>EP-3 - BIENNIAL EXERCISE INSPECTION</b>             |                        |            |                     |  | <b>4</b>                |
| 1  | 06/27/2016             | 07/01/2016 | IP 7111401          | Exercise Evaluation  |                         |
| 1  | 06/27/2016             | 07/01/2016 | IP 7111404          | Emergency Action Level and Emergency Plan Changes                    |                         |
| <b>INSP - BIENNIAL REQUAL INSPECTION</b>               |                        |            |                     |  | <b>2</b>                |
| 1  | 08/29/2016             | 09/02/2016 | IP 7111111B         | Licensed Operator Requalification Program                            |                         |
| <b>RS 12 PI - RADIATION SAFETY</b>                     |                        |            |                     |  | <b>2</b>                |
| 1  | 02/06/2017             | 02/10/2017 | IP 71124.01         | Radiological Hazard Assessment and Exposure Controls                 |                         |
| 1  | 02/06/2017             | 02/10/2017 | IP 71124.02         | Occupational ALARA Planning and Controls                             |                         |
| 1  | 02/06/2017             | 02/10/2017 | IP 71151-OR01       | Occupational Exposure Control Effectiveness                          |                         |
| 1  | 02/06/2017             | 02/10/2017 | IP 71151-PR01       | RETS/ODCM Radiological Effluent Occurrences                          |                         |
| <b>71111.08 - INSERVICE INSPECTION</b>                 |                        |            |                     |  | <b>1</b>                |
| 1  | 02/13/2017             | 02/17/2017 | IP 7111108G         | Inservice Inspection Activities - BWR                                |                         |
| <b>TSB 52B - BIENNIAL PI&amp;R</b>                     |                        |            |                     |  | <b>5</b>                |
| 1  | 04/10/2017             | 04/14/2017 | IP 71152B           | Problem Identification and Resolution                                |                         |
| 1  | 04/24/2017             | 04/28/2017 | IP 71152B           | Problem Identification and Resolution                                |                         |
| <b>EP-1 - BIENNIAL EP PROGRAM INSPECTION</b>           |                        |            |                     |  | <b>1</b>                |
| 1  | 05/22/2017             | 05/26/2017 | IP 7111402          | Alert and Notification System Testing                                |                         |
| 1  | 05/22/2017             | 05/26/2017 | IP 7111403          | Emergency Preparedness Organization Staffing and Augmentation System |                         |
| 1  | 05/22/2017             | 05/26/2017 | IP 7111404          | Emergency Action Level and Emergency Plan Changes                    |                         |
| 1  | 05/22/2017             | 05/26/2017 | IP 7111405          | Correction of Emergency Preparedness Weaknesses and Deficiencies     |                         |
| <b>EP-2 - EP PERFORMANCE INDICATOR VERIFICATION</b>    |                        |            |                     |  | <b>1</b>                |
| 1  | 05/22/2017             | 05/26/2017 | IP 71151-EP01       | Drill/Exercise Performance   |                         |
| 1  | 05/22/2017             | 05/26/2017 | IP 71151-EP02       | ERO Readiness  |                         |
| 1  | 05/22/2017             | 05/26/2017 | IP 71151-EP03       | Alert & Notification System Reliability                              |                         |
| <b>EB1-21M - RBS COMPONENT DESIGN BASIS INSPECTION</b> |                        |            |                     |  | <b>6</b>                |
| 1  | 06/12/2017             | 07/14/2017 | IP 7111121M         | Component Design Bases Inspection (Teams)                            |                         |

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

Enclosure

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| Unit Number                                | Planned Dates |            | Inspection Activity | Title   | No. of Staff on Site |
|--|---------------|------------|---------------------|---|----------------------|
|  | Start         | End        |                     |   |                      |
| <b>RS 5678 - RS TEAM</b>                   |               |            |                     |   | <b>5</b>             |
| 1  | 08/21/2017    | 08/25/2017 | IP 71124.05         | Radiation Monitoring Instrumentation  |                      |
| 1  | 08/21/2017    | 08/25/2017 | IP 71124.06         | Radioactive Gaseous and Liquid Effluent Treatment   |                      |
| 1  | 08/21/2017    | 08/25/2017 | IP 71124.07         | Radiological Environmental Monitoring Program   |                      |
| 1  | 08/21/2017    | 08/25/2017 | IP 71124.08         | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation |                      |
| <b>EB1-07T - RBS HEAT SINK PERFORMANCE</b> |               |            |                     |   | <b>1</b>             |
| 1  | 09/18/2017    | 09/22/2017 | IP 7111107T         | Heat Sink Performance   |                      |
| <b>EXAM - INITIAL EXAM</b>                 |               |            |                     |   | <b>5</b>             |
| 1  | 05/21/2018    | 05/25/2018 | X02622              | INITIAL EXAM RB(6/18)   |                      |
| 1  | 06/25/2018    | 07/03/2018 | X02622              | INITIAL EXAM RB(6/18)   |                      |
| <b>EB2-02 - LICENSE RENEWAL INSPECTION</b> |               |            |                     |   | <b>4</b>             |
| 1  | 03/05/2018    | 03/09/2018 | IP 71002            | License Renewal Inspection  |                      |
| 1  | 03/19/2018    | 03/23/2018 | IP 71002            | License Renewal Inspection  |                      |
| <b>EP-1 - EP EXERCISE INSPECTION</b>       |               |            |                     |   | <b>4</b>             |
| 1  | 06/25/2018    | 06/29/2018 | IP 7111401          | Exercise Evaluation   |                      |
| 1  | 06/25/2018    | 06/29/2018 | IP 7111404          | Emergency Action Level and Emergency Plan Changes   |                      |
| 1  | 06/25/2018    | 06/29/2018 | IP 71151-EP01       | Drill/Exercise Performance  |                      |
| 1  | 06/25/2018    | 06/29/2018 | IP 71151-EP02       | ERO Readiness   |                      |
| 1  | 06/25/2018    | 06/29/2018 | IP 71151-EP03       | Alert & Notification System Reliability   |                      |

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|                           |             |                       |             |  |  |                                |  |                     |
|---------------------------|-------------|-----------------------|-------------|--|--|--------------------------------|--|---------------------|
| ■ SUNSI Review<br>By: CHY |             | ADAMS<br>■ Yes □ No   |             | ■ Publicly Available<br>□ Non-Publicly Available |  | □ Non-Sensitive<br>■ Sensitive |  | Keyword:<br>NRC-002 |
| OFFICE                    | DRP:C/SPE   | DRS: D                | DRP:PBC     | DRP: D   |  |                                |  |                     |
| NAME                      | CYoung      | AVegel                | GWarnick    | TPruett  |  |                                |  |                     |
| SIGNATURE                 | <i>/RA/</i> | <i>/RA/JClark,for</i> | <i>/RA/</i> | <i>/RA/</i>                                      |  |                                |  |                     |
| DATE                      | 8/16/16     | 8/17/16               | 8/29/16     | 8/22/16  |  |                                |  |                     |

**OFFICIAL RECORD COPY**

Letter to Mr. William F. Maguire from Troy W. Pruett dated August 31, 2016

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