



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

June 3, 2010

Mr. J. Randy Johnson
Vice President - Farley
Southern Nuclear Operating Company, Inc.
7388 North State Highway 95
Columbia, AL 36319

SUBJECT: REACTOR AND SENIOR REACTOR OPERATOR INITIAL EXAMINATIONS -
JOSEPH M. FARLEY NUCLEAR PLANT 05000348/2010301 AND
05000364/2010301

Dear Mr. Johnson:

During the period of April 5 - 9, 2010, the Nuclear Regulatory Commission (NRC) administered operating tests to employees of your company who had applied for licenses to operate the Farley Nuclear Plant. At the conclusion of the examination, the examiners discussed the examination questions and preliminary findings with those members of your staff identified in the enclosed report. The written examination was administered by your staff on April 13, 2010.

Three Senior Reactor Operator (SRO) applicants passed both the written and operating examinations. Two SRO applicants and one RO applicant did not pass the written examination. There were two post examination comments. These comments and the NRC resolution of these comments are summarized in Enclosure 2. A Simulation Facility Report is included in this report as Enclosure 3.

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 Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If you have any questions concerning this letter, please contact me at (404) 997-4550.

Sincerely,

/Bruno Caballero RA for/

Malcolm T. Widmann, Chief
Operations Branch
Division of Reactor Safety

Docket Nos.: 50-348, 50-364
License Nos.: NPF-2, NPF-8

cc w/encl: (See page 2)

Enclosures: 1. Report Details
2. NRC Post Examination Comment Resolution
3. Simulation Facility Report

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SIGNATURE	MAB /RA/	BLC /RA for/							
NAME	MBates	MWidmann							
DATE	06/03/2010	06/03/2010							
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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(cc w/encl continued next page)

SNC

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(cc w/encl continued)

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4

Letter to J. Randy Johnson from Malcolm T. Widmann dated June 3, 2010

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT - NRC INTEGRATED INSPECTION
REPORT 05000348/2010 AND 05000364/2010

Distribution w/encl:

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NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 50-348, 50-364

License No.: NPF-2, NPF-8

Report No.: 05000348/2010301, 05000364/2010301

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Joseph M. Farley Nuclear Plant

Location: Columbia, AL 36319

Dates: Operating Test – April 5 – 9, 2010
Written Examination – April 13, 2010

Examiners: M. Bates, Chief Examiner, Senior Operations Engineer
G. Laska, Senior License Examiner
M. Meeks, Operations Engineer

Approved by: Malcolm T. Widmann, Chief
Operations Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000348/2010301, 05000364/2010301, April 5-9, 2010 and April 13, 2010; Farley Nuclear Plant; Licensed Operator Examinations.

Nuclear Regulatory Commission (NRC) examiners conducted operator licensing initial examinations in accordance with the guidance in NUREG-1021, Revision 9, Supplement 1, "Operator Licensing Examination Standards for Power Reactors." This examination implemented the operator licensing requirements of 10 CFR §55.41, §55.43, and §55.45.

Members of the Farley Nuclear Plant staff developed both the operating tests and the written examination.

The NRC administered the operating tests during the period of April 5 - 9, 2010. Members of the Farley Nuclear Plant training staff administered the written examination on April 13, 2010. Three Senior Reactor Operator (SRO) applicants passed both the written and operating examinations. Two SRO applicants and one RO applicant did not pass the written examination. One Senior Reactor Operator (SRO) applicant was issued an operating license commensurate with the level of examination administered. One SRO applicant was issued a letter stating that he passed both the written and operating examinations and that his license will not be issued until the conclusion of any pending appeals. One SRO applicant was issued a letter stating that he passed both the written and operating examinations and that his license will not be issued until the NRC is notified in writing that he has completed the experience requirements detailed in the procedures governing Farley's initial license training program.

There were two post examination comments.

No findings of significance were identified.

REPORT DETAILS

2. OTHER ACTIVITIES

40A5 Operator Licensing Initial Examinations

a. Inspection Scope

Members of the Farley Nuclear Plant training staff developed both the operating tests and written examinations. All examination material was developed in accordance with the guidelines contained in Revision 9, Supplement 1, of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." The NRC examination team reviewed the proposed examination. Examination changes agreed upon between the NRC and the licensee were made per NUREG-1021 and incorporated into the final version of the examination materials.

The NRC reviewed the licensee's examination security measures while preparing and administering the examinations in order to ensure compliance with 10 CFR 55.49, "Integrity of examinations and tests."

The examiners evaluated one Reactor Operator (RO) applicant and five Senior Reactor Operator (SRO) applicants who were being assessed under the guidelines specified in NUREG-1021. The examiners administered the operating tests during the period of April 5 – 9, 2010. Members of the Farley Nuclear Plant training staff administered the written examination on April 13, 2010. Evaluations of applicants and reviews of associated documentation were performed to determine if the applicants, who applied for licenses to operate the Farley Nuclear Plant, met the requirements specified in 10 CFR Part 55, "Operators' Licenses."

b. Findings

No findings of significance were identified. The NRC determined, using NUREG-1021, that the licensee's initial examination submittal was within the range of acceptability expected for a proposed examination.

Three Senior Reactor Operator (SRO) applicants passed both the written and operating examinations. Two SRO applicants and one RO applicant passed the operating test, but did not pass the written examination. One Senior Reactor Operator (SRO) applicant was issued a license.

One SRO applicant passed the operating test, but passed the written examination with an overall score between 80% and 82%. This applicant was issued a letter stating that he passed the examination and issuance of his license has been delayed pending any written examination appeals that may impact the licensing decision for their application.

Another SRO applicant who passed both the operating test and written examination was issued a letter stating that he passed the examination and that his license will not be issued until the NRC is notified in writing that he has completed the experience

requirements detailed in the procedures governing Farley's accredited initial license training program.

Copies of all individual examination reports were sent to the facility Training Manager for evaluation and determination of appropriate remedial training.

The licensee submitted two post-examination comments concerning the written examination. A copy of the final written examination and answer key, with all changes incorporated, and the licensee's post-examination comments may be accessed in the ADAMS system (ADAMS Accession Numbers, ML101520119, ML101520142 and ML101520160).

4OA6 Meetings

Exit Meeting Summary

On April 9, 2010, the examination team discussed generic issues associated with the operating test with Mr. Randy Johnson, and members of the Farley Nuclear Plant staff. The examiners asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee personnel

T. Blindauer, Initial License Training Supervisor
D. Christiansen, Training Manager
H. Fitzwater, Plant Instructor - Nuclear
D. Hall, Operations Training Supervisor
J. Hutto, Operations Manager
J. Johnson, Site Vice President
G. Ohmstede, Lead Instructor – Exam Development
C. Richter, Plant Instructor – Nuclear

NRC personnel

E. Crowe, Senior Resident Inspector

NRC RESOLUTION TO THE FARLEY POST EXAMINATION COMMENT(S)

A complete text of the licensee's post-examination comments can be found in ADAMS under Accession Number ML101520160.

WRITTEN EXAMINATION – QUESTION 43 (K/A 062A1.01)

Licensee Comment:

The licensee contends that the question contained a typographical error which resulted in testing the status of a "B" train component and the procedural allowances for energizing the "B" train component when the "B" train did not have power. Specifically:

- (1) The question stem stated that the "B" train did not have power and then the question asked the applicant if the "A" train EDG (1C EDG) load limit would be exceeded IF the 1B PRZR HTR GROUP BACKUP ("B" Train) was energized. An unintentional typographical error existed, in that the intent of the question was to ask about the "A" Train PRZR heaters, not the "B" Train PRZR heaters. The licensee contends that the applicant would have needed to ignore the fact that the 1B PRZR HTR GROUP BACKUP could not be energized, based on the conditions presented in the stem, in order to answer the question. In other words, the question stated that the heaters were energized, which would have been physically impossible with the conditions presented earlier in the stem.
- (2) The question stem also asked the applicant if energizing the 1B PRZR HTR GROUP BACKUP was procedurally allowed. The licensee contends that although it would be allowed, it would not have been physically possible with the conditions presented in the stem. The licensee contends that the applicants would have needed to make an assumption that the 2C EDG had been started so that the 1B PRZR HTR GROUP BACKUP could then be energized. This assumption would contradict NUREG-1021 (Operator Licensing Examination Standards for Power Reactors), Appendix E (Policies and Guidelines for Taking NRC Exams), requirements for taking the exam.

The licensee contends that the question be deleted due to there not being a correct answer.

NRC Resolution:

The licensee's recommendation to delete the question was accepted. In accordance with NUREG-1021, ES-403, D.1.c, the question was deleted because there was no correct answer. In order for a correct answer to exist, the applicant would have had to make assumptions that were contradictory to the requirements of NUREG-1021, Appendix E. The typographical error created a situation where the stem did not solicit one and only one correct answer. The question was not operationally valid in that it tested the physical impacts and procedural allowances of energizing equipment that had not power.

Conclusion: Deleted question.

WRITTEN EXAMINATION – QUESTION 68 (K/A G2.4.16)Licensee Comment:

The licensee contends that both answer choices “A” and “B” are correct and that they did not contain conflicting information; therefore, both answers should be graded as correct responses.

The licensee contends that answer choice “A” (original correct answer) was a subset of answer choice “B”. They contend that ECP-0.0, Loss of All AC Power, would be completed through step 29 and operators would not again be instructed to monitor Critical Safety Function (CSF) status trees until after ECP-0.0 was exited. The licensee contends that at no time in ECP-0.0 is a NEW instruction, beyond the CAUTION at the beginning of the procedure, provided to monitor CSF status trees. They contend that the NEXT instruction to monitor CSF status trees appears in either ECP-0.1, Loss of All AC Recovery Without SI Required, or ECP-0.2, Loss of All AC Recovery With SI Required. The licensee contends that ECP-0.0 would be performed until CSF status tree monitoring was instructed by procedure, as stated in answer choice “B”.

NRC Resolution:

The licensee’s recommendation to accept two correct answers was not accepted. The NRC does not believe that answer choice “A” is a subset of answer choice “B” and does not believe that two correct answers existed.

CSF status tree monitoring was instructed within ECP-0.0 as stated in the CAUTION at the beginning of the procedure, which applied from procedure entry until procedure exit:

CAUTION: Critical safety function status trees should be monitored for information only. No function restoration or other procedure should be implemented during loss of all AC.

The CAUTION stated that CSF status trees should be monitored, but Functional Restoration Procedures (FRPs) were not to be implemented based on CSF status tree monitoring. Answer choice “B” stated that operators are required to continue in ECP-0.0 until instructed to “monitor” CSF status trees. Operators have procedural instruction to monitor CSF status trees the entire time they are performing ECP-0.0; even during the repetitive (do-loop) steps to regain power. Therefore, only continuing in ECP-0.0 until instructed to monitor CSF status trees was an incorrect response.

Furthermore, if the applicant answered the question based on the NEXT time a procedure instruction was provided to monitor CSF status trees, then the applicant would have been referring to the CAUTIONS at the beginning of either ECP-0.1 or ECP-0.2. In order to get to either of these procedures an assumption that power was restored would have been made. NUREG-1021 (Operator Licensing Examination Standards for Power Reactors), Appendix E (Policies and Guidelines for Taking NRC Exams), instructed the applicants to not make assumptions regarding conditions that are not specified in the question unless they occur as a consequence of conditions that are stated in the question. Restoration of power was not stated in the question and it was not a consequence of other conditions that were stated in the

question. Considering answer choice "B" to be correct would require a violation of the Appendix E instructions, in that an assumption that power was restored would have been necessary.

Conclusion: Question remained as-is with answer choice "A" as the only correct answer.

SIMULATION FACILITY REPORT

Facility Licensee: Farley Nuclear Plant

Facility Docket Nos.: 05000348/05000364

Operating Tests Administered on: April 5 - April 9, 2010

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and, without further verification and review in accordance with IP 71111.11, are not indicative of noncompliance with 10 CFR 55.46. No licensee action is required in response to these observations.

No simulator fidelity or configuration items were identified.