



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

March 22, 2021

Mr. John Dinelli, Site Vice President
Arkansas Nuclear One
Entergy Operations, Inc.
N-TSB-58
1448 S.R. 333
Russellville, AR 72802-0967

SUBJECT: ARKANSAS NUCLEAR ONE - NOTIFICATION OF NRC DESIGN BASES
ASSURANCE INSPECTION (TEAM) (05000313/2021010 AND
05000368/2021010) AND INITIAL REQUEST FOR INFORMATION

Dear Mr. Dinelli:

On May 17, 2021, U.S. Nuclear Regulatory Commission (NRC) staff will begin a triennial baseline Design Bases Assurance Inspection at Arkansas Nuclear One. A team of five inspectors will perform this inspection using NRC Inspection Procedure 71111.21M, "Design Bases Assurance Inspection (Team)."

This inspection of component design bases and modifications made to structures, systems, and components (SSCs) verifies that plant components are maintained within their design basis. This inspection also provides monitoring of the capability of the selected components and operator actions to perform their design bases functions. Additionally, this inspection verifies that risk significant issues resulting from generic communications have been adequately addressed.

This inspection requires a review of 8-12 risk informed samples and 1-3 operating experience samples. Risk informed samples will consist of 4-6 components and 4-6 modifications. The samples reviewed during this inspection will be identified during an information gathering visit and/or during the subsequent in-office preparation week.

The inspection will include an information gathering site visit by the lead inspector and two weeks of onsite inspection by the entire team. The current inspection schedule is as follows:

Onsite Information Gathering Visit: May 17-20, 2021
Inspection Preparation Weeks: June 1-4 and June 21-25, 2021
Onsite Inspection Weeks: June 14-18 and June 28 – July 2, 2021

Our experience with these inspections has shown that they are extremely resource intensive, both for the NRC inspectors and the licensee staff. To minimize the inspection impact on the site and to ensure an efficient inspection, we have enclosed an initial request for information needed for the inspection. The request has been divided into three groups. Generally, the first group lists information necessary for the information gathering visit and for overall preparation; the second group of information lists information necessary for sample-specific inspection

preparation; and the third group lists information necessary throughout the remainder of the inspection. This information should be provided electronically by the dates listed in the enclosure (and should also be sorted in a consistent manner). If this is not possible, please inform the lead inspector as soon as practicable. Additionally, it is important that this information is up-to-date and complete in order to minimize the number of additional documents requested during the preparation and/or onsite portions of the inspection. Finally, we request that a contact individual be assigned to each inspector to ensure information requests, questions, and concerns are addressed in a timely manner.

As stated, the first group of information is intended to aid the lead inspector during the information gathering visit to identify potential risk-significant SSCs, operator actions, operating experience, and modification samples. The lead inspector will also request a tour of the plant with members of your operations staff and probabilistic safety assessment staff. Additional information and/or documentation needed to support the inspection may be identified during the visit, including interviews with engineering managers, engineers, and probabilistic safety assessment staff. Between the information gathering visit and the initial preparation, the lead inspector will choose the inspection samples and communicate them to your staff. Please note that the team may make changes to the sample selections during the preparation week.

Similarly, the second group of information is intended to provide sample-specific information to the inspection team. Please note that the inspection team may identify additional information and/or documentation needed to support the inspection during the initial preparation week. This information will be communicated by the lead inspector as soon as practicable. This information may include requests for plant tours, interviews with staff, etc. during the onsite portions of the inspection.

Finally, the third group of documents requested lists information necessary to aid the inspection team in tracking issues identified as a result of the inspection. It is requested that this information be provided to the lead inspector as the information is generated during the inspection. Please also note that additional requests by inspectors will also be made throughout the onsite weeks for specific documents needed to complete the review, which may also include additional plant tours, interviews with staff, etc.

The lead inspector for this inspection is Wayne Sifre. We understand that our licensing engineer contact for this inspection is Ms. Natalie Mosher. If there are any questions about the inspection or the requested materials, please contact the lead inspector by telephone at 817-200-1193 or by e-mail at wayne.sifre@nrc.gov.

PAPERWORK REDUCTION ACT STATEMENT

This letter contains mandatory information collections that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). The Office of Management and Budget (OMB) approved these information collections (approval number 3150-0011). Send comments regarding this information collection to the Information Services Branch, Office of the Chief Information Officer, Mail Stop: T6 A10M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0011) Office of Management and Budget, Washington, DC 20503.

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The NRC may not conduct nor 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 OMB control number.

In accordance with Title 10 of the *Code of Federal Regulations* Section 2.390 of the NRC's "Rules of Practice and Procedure," 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 component of NRC's document system 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).

Sincerely,

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

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

Enclosure: Design Bases Assurance
Inspection (Team) Initial Request for Information

cc: Electronic Distribution via LISTSERV®

ARKANSAS NUCLEAR ONE - NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (TEAM) (05000313/2021010 AND 05000368/2021010) AND INITIAL REQUEST FOR INFORMATION DATED MARCH 22, 2021

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**Initial Request for Information
Design Bases Assurance Inspection (Team)
Arkansas Nuclear One**

Inspection Report: 05000313/2021010 and 05000368/2021010

EPID ID: I-2021-010-0021

Information Gathering Dates: May 17-20, 2021

Inspection Dates: June 14-18 and June 28 – July 2, 2021

Inspection Procedure: IP 71111.21M, "Design Bases Assurance Inspection (Team)"

Lead Inspector: Wayne Sifre, Senior Reactor Inspector

I. Information Requested for the Information Gathering Visit (May 17, 2021)

1. An Excel spreadsheet of equipment basic events (with definitions), including importance measures sorted by risk achievement worth and Fussell-Vesely from your internal events probabilistic risk assessment. Include basic events with risk achievement worth value of 1.3 or greater.
2. A list of the top 50 cut-sets from your PRA.
3. Copies of probabilistic risk assessment "system notebooks" and the latest probabilistic risk assessment summary document.
4. An Excel spreadsheet of probabilistic risk assessment human action basic events or risk ranking of operator actions from your site-specific PSA sorted by risk achievement worth and Fussell-Vesely. Provide copies of your human reliability worksheets for these items.
5. If you have an external events or fire PSA model, provide the information requested in items 1-4 for external events and fire.
6. A list, if available, of low design margin components.
7. A list of high large early release frequency impact events and associated components.
8. Structures, systems, and components in the Maintenance Rule (a)(1) category.
9. A list of high-risk maintenance rule systems/components and functions; based on engineering or expert panel judgment.
10. Site top 10 issues list, if available.

Enclosure

11. Any pre-existing list of components and associated calculations with low design margins.
12. A list of operating experience evaluations for the last 3 years.
13. A list of all time-critical or time-sensitive operator actions in procedures.
14. A list of current "operator work arounds/burdens."
15. Procedures, including emergency and abnormal, used to accomplish operator actions associated with the basic events credited in your PRA.
16. Lists of permanent and temporary modifications performed in the past 5 years to structures, systems, and components sorted by component identified in Item 1.
17. List of root cause evaluations associated with component failures or design issues initiated/completed in the last 5 years.
18. A list of any common-cause failures of components in the last 3 years.
19. A copy of any internal/external self-assessments and associated corrective action documents generated in preparation for this inspection.
20. A copy of engineering/operations-related audits completed in the last 2 years.
21. Electronic copies of the Technical Specifications, Technical Specifications Bases, and the Final Safety Analysis Report, as updated.
22. A copy of the Individual Plant Examination of External Events, if available electronically.
23. One-line drawings of emergency core cooling system, ultimate heat sink, emergency feedwater, safety-related electrical systems.
24. A copy of condition reports associated with inspection findings from the previous NRC Inspection Procedure 71111.21 (or 71111.21 Attachment M inspection).
25. A list of licensee contacts for the inspection team with phone numbers.
26. A copy of the current management and engineering organizational charts.

II. Information Requested for the Inspection Preparation Week (June 1, 2021)

1. Electronic copies of the design bases documents (or system descriptions) for selected components and modifications.
2. Electronic copies of the system health notebooks for selected components and modifications.
3. A list of relevant design calculations.

4. Calculations and drawings associated with selected components.
5. Modification documentation associated with modifications selected. This includes:
 - a. Post-modification testing, including performance characteristics affected, assumptions, and acceptance criteria associated with modifications selected.
 - b. Updated maintenance and surveillance procedures associated with modifications.
 - c. Updated operation procedures and training plans associated with the modifications.

III. Information Requested Throughout Inspection (June 14, 2021)

1. Copies of any corrective action documents generated as a result of the team's questions or queries during this inspection.
2. Copies of the list of questions submitted by the team members and the status/resolution of the information requested (provide daily during the inspection to each team member).

Inspector Contact Information:

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