



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION 1)
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

ENCLOSURE 1

Examination Report No. 50-348/OL-90-01

Facility Licensee: Alabama Power Company
P. O. Drawer 470
Ashford, AL 36312

Facility Name: Joseph M. Farley Nuclear Plant

Facility Docket Nos.: 50-348 and 50-364

Facility License Nos.: NPF-2 and NPF-8

Requalification retake written examinations and operating tests were administered at the Farley Nuclear Plant near Ashford, Alabama.

Chief Examiner:

Mike Eustis
for D. Charles Payne

5-4-90
Date Signed

Approved By:

Mike Eustis
for John F. Munro, Chief
Operator Licensing Section 1

5-4-90
Date Signed

SUMMARY

Examinations were administered during the week of January 29, 1990.

Requalification retake written examinations and operating tests were administered to four Senior Reactor Operators (SROs) and two Reactor Operators (ROs). Of the four SROs tested, all passed the examination. Of the two ROs tested, both passed the examination.

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REPORT DETAILS

1. Facility Employees Contacted During the Examination

- *D. N. Morey, General Manager
- *L. M. Stinson, Assistant General Manager - Support
- *L. S. Williams, Training Manager
- *R. Wiggins, Supervisor, Operations Training
- *B. W. Van Landingham, Unit Supervisor Operations
- *S. G. Freeman, SAER Engineer
- *W. H. Lee, SR Plant Instructor - Nuclear
- *C. I. McLean, SR Plant Instructor

*Attended Exit Meeting

2. Examiners

- *D. C. Payne, NRC, Region II
- M. J. Morgan, NRC, Region II
- +G. F. Maxwell, Farley Senior Resident Inspector

*Chief Examiner

+Attended Exit Meeting Only

3. Examination Development

The examination team reviewed the simulator and written tests proposed by the facility for use in this reexamination. There was no sample plan associated with this material and thus no way to confirm how representative it was to the training goals of the requalification program. Some examination weaknesses were identified as a result of this failing and are discussed below. All examinations should have a sample plan associated with them which serves as the blueprint for selecting the questions from the bank to be used in the test. Development of the sample plan should reflect the relative emphasis given to each training objective, its importance, its difficulty, and its frequency of performance during the course of the requalification cycle.

Static Simulator Examination

Each portion of both the RO and SRO static exam consisted of 10 - 12 questions. Question formats ranged from multiple choice to list to short answer essay. The facility is cautioned that, for future NRC requal visits, questions should emphasize an objective format such as multiple choice or matching over short answer essay for the written examination. Revision 6 to the Examiner Standards will clarify this point. Several of the questions (three or four per section) were not related to the actual transient. This was noted as permissible, and the operators were made aware of the lack of question relationship to the transient. However, most of these "unrelated" questions did not require the static simulator as a frame of reference since unique/different initial conditions - much like those found in open reference questioning - were presented in the text of the questions.

Of the remaining static exam questions - those designated as related to static simulator conditions - several did not need the static simulator as a frame of reference and were procedure oriented (i. e., they were in an open reference format). Still other questions were of a pure memorization, theoretical in nature construction. These questions required neither the static simulator nor references to answer them. The facility is reminded that the static simulator portion of the written exam is systems based and thus procedural actions/bases type questions are inappropriate. Additionally, confining all the questions to just one or two system topics is not the intent of ES-601. The facility should use their sample plan to help develop the scope of each section of the examination.

Time Validation

A standard time of from four to six minutes was assessed to each question of the written examination. It was noted, however, that this assignment of time appeared to be rather arbitrary and based mainly upon the perceived difficulty of the question rather than by a true assessment of time using plant operators/training staff. The plant staff attempted to validate the whole examination by actual exam administration. While time validating the whole examination is acceptable, realistic validation times for individual questions are necessary in order to design a test of sufficient length to meet the examiner standards without validating the whole exam several times with several different people. Validation of the whole exam should serve as a final quality check on the exam construction process. The validation time for each individual question should be representative of the question's situational aspects. For example, if a Steam Generator Tube Rupture (SGTR) is postulated in the question and a relatively quick response would be expected in real life, then a short validation time should be assigned. Time to utilize reference material should only be accounted for if said reference material is required to be used in order to answer the question such as in a boron calculation problem. Time to review the test and check answers against reference material is already accounted for in the design of the exam and should not be added as part of the individual question validation time.

4. Examination Changes

Modifications to some of the examination questions or Individual Simulator Critical Tasks (ISCTs) were proposed by the facility training staff during and after administration of the exam. The utility changes have been consolidated within Enclosure 3. These changes were accepted by the NRC.

5. Exit

At the conclusion of the site visit, the examiners met with representatives of the plant staff to discuss the results of the examinations. There were no generic weaknesses noted during the operating tests. The cooperation given to the examiners was noted and appreciated. The licensee did not identify as proprietary any material provided to or reviewed by the examiners.