

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

UNIVERSITY OF MISSOURI, ROLLA

DOCKET NO. 50-123

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 14 License No. R-79

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment filed by the University of Missouri, Rolla, (the licensee), dated July 26, 1995, comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - F. Prior notice of this amendment was not required by 10 CFR 2.105 and publication of notice for this amendment is not required by 10 CFR 2.106.

 Accordingly, the license is amended by change of the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph 2.C.2 of Facility Operating License No. R-79 is hereby amended to read as follows:

2.C.2 Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 14 are hereby incorporated in this license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Seymour H. Weiss, Director

Leymons H. Weiss

Non-Power Reactors and Decommissioning

Project Directorate

Division of Reactor Program Management Office of Nuclear Reactor Regulation

Enclosure: Appendix A Technical Specification Changes

Date of Issuance: August 28, 1995

ENCLOSURE TO LICENSE AMENDMENT NO. 14

FACILITY OPERATING LICENSE NO. R-79

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Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines in leating the areas of change.

Remove Page	Insert Page
28	28
35a	
36	36

- (3) The regulating rod worth shall be measured whenever the rod is installed in a new core configuration.
- (4) The shutdown margin shall be determined after the excess reactivity of the core and the total worth of each control rod have been experimentally determined for a new core configuration.
- (5) The shim/safety rods shall be visually inspected annually for pitting and cracking and whenever rod drop times exceed the limiting conditions for operation (section 3.2.3 of these specifications).

Bases: The reactivity worth of the shim/safety rods is measured to assure that the required shutdown margin is available and to provide means for determining the reactivity worth of experiments inserted in the core. The visual inspection of the shim/safety rods and measurement of their drop times are made to determine whether they are capable of performing properly. The determination of the regulating rod worth is to make certain that its value does not exceed the delayed neutron fraction.

4.2.2 Safety Channels

Applicability: This specification applies to the surveillance requirements for the reactor safety system channels for the reactor.

Objective: To ensure that the reactor safety system channels are operable as required by Specification 3.2.2.

Specifications:

(1) A channel test of each of the reactor safety system channels shall be performed before each day's operation or before each operation expected to extend more than one day, except for the bridge motion monitor which shall be done

^{*}This visual inspection shall be conducted before October 17, 1996, or within four months after an adequate number of High Enriched Uranium fuel elements are removed from the facility so that the current Low Enriched Uranium fuel can be offloaded from the core in accordance with facility procedures to allow the inspection.

Amendment No. 14

5.3.4 Control Rod Drive Mechanisms

- (1) The shim/safety rod drives have a maximum vertical travel of 24 inches and a withdrawal rate of approximately 6-inches per minute. The shim/safety rods are magnetically coupled to the drive mechanisms and drop into the core, by gravity, upon a scram signal.
- (2) The regulating rod drive has a maximum vertical travel of 24 inches and a withdrawal rate of approximately 24 inches per minute. The regulating rod is mechanically coupled to its rod drive and does not respond to a scram signal.
- (3) Lights are provided on the operator's console to indicate upper limit, lower limit, and shim range for each shim/safety rod.

5.3.5 Startup Source

A neutron source is available of such a strength as to satisfy the requirements that the count rate is greater than 2 counts per second during a cold reactor startup.

5.4 Fissionable Material Storage

5.4.1 The fuel storage pit, which is located below the floor of the reactor pool and at the end opposite from the core, will be capable of storing the complete fuel inventory of either highly-enriched uranium (HEU) fuel or of low-enriched uranium, but not both. The neutron multiplication factor of the fully loaded storage pit shall not exceed 0.9 under any conditions.