



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

UNIVERSITY OF UTAH

DOCKET NO. 50-407

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 7
License No. R-126

1. The U. S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for an amendment filed by the University of Utah (the licensee), dated November 2, 1998, 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 rules and regulations of the Commission;
 - C. There is reasonable assurance that (i) the activities authorized by this amendment can be conducted without endangering the health and safety of the public and (ii) such activities will be conducted in compliance with the regulations of the Commission;
 - 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.
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 Facility Operating License No. R-126 is hereby amended to read as follows:

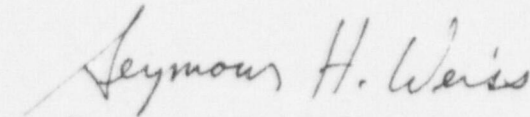
(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 7, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Seymour H. Weiss". The signature is written in dark ink and is positioned above the printed name and title.

Seymour H. Weiss, Director
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:

ENCLOSURE TO LICENSE AMENDMENT NO. 7

AMENDED FACILITY OPERATING LICENSE NO. R-126

DOCKET NO. 50-407

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 indicating the areas of change.

Remove

Insert

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- (3) A channel calibration shall be made of the power level monitoring channels by either nuclear or calorimetric methods annually, but at intervals not to exceed 15 months.
- (4) A channel test of the temperature measuring channel shall be performed semiannually, but at intervals not to exceed 8 months.

Basis: Measurements of the scram time on an annual basis is a check not only of the scram system electronics, but also is an indication of the capability of the control rods to perform properly. The channel tests will ensure that the safety system channels are operable on a daily basis or before an extended run. The power level channel calibration will ensure that the reactor will be operated at the proper power levels.

4.3.3 Radiation Monitoring System

Applicability: This specification applies to the surveillance requirements for the area radiation monitoring equipment and the continuous air monitoring system.

Objectives: The objectives are to ensure that the radiation monitoring equipment is operating and to verify the appropriate alarm settings.

Specification: The area radiation monitoring system and the continuous air monitoring system shall be calibrated annually and shall be verified to be operable at monthly intervals.

Basis: Experience has shown that monthly verification of area radiation and air - monitoring system setpoints in conjunction with annual calibration is adequate to correct for any variation in the system caused by a change of operating characteristics over a long timespan.

4.3.4 Ventilation System

Applicability: This specification applies to the reactor room ventilation system.

Objective: The objective is to assure that the ventilation system is in operation to mitigate the consequences of the possible release of radioactive materials resulting from reactor operation.

Specification: The reactor shall not be operated unless the reactor room ventilation system is in operation, establishing a negative air pressure within the reactor room, except for periods of time not to exceed 48 hours to permit repair of the system.

Basis: It is shown that during normal operation of the ventilation system the concentration of argon -41 in unrestricted areas is below MPC. In the event of a substantial release of fission products, the ventilation system will be secured automatically. Therefore, operation of the reactor with the ventilation system shutdown for short periods of time to make repairs

Specifications:

- (1) Function of Area Radiation Monitor (gamma-sensitive instruments): Monitor radiation fields in key locations, alarm and readout at control console.
- (2) Function of Continuous Air Radiation Monitor (beta-, gamma-sensitive detector with particulate collection capability): Monitors concentration of radioactive particulate activity and radioactive gases including Argon-41 in the building exhaust, alarm and readout at control console.

Basis: The radiation monitoring system is intended to provide information to operating personnel of any impending or existing danger from radiation so that there will be sufficient time to evacuate the facility and take the necessary steps to prevent the spread of radioactivity to the surroundings.

5.5 Fuel storage

Applicability: This specification applies to the storage of reactor fuel at times when it is not in the reactor core.

Objective: The objective is to ensure that fuel that is being stored will not become critical and will not reach an unsafe temperature.

Specifications :

- (1) All fuel elements shall be stored in a geometrical array where the k_{eff} is less than 0.8 for all conditions of moderation.
- (2) Irradiated fuel elements and fueled devices shall be stored in an array, which will permit sufficient natural convection cooling by water or air, so that the fuel element or fueled device temperature will not exceed design values.

Basis: The limits imposed by the Specifications 5.5(1) and 5.5(2) are conservative and ensure safe storage of reactor fuel.

5.6 Reactor Building and Ventilation System

Applicability: This specification applies to the building that houses the reactor.

Objective: The objective is to ensure that provisions are made to restrict the amount of radioactivity released into the environment.