



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 E. LAMAR BLVD
ARLINGTON, TX 76011-4511

June 5, 2017

Mr. Richard L. Anderson, Vice President
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802-0967

**SUBJECT: ARKANSAS NUCLEAR ONE – NOTIFICATION OF NRC DESIGN BASES
ASSURANCE INSPECTION (PROGRAMS) (05000313/2017007;
05000368/2017007) AND INITIAL REQUEST FOR INFORMATION**

Dear Mr. Anderson:

On July 11, 2017, the NRC will begin an inspection at Arkansas Nuclear One. A three-person team will perform this inspection using NRC Inspection Procedure 71111.21N, "Design Bases Assurance 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 the electrical equipment program, as required by the Arkansas Nuclear One, Units 1 and 2, Operating Licenses. 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 two weeks of on-site inspection by the team. The inspection will consist of three NRC inspectors. The current inspection schedule is as follows:

On-site Information Gathering Visit: July 11, 2017
Preparation Week: July 17–21, 2017
On-site Weeks: July 24–28, 2017, and August 7–11, 2017

The purpose of the information gathering visit is to meet with members of your staff to become familiar with the Arkansas Nuclear One, Units 1 and 2, environmental qualification programs. 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

information gathering visit, July 11, 2017. Since the inspection will be concentrated on environmental qualification, the equipment qualification master list 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 on-site 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 on-site 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 James Drake. If there are any questions about the inspection or the requested materials, please contact the lead inspector by telephone at 817-200-1558 or by email at James.Drake@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.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Thomas R. Farnholtz, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6

Enclosure:
Request for Information

cc: Electronic Distribution

**Initial Request for
Information
Design Bases Inspection (Programs), Environmental
Qualification
Arkansas Nuclear One
Units 1 and 2**

Inspection Report: 05000313/2017007, 05000368/2017007

Information Gathering Dates: July 11, 2017

Inspection Dates: July 24 to August 11, 2017

Inspection Procedure: IP 71111.21N, "Design Bases Assurance Inspection (Programs)," Attachment 1, "Environmental Qualification under 10 CFR 50.49 Programs, Processes, and Procedures"

Lead Inspector: James Drake, Senior Reactor Inspector

I. Information Requested for Information Gathering Visit (July 11, 2017)

The following information should be provided to the lead inspector in hard copy or electronic format (Certrec IMS preferred), to the attention of James Drake by July 11, 2017, 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 one 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 pressurized water reactor technology. If requested documents are large and only hard copy formats are available, please inform the inspector(s), and provide subject documentation during the first day of the on-site 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. Arkansas Nuclear One Units 1 and 2 word-searchable updated final safety analysis report (UFSAR), License Conditions, and technical specifications. Specifically identify which UFSAR sections address environmental (including seismic) qualification, seismic.
6. NRC Safety Evaluation Report(s) associated with Arkansas Nuclear One, Units 1 and 2, environmental qualification programs.
7. Identify the various environmental qualification standards (including year, edition, or revision) that Arkansas Nuclear One is committed to.
8. Identify whether Arkansas Nuclear One, Units 1 and 2, have 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 Part 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 five 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 during the previous 20 years.
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.

II. Discussions Requested

1. Interview with representative to discuss site high energy line break (HELB) analyses, plant drawings, and assumptions.
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 (July 17, 2017)

1. Equipment qualification documentation files, including test reports for electrical components listed on the equipment qualification master list selected by the inspectors.
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. Tours of stored electrical components in the warehouse.

Inspector Contact Information: (Third inspector to be determined)

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Reactor Inspector
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Mailing Address:

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

R. Anderson

ARKANSAS NUCLEAR ONE – NOTIFICATION OF NRC DESIGN BASES ASSURANCE
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SUNSI Review ADAMS: Non-Publicly Available Non-Sensitive Keyword:
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