Revision to Operator and Senior Operator
Requalification Program
Submitted by the Penn State Breazeale Reactor
License No. R-2, Docket No. 50-005
October 21, 1987

A. PURPOSE

1. To assure that all operators and senior operators maintain competence.

B. ADMINISTRATION

- 1. The Director or Deputy Director shall appoint a facility training manager.
- 2. The training manager shall be responsible for:
 - a. Conducting the requalification program.
 - b. Assuring that the examinations are not compromised.
 - c. Maintaining records required by the program.
- The requalification program will be conducted over a period of 24 consecutive months.
- 4. A licensee conducting an exam shall be exempt from that exam.
- 5. During each one-year period, no licensee shall conduct and be exempt from more than one of the four exams (comprehensive written, oral facility walk-around, oral procedure, and operating test).
- 6. No licensee shall conduct and be exempt from the same exam twice during the 24-month requalification program.
- 7. A licensee conducting and exempt from the comprehensive written exam during one 24-month requalification program shall not conduct and be exempt from this exam during the next 24-month requalification program.
- 8. Training following exam failure shall be lectures, tutoring, self-study, or on-the-job training as appropriate.

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C. WRITTEN EXAMINATION

- 1. During each requalification program, a comprehensive written exam shall be given in the subject areas listed below:
 - a. Theory and Principles of Reactor Operation
 - b. Features of Facility Design
 - c. General and Specific Operating Characteristics
 - d. Instrumentation and Control
 - e. Safety and Emergency Systems
 - f. Procedures, Technical Specifications, and Government Regulations
 - g. Radiation Control and Safety
- 2. A licensee receiving a grade of less than 70% in any subject shall receive training in that subject until the licensee can pass an examination in that subject with a grade of 70% or more.
- 3. A licensee receiving a grade of less than 70% (overall) shall, in the next two working weeks, be given an accelerated training program to remedy deficiencies.
- 4. At the end of this period, the licensee shall be given an oral examination.
 - a. If the results of this examination are negative, removal from licensed duties shall occur until the requirements of C2 are met.
 - b. If the oral examination results are satisfactory, the licensee may continue performing licensed duties while receiving additional training until the requirements of C2 are met.

D. ORAL EXAMINATIONS

 Each calendar year, a walk around type examination shall be given to each licensee to ensure familiarity with features of facility design, with special emphasis on design changes.

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- 2. During each calendar year, each licensee is expected to review PSBR abnormal and emergency procedures. Subsequent to this, an oral examination shall be given to ensure familiarity with these procedures.
- 3. The oral examinations shall be graded on a pass-fail basis.
- 4. If a negative result is obtained, the next two working weeks shall be devoted to an accelerated training program.
 - a. A retest shall be given at the end of this period.
 - b. If the results are still negative, the licensee shall be removed from licensed duties until the deficiency is remedied.

E. ON-THE-JOB TRAINING

- 1. Each licensed senior operator shall make or supervise at least one significant reactivity change each calendar quarter and at least ten significant reactivity changes during the two year requalification program.
- Each licensed operator shall make at least one significant reactivity change each calendar quarter and at least ten significant reactivity changes during the two year requalification program.
- A significant reactivity change is defined as a reactor startup, shutdown, or a power change greater than 10 percent.
- 4. Each licensee shall actively perform the functions of the licensed position for a minimum of four hours per calendar quarter. A licensee not meeting this requirement shall have an inactive license until the conditions of G3 are met.
- 5. Meetings shall be held as deemed necessary at which facility design, license, and procedure changes are explained and discussed.
- 6. Written material concerning facility design, license, and procedure changes shall be distributed and/or circulated.

F. OPERATING TEST

- 1. A SRO shall administer an operating test to each licensee during each year, to ensure the licensee has the knowledge, competence, and dexterity to safely operate the reactor and respond to situations that may arise.
- 2. An operating test checklist shall be filled out by the evaluator for all licensees and graded on a pass-fail basis.
- 3. In case of a failure the licensee shall be:
 - a. Removed from licensed duties.
 - b. Given training in areas of deficiency.
 - c. Returned to duty upon permission of the evaluator.
- G. LICENSEE REQUALIFICATION REQUIREMENTS TO RETURN TO ACTIVE LICENSE STATUS FOLLOWING AN ABSENCE FROM DUTY DURING A CALENDAR QUARTER
 - 1. The licensee shall meet any reactivity requirement deficiencies of Sections E1 and E2.
 - 2. The licensee shall pass the operating test as per Section F.
 - The licensee shall complete a minimum of six hours of shift functions under the direction of an operator or senior operator as appropriate.
 - 4. The licensee shall pass any written or oral exams as per Sections C and D that were given during the absence from duty.
 - 5. The licensee shall be informed of any facility design, license, or procedure changes during the absence.

H. RECORDS

- Records of the requalification program shall be maintained in each licensee file until the next license renewal.
- The records shall contain copies of written exams administered including the answers given by the licensees.

- 3. Records of documentation and results of additional training and examinations in areas where licensee deficiencies were noted shall be retained.
- 4. Results of the oral examinations shall be recorded.
- 5. Operating test checklists shall be maintained in each licensee's file.
- 6. Reactivity manipulation checklists shall be maintained in each licensee's file.
- 7. Duty hour requirements for each calendar quarter shall be documented.
- 8. Records shall be maintained for actions taken to return licensees to active license status as described in Section G.

I. REFERENCE

1. ANSI/ANS-15.4-1977 - Selection and Training of Personnel for Research Reactors