



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

May 28, 2019

Mr. Eric Larson, Site Vice President  
Entergy Operations, Inc.  
Grand Gulf Nuclear Station  
P.O. Box 756  
Port Gibson, MS 39150

SUBJECT: GRAND GULF NUCLEAR STATION – NOTIFICATION OF NRC DESIGN  
BASES ASSURANCE INSPECTION (PROGRAMS) ((05000416/2019010) AND  
INITIAL REQUEST FOR INFORMATION

Dear Mr. Larson:

On September 9, 2019, the Nuclear Regulatory Commission (NRC) will begin an inspection at the Grand Gulf Nuclear Station. A three-person team will perform this inspection using NRC Inspection Procedure 71111.21N, "Design Bases Inspection (Programs);" Attachment 1, "Environmental Qualification under 10 CFR 50.49 Programs, Processes, and Procedures."

This inspection will evaluate the implementation of the environmental qualification of electrical equipment program, as required by the Grand Gulf Nuclear Station Operating License. Additionally, the team will perform an inspection of the equipment qualification documentation files to verify that electrical equipment important to safety meets the requirements of 10 CFR 50.49. The team will select components that will be subjected to harsh environments and required to mitigate the consequences of a design basis accident.

The inspection will include an information gathering site visit by the team leader and 2 weeks of onsite inspection by the team. The inspection will consist of three NRC inspectors. The current inspection schedule is as follows:

Onsite Information Gathering Visit: August 12-16, 2019  
Preparation Weeks: August 26–30, 2019, and September 16-20, 2019  
Onsite Weeks: September 9-13, 2019, and September 23-27, 2019

The purpose of the information gathering visit is to meet with members of your staff to become familiar with the Grand Gulf Nuclear Station environmental qualification program. The lead inspector will request a meeting with your personnel to discuss the site environmental qualification program and procedures. Additionally, the lead inspector will request a discussion with your staff to become familiar with the equipment qualification regulations and standards to which the site is committed. Additional information and documentation needed to support the inspection will be identified during the inspection, including interviews with engineering managers and engineers.

Our experience with these inspections has shown that they are resource intensive, both for the NRC inspectors and the licensee staff. In order to minimize the inspection impact on the site and to ensure a productive inspection, we have enclosed a request for information needed for

the inspection. This information should be made available to the lead inspector during the August 12-16, 2019, visit. Since the inspection will be concentrated on the environmental qualification of the equipment, the Equipment Qualification Master List (EQML) should be available to review during the information gathering visit to assist in our selection of components.

It is requested that this information be provided to the lead inspector as the information is generated during the inspection. Additional requests by inspectors will be made during the onsite week for specific documents needed to complete the review of that component/selection. It is important that all of these documents are up-to-date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. In order to facilitate the inspection, we request that a contact individual be assigned to each inspector to ensure information requests, questions, and concerns are addressed in a timely manner.

The lead inspector for this inspection is Mr. Ronald Kopriva. We understand that our licensing engineer contact for this inspection is Mr. Richard Meister. If there are any questions about the inspection or the requested materials, please contact the lead inspector by telephone at 817-200-1104 or by e-mail at [Ron.Kopriva@nrc.gov](mailto:Ron.Kopriva@nrc.gov).

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

**/RA/**

Vincent G. Gaddy, Chief  
Engineering Branch 1  
Division of Reactor Safety

Docket No. 50-416  
License No. NPF-29

Enclosure: Design Bases Inspection (Programs)  
Environmental Qualification Request for Information

cc: Electronic Distribution to Grand Gulf Nuclear Station

**Initial Request for Information  
Design Bases Inspection (Programs), Environmental Qualification  
GRAND GULF NUCLEAR STATION**

Inspection Report: 05000416/2019010

Information Gathering Dates: August 12-16, 2019

Inspection Dates: September 9-13, 2019, and September 23-27, 2019

Inspection Procedure: IP 71111, Attachment 21N, "Design Bases Inspection (Programs)"

Lead Inspector: Ronald A. Kopriva, Senior Reactor Inspector

***I. Information Requested for Information Gathering Visit (August 12, 2019)***

The following information should be provided to the lead inspector in hard copy or electronic format, to the attention of Ronald Kopriva by August 5, 2019, to facilitate the reduction in the items to be selected for a final list of components. The inspection team will finalize the selected list during the prep week using the documents requested in this enclosure. The specific items selected from the lists shall be available and ready for review on the day indicated in this request. \*Please provide requested documentation electronically in "pdf" files, Excel, or other searchable formats, if possible. The information should contain descriptive names, and be indexed and hyperlinked to facilitate ease of use. Information in "lists" should contain enough information to be easily understood by someone who has knowledge of boiling water reactor technology. If requested documents are large and only hard copy formats are available, please inform the inspectors, and provide subject documentation during the first day of the onsite inspection.

1. List of components that are in Equipment Qualification Master List. If plant is approved to categorize structures, systems, and component in accordance with 10 CFR 50.69, please provide the Risk Informed Safety Category of the component.
2. Listing of the Equipment Qualification Master List components sorted by Birnbaum risk importance.
3. List of all post-accident monitoring instrumentation components and locations.
4. Documents which show the environmental service conditions expected for areas in which the equipment qualification components are located.
5. Grand Gulf Nuclear Station, word-searchable Updated Final Safety Analysis Report, License Conditions, and Technical Specifications. Specifically identify which UFSAR sections address environmental (including seismic) qualification, seismic.
6. NRC Safety Evaluation Report(s) associated with Grand Gulf Nuclear Station environmental qualification program.

Enclosure

7. Identify the various environmental qualification standards (including year, edition, or revision) that Grand Gulf Nuclear Station is committed.
8. Identify whether Grand Gulf Nuclear Station has entered its period of extended operation (i.e., operation past the original 40-year license period).
9. Site (and corporate if applicable) procedures associated with the 10 CFR 50.49 environmental qualification program for electrical components. Additionally, please provide similar procedures used to verify mechanical components meet their 10 CFR 50, Appendix A, Criterion 4, "Environmental and Dynamic Effects Design Bases." Include procedures for procurement of qualified equipment, maintenance of qualified equipment, and modification to qualified equipment (including equivalency or commercial grade dedication programs).
10. Site high energy line break analyses, including associated plant area drawings.
11. Procedures for material storage and shelf life controls.
12. List of commercial grade dedication evaluations performed, for which the dedicated parts have been issued for installation on equipment qualification applications in the plant, for the previous 5 years. Include description of the component the part was issued to repair, work order, and date issued or installed.
13. List of condition reports related to the equipment qualification program or environmental qualification of components (both electrical and mechanical) for the previous 5 years.
14. Lists of modifications, repairs, or replacement of Equipment Qualification Master List components completed for the previous 5 years.
15. List of modifications, repairs, or replacements of containment penetrations for the previous 5 years.
16. List of components removed from the environmental qualification program since beginning of operation.
17. Any self-assessments and quality assurance assessments of the environmental qualification program performed in the previous 5 years.
18. List of systems, system numbers/designators and corresponding names.
19. List of site contacts that will be associated with the inspection.

## ***II. Discussions Requested***

1. Interview with representative to discuss site environmental qualification service condition analyses for plant areas, including plant drawings and assumptions. This includes analysis for areas that are subject to high energy line breaks (HELB).

2. Interview with representative to discuss environmental qualification mandated maintenance elements are integrated into plant programs and procedures.
3. Interview with representative to discuss maintaining qualification for plant/equipment that has entered its period of extended operation, if applicable.

**III. Information Requested for Inspection Preparation (September 9, 2019)**

1. Equipment qualification documentation files, including test reports, for the electrical components selected by the lead inspector listed on the Equipment Qualification Master List.
2. References associated with the electrical components equipment qualification document files.
3. Vendor manuals and technical sheets associated with the selected electrical components.
4. Tours of the rooms in which the selected electrical components are installed.
5. Tour of stored selected electrical components in the warehouse.

Inspector Contact Information:

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Senior Reactor Inspector  
817-200-1104  
Ron.Kopriva@nrc.gov

Wes Cullum  
Reactor Inspector  
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Wes.Cullum@nrc.gov

Dustin Reinert  
Reactor Inspector  
817-200-1534  
Dustin.Reinert@nrc.gov

Mailing Address:

U.S. NRC, Region IV  
Attn: Ronald Kopriva  
1600 East Lamar Blvd.  
Arlington, TX 76011-4511

GRAND GULF NUCLEAR STATION – NOTIFICATION OF NRC DESIGN BASES  
ASSURANCE INSPECTION (PROGRAMS) ((05000416/2019010) AND INITIAL REQUEST  
FOR INFORMATION – MAY 28, 2019

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ADAMS ACCESSION NUMBER: ML19148A525

☒ SUNSI Review: ADAMS: ☐ Non-Publicly Available ☒ Non-Sensitive Keyword: NRC-002  
By: RAK ☒ Yes ☐ No ☒ Publicly Available ☐ Sensitive

OFFICE	SRI:EB1	C:EB1	C:PBC	C:EB1		
NAME	RKopriva	VGaddy	JKozal	VGaddy		
SIGNATURE	/RA/	/RA/	/RA/	/RA/		
DATE	05/22/2019	05/22/2019	05/27/2019	05/28/2019		

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