



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

ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE

DOCKET NO. 50-170

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 20
License No. R-84

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to Facility Operating License No. R-84 filed by the Armed Forces Radiobiology Research Institute (the licensee), dated April 30, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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 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 set forth in 10 CFR Chapter I;
 - 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(a)(4) and publication of notice for this amendment is not required by 10 CFR 2.106(a)(2).

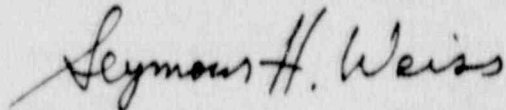
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph 2.C.(2) of License No. R-84 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 20, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Seymour H. Weiss, Director
Non-Power Reactor, Decommissioning and
Environmental Project Directorate
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
Appendix A Technical
Specifications Changes

Date of Issuance: October 4, 1990

ENCLOSURE TO LICENSE AMENDMENT NO. 20

FACILITY OPERATING LICENSE NO. R-84

DOCKET NO. 50-170

Replace the following page of the Appendix A Technical Specifications with the attached page. The revised page is identified by amendment number and contains vertical lines indicating the areas of change.

Remove

22

Insert

22

Specification

Functional checks shall be made annually, but not to exceed 15 months, to insure the following:

- a. With the lead shield doors open, neither exposure room plug door can be electrically opened.
- b. The core dolly cannot be moved into position 2 with the lead shield doors closed.
- c. The warning horn shall sound in the exposure room before opening the lead shield door, which allows the core to move to that exposure room unless cleared by two licensed operators.

BASIS

These functional checks will verify operation of the interlock system. Experience at AFRRRI indicates that this is adequate to insure operability.

4.2.5

REACTOR FUEL ELEMENTS

Applicability

This specification applies to the surveillance requirements for the fuel elements.

Objective

The objective is to verify the integrity of the fuel element cladding.

Specifications

All the fuel elements present in the reactor core, shall be inspected for damage or deterioration, and measured for length and bow at intervals separated by not more than 500 pulses of insertion greater than \$2.00 or annually (not to exceed 15 months), whichever occurs first. Fuel elements in storage need not be inspected and measured until returned to the reactor core.

Basis

The frequency of inspection and measurement is based on the parameters most likely to affect the fuel classing of a pulse reactor, and the utilization fuel elements whose characteristics are well known.

The limit of transverse bend has been shown to result in no difficulty in disassembling the core. Analysis of the removal of heat from touching fuel elements shows that there will be no hot spots that result in damage to the fuel (caused by this touching).