

REACTOR FACILITY
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October 19, 2007

U.S. Nuclear Regulatory Commission
ATTN: Dan Hughes
Mail Stop O12-G13
Washington, DC 20555-0001

Ref: Docket 50-288

Dear Mr. Hughes,

Enclosed is a revision to the Reed Reactor Facility Requalification Plan. This revision does not decrease the effectiveness of the plan. The revision has been approved by the Reed Reactor Operations Committee and Radiation Safety Committee. Some of the changes are clarifications. The major changes are:

1. Standardize the Requalification Cycle on two years and eliminate unnecessary annual requirements to the extent allowed in 10 CFR Part 55.
2. Specify how operators who may be away from the campus for a period of time may participate in the Requalification Plan, or regain Requalification Status.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen G. Frantz". The signature is fluid and cursive.

Stephen G. Frantz
Director, Reed Reactor Facility

A020
M003
NRR

Requalification Plan

October 2007

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License R-112
Docket 50-288

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Requalification Plan

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1 Introduction

This Requalification Plan is developed in compliance with the requirements of 10CFR55.59.

The requalification requirements are the same for Reactor Operators and Senior Reactor Operators. The term operator is used to apply to both levels of US NRC licensing.

2 Schedule

The Requalification Program shall be continuous and operate on a two-year cycle starting in odd numbered years. For purposes of this Plan, an academic year begins on July 1 and ends on June 30. Calendar quarters are as follows:

First Quarter:	July 1 to September 30
Second Quarter:	October 1 to December 31
Third Quarter:	January 1 to March 31
Fourth Quarter:	April 1 to June 30

3 Meetings and Facility Changes

3.1 Meetings

A minimum of ten meetings shall be scheduled during each requalification cycle, with a minimum of two each semester. The subjects of these meetings may be drawn from the topics listed below, but are not restricted to those topics. The specific content of the meetings is to be based on items identified as weaknesses in the training program or operator knowledge. These weakness may be identified using the results on NRC licensing exams, facility administered requalification exams, or observations of operator knowledge and performance by the Director. It is not required that all topics be covered in any given requalification cycle. A single meeting may address more than one topic.

- a) Theory and principles of reactor operation
- b) Reactor instrumentation, control, and safety systems
- c) Radiation control and safety; use and handling of radioactive materials
- d) Facility and Regulatory requirements including License, Technical Specifications, Requalification and Emergency Plans, Administrative Procedures, and applicable portions of Title 10 Code of Federal Regulations
- e) Standard and Emergency Operating Procedures
- f) General and specific plant operating characteristics
- g) Fitness for duty requirements for operators
- h) Harassment policies
- i) Other topics identified by the reactor staff as relevant to the safe operation of the reactor in accordance with federal and state regulations

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3.2 Reviews of Facility Changes

At least four times each requalification cycle, a meeting of Operators shall be held to make them aware of facility design changes, and changes in procedures and administrative requirements. This meeting may be held in conjunction with a Requalification meeting. Written reviews of changes to the facility should be issued as a Procedure Change Notification.

3.3 Missed Meetings

Any operator who is absent from any required meeting shall review any notes, handouts, or other reference material from the meeting. This material shall be discussed with the Director (or his designate) to assure that the operator has understood the material. This discussion shall be documented on the attendance record from the meeting the operator missed.

4 On-The-Job Training

4.1 Hours per Quarter

Each operator must actively perform the functions for which the operator is licensed for a minimum of 4 hours per calendar quarter. The Director shall maintain a list of those activities that may and may not be counted towards this requirement.

4.2 Reactivity Manipulations

Each operator shall demonstrate an ability to conduct reactivity manipulations during the course of the year. A minimum of 20 reactivity manipulations shall be completed during each requalification cycle. The Director shall maintain a list of those operations that qualify towards meeting this requirement.

4.3 Records of Hours and Reactivity

Each operator shall be responsible for maintaining records, in a format approved by the Director, to verify compliance with sections 4.1. and 4.2. Operator records will be reviewed by the Director (or designate) at regular intervals to ensure all operators comply with sections 4.1 and 4.2.

Any operator who does not document 4 hours per quarter or 20 reactivity manipulations per cycle must spend six hours operating the reactor under the supervision of a licensed operator before resuming licensed duties.

5 Observation

Reactor supervisory personnel shall conduct periodic observations of the performance and competency of operators during routine operations. These observations should normally be unannounced and shall be documented.

Documented observation of each operator shall occur at least once each cycle.

6 Evaluation

6.1 Written Exam

A comprehensive three section written exam shall be administered during each requalification cycle to each operator. Passing criteria shall be 70% in each section.

The written exam shall either use an on-line random exam bank or be prepared by the Director or a Senior Reactor Operator designated by the Director.

6.2 Operating Exam

An operating exam shall be administered each academic year to each operator. Passing criteria shall be 70% overall.

The operating exam shall be administered by a Senior Reactor Operator designated by the Director. This may be in conjunction with the operator observation required by section 5.

6.3 Exam Exemption

A license exam administered by the NRC during a requalification cycle shall satisfy the requalification written and operating exam requirements for that cycle.

Any person who prepares an exam will be exempt from taking the exam during that requalification cycle. The same person shall not be exempted for two consecutive cycles.

7 Accelerated Requalification Program

The Accelerated Requalification Program is designed to ensure an operator can safely perform their licensed duties. Operators enter Accelerated Requalification by failing to demonstrate competency in performing licensed duties.

An operator in Accelerated Requalification shall not perform duties that require a license except under the direct supervision of a licensed operator, until completion of an Accelerated Requalification Program.

The content of any Accelerated Requalification Program shall be determined on a case-by-case basis by the Director. It may include, but need not be limited to, attending or presenting meetings on the areas of weakness, revising facility documentation, individual or group study sessions, or tutorials.

Any operator who in the opinion of the Director is deficient in operating knowledge or skills may be placed in Accelerated Requalification by the sole discretion of the Director.

Any operator who achieves a score less than 70% on any section of the written exam required by section 6.1, or less than 70% on the operating exam required by section 6.2 shall be placed in Accelerated Requalification.

Successful completion of the Accelerated Requalification Program shall be based on the passing of an additional exam. This exam shall be administered within six months of the date of entering the Accelerated Requalification Program. The extent of this additional

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exam will normally be limited to areas of identified weakness. The examination may be written, oral, or operational. The type of exam used should be determined at the start of the Accelerated Requalification Program.

An operator who misses or fails one of the requirements to stay in requalification must only fulfill the requirement that was missed. For example, if the operator missed or failed a written exam, all that is need is to a pass another written exam (e.g., six hours of licensed duties under observation is not required).

8 Physicals

Each operator is required to satisfactorily complete a physical exam every 24 months, not to exceed 30 months. If the exam is not completed, the operator may not perform licensed duties until the operator passes a physical exam.

Operators whose NRC license specifies the need for corrective lenses shall wear corrective lenses when performing any licensed duties.

Any operator who has a significant permanent change in their physical condition that may affect their ability to perform licensed duties must inform the Director immediately. evaluate their license status. The Director will notify the NRC in writing within 30 days of any permanent disability or illness that affects the operator's ability to perform licensed duties per 10CFR50.74.

9 Other Requirements

Operator licenses expire six years from their effective date. To renew a license, an application (Form 398 and 396) must be submitted to the NRC per 10CFR55.57.

Any operator who is convicted of a felony must inform the Director immediately.

Any operator who is absent from the campus for some reason, e.g., overseas for a year, must still participate in this Plan per 10CFR55.53(h).

- The requalification meeting requirements of section 3.1 may be satisfied by providing the information to the operator and having the operator verify that have reviewed and understood the material per section 3.3.
- The facility change meeting requirements of section 3.2 may be satisfied by providing the information to the operator and having the operator verify that they have reviewed and understood the material per section 3.3.
- The four hours of licensed duty per quarter requirements of section 4.1 may be satisfied by performing licensed duties that do not require physical presence at the reactor, such as writing or revising procedures, training materials, or experiments. The Director shall determine which activities meet this requirement on a case-by-case basis. When the operator returns they must spend six hours operating the reactor under the supervision of a licensed operator before resuming licensed duties.
- The reactivity manipulation requirements of section 4.2 must be satisfied by operating the reactor or moving fuel at the reactor. This may be accomplished before the operator leaves or after they return, but it must be during the

appropriate requalification cycle. Any operator who does not complete 20 reactivity manipulations during the requalification cycle must spend six hours operating the reactor under the supervision of a licensed operator before resuming licensed duties per section 4.3.

- The operator observation requirements of section 5 must be satisfied by operating the reactor. This may be accomplished before the operator leaves or after they return, but it must be during the appropriate requalification cycle. If operator is not observed during the cycle, it shall be treated as an operating exam failure and they shall enter Accelerated Requalification under section 7.
- The written exam requirements of section 6.1 may be satisfied by completing an on-line exam as usual. Any operator who does not pass a written exam during the requalification cycle must successful pass a written exam before resuming licensed duties.
- The operating exam requirements of section 6.2 must be satisfied by operating the reactor. This may be accomplished before the operator leaves or after they return, but it must be during the appropriate academic year. If operator does not complete the exam during the academic year, it shall be treated as a failure and they shall enter Accelerated Requalification under section 7.
- The physical exam requirements of section 8 may be satisfied by having a local physician perform the examination. Any operator who does not pass a physical exam during the required time period must successful pass a physical exam before resuming licensed duties.
- Any operator who is unable to participate in the requalification program as outlined above must have their license be terminated. The Director may choose to apply for a new license for the operator when the operator returns.

10 Records

Originals of all records relating to the requalification requirements in this Plan shall be retained by the facility. Copies shall be provided to the operator at their request.