



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

February 16, 2012

Christopher J. Schwartz, Site Vice President
Arkansas Nuclear One
Entergy Operations, Inc.
1448 SR 333
Russellville, AR 72802-0967

SUBJECT: ARKANSAS NUCLEAR ONE - NOTIFICATION OF NRC INITIAL OPERATOR
LICENSING EXAMINATION 05000313/2013301

Dear Mr. Schwartz:

In a telephone conversation on February 14, 2012, between Messrs. R. Martin, Operations Training Superintendent, and C. Osterholtz, Chief Examiner, arrangements were made for the administration of licensing examinations at Arkansas Nuclear One, Unit 1, during the week of February 25, 2013.

As agreed during the telephone conversation, the staff of the U.S. Nuclear Regulatory Commission (NRC) will prepare the written examinations based on the guidelines in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1, and NUREG-1122, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators," Revision 2, Supplement 1. Your staff will be given the opportunity to review the written examinations during the week of September 17, 2012. In addition, your staff will prepare the operating examinations in accordance with NUREG-1021 and NUREG-1122. The NRC's regional office will discuss with your staff any changes that might be necessary before the examinations are administered.

To meet the above schedule, it will be necessary for your staff to furnish the supporting reference materials, identified in Attachment 3 to ES-201 and enclosed with this letter, by March 5, 2012. We request that any personal, Proprietary, Sensitive Unclassified, or Safeguards information in your response be contained in a separate enclosure and appropriately marked. Any delay in receiving the required reference materials, or the submittal of inadequate or incomplete materials, may cause the examinations to be rescheduled. In addition, your support for on-site validation of the examinations is required during the week of January 28, 2013.

In order to conduct the requested written examinations and operating tests, it will be necessary for your staff to provide adequate space and accommodations in accordance with ES-402, and to make the simulation facility available on the dates noted above. In accordance with ES-302, your staff should retain the original simulator performance data (e.g., system pressures, temperatures, and levels) generated during the dynamic operating tests until the examination results are final.

Appendix E to NUREG-1021 contains a number of NRC policies and guidelines that will be in effect while the written examinations and operating tests are being administered.

To permit timely NRC review and evaluation, your staff should submit preliminary operator and senior operator license applications (Office of Management and Budget (OMB) approval number 3150-0090), medical certifications (OMB approval number 3150-0024), and waiver requests (if any) (OMB approval number 3150-0090) at least 30 days before the first examination date. If the applications are not received at least 30 days before the examination date, a postponement may be necessary. Signed applications certifying that all training has been completed should be submitted at least 14 days before the first examination date.

This letter contains information collections that are subject to the *Paperwork Reduction Act of 1995* (44 U.S.C. 3501 et seq.). These information collections were approved by OMB, under approval number 3150-0018, which expires on February 28, 2013. The public reporting burden for this collection of information is estimated to average 500 hours per response, including the time for reviewing instructions, gathering and maintaining the data needed, writing the examinations, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of these information collections, including suggestions for reducing the burden, to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet electronic mail to INFOCOLLECTS@NRC.GOV.

The NRC may neither conduct nor sponsor, and a person is not required to respond to, an information collection, unless it displays a currently valid OMB control number.

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

Thank you for your cooperation in this matter. Mr. R. Martin has been advised of the policies and guidelines referenced in this letter. If you have any questions regarding the NRC's examination procedures and guidelines, please contact Mr. C. Osterholtz, Chief Examiner, at 817-200-1269, or myself at 817-200-1159.

Sincerely,

/RA/ Steve Garchow for

Mark S. Haire, Chief
Operations Branch
Division of Reactor Safety

Docket: 50-313
License: DPR-51

C. Schwartz

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Enclosure:
Supporting Reference Materials

Distribution via Electronic Mail

Electronic distribution by RIV:

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R:\

ADAMS ML

ADAMS: ☐ No ☒ Yes		☒ SUNSI Review Complete	Reviewer Initials: KDC
		☒ Publicly Available	☒ Non-Sensitive
		☐ Non-publicly Available	☐ Sensitive
SOE: DRS/OB	C:DRS/OB		
CCO	MSH		
/RA/	/RA/ S. Garchow for		
2/16/12	2/16/12		

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SUPPORTING REFERENCE MATERIALS

This enclosure discusses the reference materials that Arkansas Nuclear One, Unit 1, is expected to provide to the NRC in order to prepare its initial licensing written examination. This list has been customized by the Region IV Office to support the NRC development of initial written examinations scheduled to be administered on February 22, 2013. The regional office may request additional materials at a later time, if necessary, to ensure the accuracy and validity of the examinations.

The regional office has duly considered the administrative burden it places on the facility licensee and is requesting only those materials that are actually necessary for the NRC examiners to prepare for the examinations.

All reference materials provided for the license examinations should be approved, final issues and should be so marked; any personal, proprietary, sensitive, or safeguards information should be marked and submitted in a separate enclosure. If any of the material is expected to change before the scheduled examination date, the facility licensee should reach agreement with the NRC chief examiner regarding changes before the examinations are administered.

Arkansas Nuclear One, Unit 1, staff have agreed to submit the reference materials on computer diskettes (in a format that is compatible with the NRC's word processing software) that are properly indexed. Failure to submit these resources in a timely fashion or incomplete submittals may prompt the NRC to return the materials and possibly postponing the examinations.

Unless otherwise instructed by the NRC's regional office, the facility licensee is expected to provide **all** of the following reference materials for this NRC initial licensing examination:

1. Materials used by the facility licensee to ensure operator competency
 - a. The following types of materials used to train applicants for initial RO and SRO licensing, as necessary to support examination development:
 - learning objectives, student handouts, and lesson plans
 - system descriptions, drawings, and diagrams of all operationally relevant flow paths, components, controls, and instrumentation
 - material used to clarify and strengthen understanding of normal, abnormal, and emergency operating procedures
 - complete, operationally useful descriptions of all safety system interactions and, where available, balance-of-plant system interactions under emergency and abnormal conditions, including consequences of anticipated operator errors, maintenance errors, and equipment failures, as well as plant-specific risk insights based on a probabilistic risk analysis(PRA) and individual plant examination (IPE)

These materials should be complete, comprehensive, and of sufficient detail to support the development of accurate and valid examinations without being redundant.

- b. Questions and answers specific to the facility training program that may be used in the written examinations or operating tests
 - c. Copies of facility-generated simulator scenarios that expose the applicants to abnormal and emergency conditions, including degraded pressure control, degraded heat removal capability, and containment challenges, during all modes of operation, including low-power conditions (a description of the scenarios used for the training class may also be provided). This scenario bank should include an index.
 - d. All JPMs used to ascertain the competence of the operators in performing tasks within the control room complex and outside the control room (i.e., local operations) as identified in the facility's job task analysis (JTA) (JPMs should evaluate operator responsibilities during normal, abnormal, and emergency conditions and events, and during all modes of operation including cold shutdown, low power and full power). This JPM bank should include an index.
 - e. All Written examination questions maintained in all question bank(s) with an included index (including all SRO-only questions)
2. Complete index of procedures (including all categories sent)
 3. All administrative procedures applicable to reactor operation or safety
 4. All integrated plant procedures (normal or general operating procedures)
 5. All emergency procedures (emergency instructions, abnormal or special procedures) including their bases documents.
 6. Standing orders (important orders that are safety-related and may modify the regular procedures)
 7. Surveillance procedures that are run frequently (i.e., weekly) or that can be run on the simulator
 8. Fuel handling and core loading procedures
 9. All annunciator and alarm procedures
 10. Radiation protection manual (radiation control manual or procedures)
 11. Emergency plan implementing procedures
 12. Technical Specifications or similar technical requirements documents (and interpretations, if available) for all units for which licenses are sought
 13. System operating procedures

14. Technical data book and plant curve information used by operators, as well as the facility precautions, limitations, and set points document
15. The following information pertaining to the simulation facility:
 - a. list of all initial conditions
 - b. list of all malfunctions with identification numbers and cause-and-effect information, including a concise description of the expected result or range of results that will occur upon initiation and an indication of which annunciators will be actuated as a result of the malfunction
 - c. a description of the simulator's failure capabilities for valves, breakers, indicators, and alarms
 - d. the range of severity of each variable malfunction (e.g., the size of a reactor coolant or steam leak, or the rate of a component failure such as a feed pump, turbine generator, or major valve)
 - e. a list of modeling conditions (e.g., simplifications, assumptions, and limits) and problems that may affect the examination
 - f. a list of any known performance test discrepancies not yet corrected
 - g. a list of differences between the simulator and the reference plant's controlroom
 - h. simulator instructor's manual
16. Complete Simulator Malfunction index of all available items (component and instrument malfunctions) that can and have been run on the simulator