



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 10, 2017

Mr. William F. Maguire
Site Vice President
River Bend Station, Unit 1
Entergy Operations, Inc.
5485 U.S. Highway 61 N
St. Francisville, LA 70775

SUBJECT: PLAN FOR THE AGING MANAGEMENT PROGRAM REGULATORY AUDIT
REGARDING THE RIVER BEND STATION, UNIT 1 LICENSE RENEWAL
APPLICATION REVIEW (CAC NO. MF9747)

Dear Mr. Maguire:

By letter dated May 25, 2017, Entergy Operations, Inc. (Entergy) submitted an application for Renewal of Operating License No, NPF-47 for the River Bend Station, Unit 1 (RBS). The staff of the U.S. Nuclear Regulatory Commission (NRC or the staff) is reviewing this application in accordance with the guidance in NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants."

The staff plans to conduct its Aging Management Program Regulatory Audit remotely from NRC headquarters offices (in-office audit) from October 16, 2017 through November 3, 2017, in accordance with the enclosed regulatory audit plan. If you have any questions, please contact me by telephone at 301-415-4084 or by e-mail at Emmanuel.Sayoc@nrc.gov.

Sincerely,

/RA Albert Wong for/

Emmanuel Sayoc, Project Manager
License Renewal Project Branch
Division of Materials and License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosure:
Audit Plan

cc w/encl: Listserv

SUBJECT: PLAN FOR THE AGING MANAGEMENT PROGRAM REGULATORY AUDIT REGARDING THE RIVER BEND STATION, UNIT 1 LICENSE RENEWAL APPLICATION REVIEW (CAC NO. MF9747) DATED OCTOBER 10, 2017

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 SBurnell, OPA
 Thomas Broussard, tbrous1@entergy.com
 David Lach, dlach@entergy.com
 Timothy Schenk, tschenk@entergy.com
 Alyson Coates, alacey@entergy.com

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OFFICE	PM:MRPB DMLR	LA:MRPB:DMLR	PM:MRPB:DMLR
NAME	ESayoc (Albert Wong for)	YEdmonds	BRogers
DATE	10/6/2017	10/6/2017	10/6/2017
OFFICE	BC:MRPB:DMLR (A)	PM: MRPB DMLR	
NAME	WBurton	ESayoc (Albert Wong for)	
DATE	10/6/2017	10/10/2017	

OFFICIAL RECORD COPY



Audit Plan

Aging Management Program Regulatory Audit for the River Bend Station, Unit 1 License Renewal Application

**Division of Materials and License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission**

ENCLOSURE

License Renewal Aging Management Program Regulatory Audit Plan River Bend Station, Unit 1

1. Background

By letter dated May 25, 2017, Entergy Operations, Inc. (Entergy), submitted to the U.S. Nuclear Regulatory Commission (NRC or the staff) its application for Renewal of Operating License No. NPF-47 for the River Bend Station, Unit 1 (RBS). RBS requested renewal of the operating license for an additional 20 years beyond the 40-year current license term, which expires on August 29, 2025. The staff from the Division of Materials and License Renewal will lead a regulatory audit to gain a better understanding of Entergy's aging management programs (AMPs), aging management review (AMR) items, Time-Limited Aging Analyses (TLAA) and associated bases and documentation as applicable.

2. Regulatory Audit Bases

License renewal requirements are specified in Title 10 of the *Code of Federal Regulations* (CFR), Part 54 (10 CFR Part 54), "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." Guidance is provided in NUREG-1800, Rev. 2, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants" (SRP-LR), dated December 2010, and NUREG-1801, Rev. 2, "Generic Aging Lessons Learned (GALL) Report," dated December 2010.

3. Regulatory Audit Scope

The scope of this regulatory audit is to: (a) examine Entergy's AMPs, AMR items, and TLAAs for RBS; and (b) verify Entergy's claims of consistency with the corresponding GALL Report AMPs, and AMR items, and (c) assess the adequacy of the TLAAs. Enhancements and exceptions will be evaluated on a case-by-case basis. The staff's review of enhancements and exceptions will be documented in the safety evaluation report.

During this audit, the staff will audit Program Elements 1 - 6 (scope, preventive actions, parameters monitored or inspected, detection of aging effects, monitoring and trending, and acceptance criteria), and Program Element 10 (operating experience) of the applicant's AMPs against the elements of the associated AMP described in the GALL Report. Program Elements 7 - 9 (corrective actions for general recommendations such as compliance with Appendix B, confirmation process, and administrative controls) are audited by another NRC project team during the scoping and screening methodology audit, and are evaluated separately. In addition, the staff will verify that the conditions at the plant are bounded by the conditions for which the GALL Report program was evaluated.

The staff will also examine the applicant's program bases documents and related references for AMPs, AMR items, and TLAAs, perform selected in-plant walkdowns, and interview applicant representatives to obtain additional clarification.

The staff will use risk insights to inform the prioritization of its review of documentation associated with AMPs, AMR items, and TLAAs. The staff will use risk insights to focus the breadth and depth of its review of plant specific operating procedures and operating experience. However, the staff's review is not limited to risk significant systems and components because 10 CFR Part 54 is a deterministic rule and the staff must conclude that there is reasonable

assurance that activities will continue to be conducted in accordance with the current licensing basis and the effects of aging will be managed during the period of extended operation for all structures and components within the scope of Part 54.

The staff has reviewed the list of risk significant systems and components (from PRA, Revision 5) provided in a presentation to the staff on May 25, 2017. The staff augmented this list with the fire protection and fire water systems because they are typically risk significant when considering external events.

4. Information and Other Material Necessary for the Regulatory Audit

The project team will review the license renewal application, the AMP basis documents and other Entergy supporting documents as appropriate.

For the in-office audit October 16, 2017 – November 3, 2017:

- The project team would like continued Entergy document review capability via the CERTREC document portal. Document requests for upload to the portal shall be made as needed via the NRC safety project manager to the appropriate Entergy licensing manager.
- The NRC staff would like to hold break-out sessions, via telephone conference calls and/or official internet based desktop sharing means, with Entergy and RBS subject matter experts to discuss various basis documents, references, condition/corrective action reports, and interview Entergy representatives to obtain additional clarification related to the license renewal review. Break-out sessions for various technical review areas will occur at predesignated time slots during the audit, with preassigned NRC and Entergy representatives. NRC staff will provide discussion topics and technical requests/questions to the NRC safety project manager, who will then relay the information to the Entergy licensing manager. All break-out sessions will be coordinated via the NRC safety project manager and the Entergy licensing manager.

5. Team Assignments

Assigned Auditor	Area of Review
Emmanuel Sayoc	Project Manager
James Gavula	Chemistry and Corrosion
Brian Allik	Chemistry and Corrosion
William Gardner	Chemistry and Corrosion
Alan Huynh	Chemistry and Corrosion
Sadollah Mohammed	Electrical
Duc Nguyen	Electrical
William Holston	Mechanical and Materials
Aaron Mink	Mechanical and Materials
Bart Fu	Mechanical and Materials
Mark Yoo	Mechanical and Materials
James Medoff	Mechanical and Materials
Seung Min	Mechanical and Materials
Naeem Iqbal	Mechanical and Materials
Amrit Patel	Mechanical and Materials
Angela Buford	Structural
Juan Lopez	Structural
Andrew Prinaris	Structural
Samuel Cuadrado DeJesus	Structural
Bryce Lehman	Structural
George Thomas	Structural
Dan Hoang	Structural

6. Logistics

The regulatory audit will be conducted with an in-office (at NRC HQ) audit portion from October 16, 2017 through November 3, 2017. Entrance and exit briefings will be held at the beginning and end of the in-office audit. Status calls during the in-office (at NRC HQ) audit will take place weekly.

7. Special Requests

The staff requests the applicant to make available the license renewal application program basis documentation and license renewal drawings (hard copy), and their condition report database (electronic version access) for independent searches by the regulatory audit team. Electronic copies of the Key-word Search Results should be made available for the staff's use. Applicant personnel responsible for or involved with the various programs should also be available.

8. Deliverables

An audit report should be issued to Entergy within 90 days from the end of the audit.