



Washington State University

Nuclear Radiation Center

Pullman, WA 99164-1300

509-335-8641

FAX 509-335-4433

Monday, February 7, 1994

Document Control Desk
U S Nuclear Regulatory Commission
Washington, DC 20555

Ref: Docket 50-27
Attn: Mr. Marvin Mendonca

Subject: Requalification Program Amendment

Dear Sir:

On Thursday, September 16, 1993 I sent a request to amend our Reactor Staff Requalification Program to the Document control desk, Ref: Docket 50-27 Attn: Marvin Mendonca. On Tuesday, January 4, 1994 I requested a delay in the program review because of a mix-up in versions of our program that had been used for the revision.

Please find enclosed our current Requalification Program with the proposed changes marked with side bars. These changes have been examined by the Reactor Safeguards Committee and approved at the February 1, 1994 quarterly meeting.

Note: Our current program was submitted on October 9, 1987 and the formal letter of approval by the U.S. NRC is dated December 3, 1987. If you have any questions, please contact Dr. Gerald Tripard, facility director at (509) 335-0172.

Sincerely,

Gerald E. Tripard.
Director

enclosure: current Washington State University Requalification Program
proposed Washington State University Requalification Program

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

December 3, 1987

Docket No. 50-27

Dr. W. E. Wilson
Associate Director
Nuclear Radiation Center
Washington State University
Pullman, Washington 99164-1300

Dear Dr. Wilson:

SUBJECT: WASHINGTON STATE UNIVERSITY REACTOR STAFF REQUALIFICATION PROGRAM

The staff of the U.S. Nuclear Regulatory Commission (NRC) has completed its review and evaluation of the Washington State University Reactor Staff Requalification Program that you submitted on October 9, 1987. The program was reviewed against the criteria in 10 CFR 55 and conforming amendments contained in Generic Letter 87-07 dated March 19, 1987. The program was also reviewed against the criteria in ANSI/ANS-15.4, "Selection and Training of Personnel for Research Reactors" which is supported by Generic Letter No. 83-12A dated July 11, 1983.

Based on its review, the staff concludes that the Washington State University Reactor Staff Requalification Program meets the requirements of the regulations and is, therefore, acceptable. We request that you begin to implement your approved program immediately.

If you have any questions, please contact Alexander Adams, Jr., our Project Manager for your facility, at (301) 492-8207.

Sincerely,

L. S. Rubenstein
Lester S. Rubenstein, Director
Standardization and Non-Power Reactor
Project Directorate
Division of Reactor Projects III, IV,
V and Special Projects
Office of Nuclear Reactor Regulation

cc: See next page

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REACTOR STAFF REQUALIFICATION PROGRAM

Each licensed reactor operator and senior operator at the Washington State University Nuclear Radiation Center reactor facility will participate in the reactor staff requalification program as outlined below, with the exception that the senior reactor operator who is in charge of the program will be exempted from taking the written examinations.

1. Biennial Written Requalification Exam

Licensed operators and senior operators will biennially take a simulated R.O. or S.R.O. written exam administered by the requalification program director just prior to submitting the request for renewal of these licenses. This exam will be broken down into sections in accordance with the subjects set forth in 10 CFR 55.41 for the RO exam and 55.42 for the SRO exam as applicable to a non-power reactor. Sections of this exam may be administered over a period of time not to exceed one month and any individual who does not receive a grade of 80% or higher on any section will be given additional training and/or tutorial lectures and then be reexamined. Individuals who receive a grade of less than 70% on any one section will not be allowed to actively participate in reactor operations until they have received additional training and successfully pass a second exam in that subject area. An overall grade of 70% for the entire exam will be considered as a passing mark.

2. Annual Operations Test

a. An annual operations test shall be administered to each RO and SRO at intervals not to exceed 15 months in order to meet the requirements

of 10 CFR 55.59 (a.2.ii). The operations test shall consist of the following elements:

1. Checkout and startup of the reactor.
2. Bringing the reactor up to full power.
3. Reducing the reactor power and leveling off at 50% power.
4. Responding to an alarm situation.
5. Shutting down the reactor.

b. Records of the annual operations test must be maintained and any individual who fails shall be given additional training and then retested.

3. Biennial Operations Requirement

In accordance with the recommendations of ANSI/ANS-15.4, over a two-year period, each licensee in the requalification program shall perform at least ten reactivity manipulations in any combination of reactor startups, shutdowns, or significant reactivity changes. In addition, each licensee shall perform two pulsing operations each year. Direct supervision of these operations shall be considered equivalent to actual performance for the senior reactor operator. The quarterly operations certification is designed to insure that the biennial operations requirements are met.

4. Quarterly Operations Certification

Each licensed reactor operator and senior operator must actively participate in the operations of the facility in order to remain qualified. The minimum quarterly operations required are listed below.

a. Reactor Operators (personally perform)

- i) One complete reactor checkout and startup, including bringing the reactor up to full power.

- ii) One shutdown from full power.
- iii) One pulse every other quarter.
- b. Senior Operators (directly supervise or personally perform)
 - i) One complete reactor checkout and startup, including bringing the reactor up to full power.
 - ii) One shutdown from full power.
 - iii) One pulse every other quarter.
- c. Each individual who fails to perform the above minimum operations in any one quarter shall be considered to be unqualified to perform his license duties. In order to be requalified, an individual must be administered the equivalent of an operating test.

5. Facility and Safety Reviews

- a. All the following listed items will be promptly routed to each licensed operator and senior operator in the facility. Each licensee will be required to read this information and sign a routing slip indicating that he has done so.
 - i. Facility design changes.
 - ii. Technical specification changes.
 - iii. Facility license changes.
 - iv. Standard operating procedure changes.
- b. Each licensed operator and senior operator shall annually review all the current standard and emergency procedures of the facility. A form indicating that this has been done shall be maintained in the individual's training file.

6. Training Records

A training record file shall be maintained which shall indicate the performance of each licensed individual in the requalification program. The training records for each individual shall be maintained for a period of not less than two years and may be disposed of after an individual's license has been renewed. This record shall contain at least the following information:

- a. Performance on each section of the requalification program exam, including the actual exams and answers given by each licensee.
- b. Special lectures, attended as a result of failure to pass a written requalification exam and results of reexamination.
- c. Quarterly certification forms.
- d. Results of annual operations test.
- e. Facility and Safety Review signed routing slips.
- f. Biennial performance review.

7. The Training Program supervisor for the Nuclear Radiation Center shall biennially review the performance of each licensed reactor operator and senior operator to ensure his competence to perform the activities for which he is licensed. This review shall include but not be limited to the following considerations:

- a. Performance on the written requalification exam.
- b. Results of quarterly operations certifications.
- c. Results of annual operations test.
- d. Attitude toward following standard procedures and performing operations in a safe manner.

e. General overall performance of the individual as to how well he has performed his license responsibilities in a safe and competent manner.

PROPOSED REACTOR STAFF REQUALIFICATION PROGRAM

Each licensed reactor operator and senior operator at the Washington State University Nuclear Radiation Center reactor facility will participate in the reactor staff requalification program as outlined below, with the exception that the senior reactor operator who is in charge of the program will be exempted from taking the written examinations.

1. Biennial Written Requalification Exam

Licensed operators and senior operators will biennially take a simulated RO or SRO written exam administered by the requalification program director just prior to submitting the request for renewal of these licenses. This exam will be broken down into sections in accordance with the subjects set forth in 10 CFR 55.41 for the RO exam and 55.42 for the SRO exam as applicable to a non-power reactor. Sections of this exam may be administered over a period of time not to exceed one month and any individual who does not receive a grade of 70% or higher on any section will be given additional training and/or tutorial lectures and then be reexamined. Individuals who receive a grade of less than 70% on any one section will not be allowed to actively participate in reactor operations until they have received additional training and successfully pass a second exam in that subject area. An overall grade of 70% for the entire exam will be considered as a passing mark.

2. Annual Operations Test

- a. An annual operations test shall be administered to each RO and SRO at intervals not to exceed 15 months in order to meet the requirements of 10 CFR 55.59 (a.2.ii).

The operations test shall consist of the following elements:

1. Checkout and startup of the reactor.
2. Bringing the reactor up to full power.

3. Reducing the reactor power and leveling off at 50% power.
 4. Responding to an alarm situation.
 5. Shutting down the reactor.
- b. Records of the annual operations test must be maintained and any individual who fails shall be given additional training and then retested.

3. Biennial Operations Requirement

In accordance with the recommendations of ANSI/ANS-15.4, over a two-year period, each licensee in the requalification program shall perform at least ten reactivity manipulations in any combination of reactor startups, shutdowns, or significant reactivity changes. To remain qualified to do pulsing an operator must do at least one pulse semiannually. An operator who does not meet this requirement must do his next pulse under the supervision of an SRO. Direct supervision of these operations shall be considered equivalent to actual performance for the senior reactor operator. The quarterly operations certification is designed to insure that the biennial operations requirements are met.

4. Quarterly Operations Certification

Each licensed reactor operator and senior operator must actively participate in the operations of the facility in order to remain qualified. The minimum quarterly operations required are listed below.

- a. Reactor Operators (personally perform)
- i) One complete reactor checkout and startup, including bringing the reactor up to full power.
 - ii) One shutdown from full power.
 - iii) Four hours of reactor operation time.

- b. Senior Operators (directly supervise or personally perform)
 - i) One complete reactor checkout and startup, including bringing the reactor up to full power.
 - ii) One shutdown from full power.
 - iii) Four hours of reactor operation time.
- c. Each individual who fails to perform the above minimum operations in any one quarter shall be considered to be unqualified to perform his license duties. In order to be requalified, an individual must be administered the equivalent of an operating test and six hours of supervised reactor operation time.

5. Facility and Safety Reviews

- a. All the following listed items will be promptly routed to each licensed operator and senior operator in the facility. Each licensee will be required to read this information and sign a routing slip indicating that he has done so.
 - i) Facility design changes.
 - ii) Technical specification changes.
 - iii) Facility license changes.
 - iv) Standard operating procedure changes.
- b. Each licensed operator and senior operator shall annual review all the current standard and emergency procedures of the facility. A form indicating that this has been done shall be maintained in the individual's training file.

6. Training Records

A training record file shall be maintained which shall indicate the performance of each licensed individual in the requalification program. The training records for each individual shall be maintained for a period of not less than two years and may be disposed of after an individual's license has been renewed. This record shall contain at least the following information:

- a. Performance on each section of the requalification program exam, including the actual exams and answers given by each licensee.
 - b. Special lectures, attended as a result of failure to pass a written requalification exam and results of reexamination.
 - c. Quarterly certification forms.
 - d. Results of annual operations test.
 - e. Facility and Safety Review signed routing slips.
 - f. Biennial performance review.
7. The Training Program supervisor for the Nuclear Radiation Center shall biennially review the performance of each licensed reactor operator and senior operator to ensure his competence to perform the activities for which he is licensed. This review shall include but not be limited to the following considerations:
 - a. Performance on the written requalification exam.
 - b. Results of quarterly operations certifications.
 - c. Results of annual operations test.
 - d. Attitude toward following standard procedures and performing operations in a safe manner.
 - e. General overall performance of the individual as to how well he has performed his license responsibilities in a safe and competent manner.