



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

May 9, 2018

Mr. Richard L. Anderson, Vice President
Entergy Operations, Inc.
Arkansas Nuclear One
1448 SR 333
Russellville, AR 72802-0967

SUBJECT: ARKANSAS NUCLEAR ONE UNITS 1 AND 2 – NOTIFICATION OF
INSPECTION (NRC INSPECTION REPORT 05000368/2018003) AND
REQUEST FOR INFORMATION

Dear Mr. Anderson:

During the week of July 9, 2018, inspectors from the U.S. Nuclear Regulatory Commission's (NRC) Region IV office will perform the baseline biennial requalification inspection at Arkansas Nuclear One Units 1 and 2, using NRC Inspection Procedure 71111.11B, "Licensed Operator Requalification Program." Experience has shown that this inspection is a resource intensive inspection for both the NRC inspectors and your staff. In order to minimize the impact to your onsite resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. These documents have been divided into three groups. The first group (Section A of the enclosure) identifies information to be provided prior to the inspection to ensure that the inspectors are adequately prepared. The second group (Section B of the enclosure) identifies the information the inspectors will need upon arrival at the site. The third group (Section C of this enclosure) identifies the items, which are necessary to close out the inspection and are usually sent a few weeks after the team has left the site. 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.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Mr. R. Martin of your training organization. Our inspection dates are subject to change based on your updated schedule of examination activities. If there are any questions about this inspection or the material requested, please contact the lead inspector Nicholas Hernandez at (361) 972-2507, Nicholas.Hernandez@nrc.gov (Unit 1), or Mahdi Hayes at (817) 200-1508, Mahdi.Hayes@nrc.gov (Unit 2).

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 3150-0018. 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.

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Sincerely,

/RA/

Vincent G. Gaddy, Chief
Operations Branch
Division of Reactor Safety

Dockets: 50-313, 50-368
Licenses: DPR-51, NPF-6

Enclosure:
Biennial Requalification Inspection
Document Request

cc w/encl: Electronic Distribution

ARKANSAS NUCLEAR ONE UNITS 1 AND 2 – NOTIFICATION OF INSPECTION (NRC INSPECTION REPORT 05000368/2018003) AND REQUEST FOR INFORMATION – DATED MAY 9, 2018.

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BIENNIAL REQUALIFICATION INSPECTION DOCUMENT REQUEST

From: Nicholas Hernandez
Resident Inspector, NRC RIV
361-972-2507

Mahdi Hayes
Operations Engineer, NRC RIV
817-200-1508

To: Randal Martin
Training Superintendent
479-858-6844

Subj: Information Request to Support week of July 9, 2018, Licensed Operator Requalification Program Inspection (IP 71111.11B)

A. The following information is requested in order to support inspection preparation activities. These items are listed by section as they appear in the inspection module (ie 2.02, 2.04, etc). Requested materials should be sent either electronically or hardcopy in order to arrive at the Region IV office no later than June 20, 2018.

- Electronically: To: Nicholas.Hernandez@nrc.gov, Mahdi.Hayes@nrc.gov
- Hardcopy to: US Nuclear Regulatory Commission, Region IV
1600 E. Lamar Blvd
Arlington, TX 76011
ATTN: Mahdi Hayes

General Requests:

- List of licensed operators (SRO & RO) by crew (operating & staff)
- Training and Operations Department organization charts (with qualified LOR evaluators identified)
- Procedures that identify process for revising and maintaining LO continuing training program up to date
- List of outstanding LOR program changes
- List of plant events and industry operating experience incorporated into LOR program since last BRQ
- Audits and/or self-assessment reports addressing the licensed operator requalification training program
- Last two years of simulator review committee (or equivalent) meeting minutes
- Last two years of CRC (or equivalent) meeting minutes

02.03: Biennial Requalification Written Examination Quality

- The current and approved biennial written examination schedule
- The current requalification cycle written examination results for both SRO & RO that have already been administered up to the week prior to the inspection team arrival onsite.
- **All** written examinations that have been approved for administration up to and including the week before the inspection team is onsite. This will need to have adequate password protection if e-mailed or double envelope protection if mailed via regular mail per NUREG-1021.
- The current requalification cycle examination methodology (sample plan)

Enclosure

02.04: Annual Requalification Operating Test Quality

- The schedule for the operating tests (JPMs & scenarios) to be given the week of July 9, 2018 (week team is onsite)
- The operating tests (JPMs & scenarios) (password protected and provide separately via telephone at later date) to be given the week of July 9, 2018 (week team is onsite)
- Current requalification cycle operating tests (SRO & RO) and results up to the week prior to the inspection team arrival onsite.
- **All** of the previous year's NRC required annual operating tests.
- Current requalification cycle operating test methodology (sample plan)
- All portions of the UFSAR that identify operator response times for time critical operator actions

02.05: Licensee Admin of Requal Exams

- All procedures used to administer the annual operating test
- All procedures used to assess operator performance
- All procedures that describe conduct of simulator training
- All Procedures used to test, operate, and maintain the simulator

02.06: Requalification Examination Security

- Submit any tracking tools that you use as a means to prevent excessive overlap on the written examinations and also meet the intent of sampling all required topics on a periodic basis.
- Submit any tracking tools that you use as a means to prevent excessive overlap on the operating tests and also meet the intent of sampling all required malfunctions (including major events, instrument/component malfunctions, TS calls, etc) on a periodic basis.
- All Procedures that describe examination security, including procedures used to develop the examinations that include guidelines on overlap between examinations in current exam cycle tests and prior year examinations
- List of all Condition Reports since the last biennial requal inspection related to examination security and overlap

02.07: Licensee Remedial Training Program

- List of remedial training conducted or planned since last requal exams (includes training provided to operators to enable passing requal exams and training provided to correct generic or individual weaknesses observed during previous requal exam cycle)
- Remediation plans (lesson plans, reference materials, and attendance documentation)

02.08: Conformance with Operator License Conditions

- All Procedures and Program documentation for maintaining active operator licenses, tracking training attendance, and ensuring medical fitness of licensed operators
- All Procedures and associated documentation that supports reactivation of any SRO/RO license (operating or staff crew) since the last biennial inspection

02.09: Simulator Performance

- For the following cases, send the most recent transient test packages, which may be electronic or in paper single test packages and shall be complete with test

procedures for each test, the acceptance criteria, and results. For each transient test, the reference chart should be included or an equivalent subject matter expert review versus the simulator results with a write-up for any differences beyond the ANSI 3.5 standard requirements.

- Transient test 3, Simultaneous closure of all main steam isolation valves
 - Transient test 4, Simultaneous trip of all reactor coolant pumps
 - Transient test 8, Maximum size reactor coolant system rupture combined with loss of all offsite power
 - Steady State tests for medium power test
- All Simulator Management and Configuration Procedures if not already provided for section 02.05 above.
 - Simulator Discrepancy Report **summary** list for all open DR's. For closed DR's, **summary** list for those items closed between June 2016 and May 2018.
 - Primary parameters tested in order to verify core physics parameters (such as moderator temperature coefficient (MTC), integral rod worth (IRW)). The applicable reference graphs from the Plant physics data book (electronic or other means as available) should also be included as well as the test procedures used and the acceptance criteria with results.
 - All simulator modification packages that are on hold, delayed, or not completed in the last two years.
 - A list of simulator modification packages completed in the last two year window.

02.10: Problem Identification and Resolution

- A summary report of all condition reports related to operator actions/errors in the control room
- Any revised requalification training that was based on licensed operator performance issues

B. The following information is requested in order to support the onsite inspection activities. Requested materials should be available to the inspection team, either electronically or hardcopy, upon site arrival on July 9, 2018.

02.02: Exam Results / 02.03 and 02.04: Written Exam and Op Test Quality

- All Operating tests (JPMs & scenarios) to be given in all subsequent weeks after onsite week
- All results up to the day the team leaves the site.

02.08: Conformance with Operator License Conditions

- Access to licensed operators' records (operating and staff crews)
- Access to licensed operators' training attendance records
- Access to licensed operators' medical records

02.09: Simulator Performance

- Simulator discrepancies (DR's) from July 12, 2016 to July 9, 2018. This should include all open DR's and DR's that have been closed, including the documentation/justification for closure.
- Acceptance test documentation, including hardware and software model revisions at the time of acceptance (as available).

- Documentation that validates current models, including the thermal-hydraulics and neutronics models, to the actual plant.
- All current model deficiencies, including FSAR vs Design differences in the simulator (any documentation on this)
- Summary list of modifications from July 12, 2016 to July 9, 2018.
- Plant Modifications (both hardware and software) completed on the Simulator by due date from July 12, 2016 to July 9, 2018.
- Simulator Differences Lesson plan used in training (current to July 9, 2018).
- The complete book of all Simulator annual performance test packages (usually in a single book, but may be electronic or in single test packages), complete with all transient tests, steady state tests, and malfunction tests. This should also include the test procedures for each test, the acceptance criteria, and results. For each transient test, the reference chart should be included or an equivalent subject matter expert review versus the simulator results with a write-up for any differences beyond the ANSI standard requirements.
- All test packages used to verify core physics parameters (such as MTC, IRW). The applicable reference graphs from the Plant physics data book (electronic or other means as available) should also be included as well as the test procedures used and the acceptance criteria with results.
- All Simulator test, configuration management, and related documents available in the room for inspectors to review. This includes training needs analysis packages, simulator review committee meeting minutes, etc.
- Current copy of ANSI 3.5 standard you are committed to for Simulator testing.

02.10: Problem Identification and Resolution

- All condition reports related to operator actions/errors in the control room

C. Arkansas Nuclear One is required to send the final results summary and any remaining exams and operating tests that have not been reviewed to the regional office lead inspector for this inspection for final review and comparison against the Significance Determination Tools in order to communicate the exit results for the inspection.