REQUALIFICATION PROGRAM

FOR

UNIVERSITY OF OKLAHOMA

AGN-211P REACTOR

LICENSE R-53

DOCKET 50-112

3-19-82

REQUALIFICATION PROGRAM

University of Oklahoma

AGN-211P Reactor

(I) INTRODUCTION

The purpose of the requalification program is to ensure that reactor operators (RO) and senior reactor operators (SRO) maintain their competence in the manipulation and operation of the University of Oklahoma's reactor. Implementation of the program is through a series of meetings in which all members of the reactor staff (director, supervisor, SROs, ROs and persons in training as ROs) are required to participate and annual examinations. The requalification program meetings will consist of lectures on subjects related to safe reactor operations, reviews of procedures, technical specifications, emergency plans, federal and state regulations and other matters relative to the safe operation of the reactor. The reactor director and the reactor supervisor will be responsible for the conduct of the program.

(II) PROGRAM SCHEDULE

The foundation of the program is based on a series of REVIEWS and Annual Examinations.

A. Reviews

The purpose of the Reviews is to cover a subject (such as emergency procedures) thoroughly at least once a year. The subject may be covered by a lecture presented by a member of the reactor staff or by a reading and discussion of a subject or procedure.

A Review meeting will normally be scheduled for a two hour period. A series of six formal Review meetings will be held annually during the September to May academic year, since all personnel are not necessarily present in the summer.

The subjects of the six meetings are as follows:

1. Reactor Operations Procedures and Regulations

   The following will be reviewed at a minimum;

   a. sample irradiation and experiment form

   b. reactor checkout and shutdown procedures

   c. reactor characteristic

   d. core fuel configuration and fuel handling procedure

   e. visitor regulations

   f. student regulations

   g. researcher regulations

   h. reactor room security (both day and night).

   i. experimental procedures

   j. other related procedures

2. Emergency Plan

   The emergency plan will be reviewed and discussed. Hypothetical situations will be postulated and the appropriate response determined as defined by the emergency plan.

   The following additional personnel will be requested to participate in this review:

   Radiation Safety Officer or his designate

   Representative from the Reactor Safety Committee

   Representative from the Fire and Safety Division of the OU Police Department.

3. Technical Specification

   The technical specifications will be read and discussed to ensure that all personnel are familiar with all the details. Where a calculation is required, such as for excess reactivity, a sample calculations will be done.

A complete review of all applicable Federal, State and University regulations which affect the reactor's operation will be done.

4. Maintenance and Calibration Procedures

The purpose of this Review is to cover maintenance and calibration procedures which are required.

5. Theory of Reactor Operations

The purpose of this Review is to ensure that all personnel stay informed on reactor theory which is related to operations. Subjects covered will include, criticality, reactivity, activation, control rod worth, coefficients of reactivity, neutron flux and any other subjects requested by the staff. This lecture will be given by the Director or where appropriated by members of the Nuclear Engin. ing Faculty.

6. Other Subjects

Subjects to be selected by the Director, Supervisor or requested by the operations staff or suggested by the Reactor Safety Committee or the Radiation Safety Officer.

B. Annual Examinations

Both written and practical exams will be given to all members of the reactor staff (all who hold operators licenses) annually.

The written exam will be prepared and graded by the Reactor Director or by a member of the Nuc. . ngineering Faculty. A score of 70 is considered to be a minimum passing grade. Two hours will be alloted to complete the written exam.

The written exam will normally consist of four sections:

1. Theory of Reactor Operations
2. Reactor Characteristics
3. Procedures and Regulations
4. Radiation Safety

The practical exam will consist of a complete checkout of the reactor, arrangement of the fuel in the standard or the flux trap configurations, operation at a steady power, excess reactivity determination, simulation of emergency or abnormal conditions, shutdown. In general, the Reactor Supervisor will conduct the practical exam and grade the performance on a pass/fail basis.

In the event a grade of less than 70% is achieved on the written exam, the RO or SRO will undertake an immediate study program relating to areas of weakness. Within 60 days a second written exam will be given. Failure to achieve a grade of 70% on this second exam will result in an immediate suspension of operator status. The future of such an operator will be considered by the Reactor Director and the Reactor Safety Committee.

Failure to achieve a grade of pass on the practical exam will result in one or more training sessions conducted by the Reactor Supervisor. A second exam will be administered within 60 days. Failure to achieve a passing grade will result in an immediate suspension of the individual's operator status. The future of such an operator will be considered by the Reactor Director and the Reactor Safety Committee.

(III) RECORDS

The following records will be maintained by the Reactor Supervisor:

(A) This document

(B) Outline of all Review meetings

(C) Administered annual exams

(D) Results and evaluations of graded exams

(E) Recommendations to the indivuduals who have taken the exams

(F) Any other material pertinent to the implementation of this program.