



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

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

DOCKET NO. 50-151

AMENDMENT TO FACILITY LICENSE

Amendment No. 12
License No. R-115

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for an amendment to Facility License No. R-115 filed by the University of Illinois at Urbana-Champaign (the licensee) on October 19, 1999, conforms to the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the regulations of the Commission as stated in Chapter I of Title 10 of the *Code of Federal Regulations* (10 CFR);
 - B. The facility will be possessed 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. This amendment is issued in accordance with the regulations of the Commission as stated in 10 CFR Part 51, 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 3.B. of Facility License No. R-115 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 12, are hereby incorporated in the license. The licensee shall maintain 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



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Enclosure:
Appendix A, Technical
Specification Changes

Date of Issuance: December 23, 1999

ENCLOSURE TO LICENSE AMENDMENT NO. 12

FACILITY LICENSE NO. R-115

DOCKET NO. 50-151

Replace the following pages of 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

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6.0 ADMINISTRATIVE CONTROLS

6.1 Organization

6.1.1 Structure and Responsibility

- a. The reactor facility shall be an integral part of the Department of Nuclear, Plasma and Radiological Engineering of the University of Illinois. The reactor shall be related to the University structure as shown in Chart I.
- b. The reactor facility shall be under the supervision of the Reactor Administrator who shall have been qualified as a licensed senior reactor operator for the reactor. He shall be responsible for assuring that all operations are conducted in a safe manner and within the limits prescribed by the facility license and the provisions of the Nuclear Reactor Committee.
- c. There shall be a Reactor Health Physicist responsible for assuring the day to day and routine radiological safety activities at the Nuclear Reactor Laboratory. The University of Illinois Radiation Safety Officer shall be responsible for monitoring, planning and promoting radiological safety at the Nuclear Reactor Laboratory. He has the responsibility and authority to stop, secure or otherwise control as necessary any operation or activity that poses an unacceptable radiological hazard.

CHART I

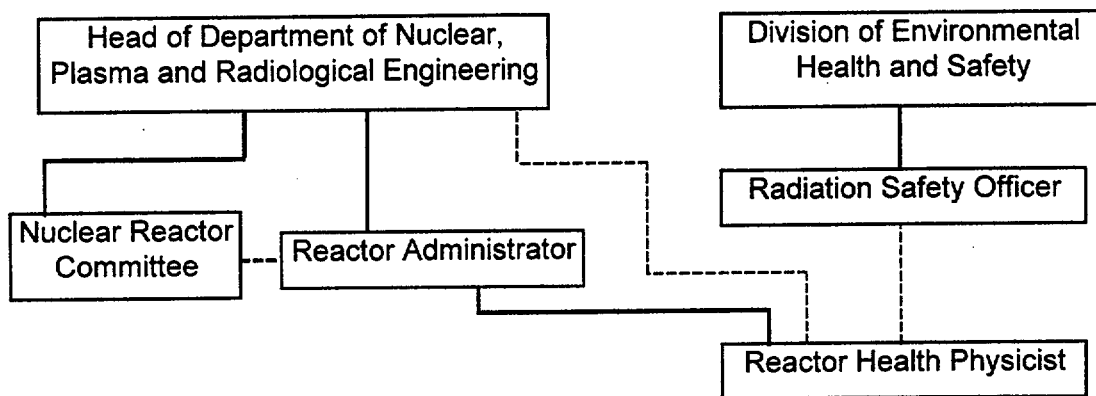


CHART I: Administrative organization of the reactor facility. Dashed lines indicate reporting paths outside the operational chain of supervision, indicated by solid lines.

6.1.2 Staffing

- a. The minimum staffing at the Nuclear Reactor Laboratory shall be:
 1. Reactor Administrator. This individual shall meet the requirements of ANSI/ANS-15.4-1988 "American National Standard for the Selection and Training of Personnel for Research Reactors" for a Level Two individual.
 2. Reactor Health Physicist. This individual shall meet the requirements of ANSI/ANS-15.4-1988 "American National Standard for the Selection and Training of Personnel for Research Reactors" for a Level Three individual in addition to training in health physics.
- b. A list of reactor personnel by name and telephone number shall be readily available to the UIUC Division of Public Safety dispatcher. One of these individuals shall be reachable and able to respond to the facility within approximately one hour. The list shall include:
 1. Campus Radiation Safety Officer
 2. Reactor Administrator
 3. Head, Department of Nuclear, Plasma and Radiological Engineering
 4. Reactor Health Physicist
 5. Licensed operators
- c. Events requiring the presence at the facility of a Senior Reactor Operator:
 1. Initial startup and approach to power.
 2. All fuel or control rod relocations.
 3. Relocation of any in-core experiment with a reactivity worth greater than one dollar.
 4. Recovery from unplanned or unscheduled shutdown or significant power reduction (In these instances, documented verbal concurrence from the Senior Reactor Operator is required).

6.1.3 Selection and Training of Personnel

The Reactor Administrator is responsible for the training and requalification of the facility reactor operators and senior reactor operators. The selection, training, and requalification of operations personnel shall be consistent with all current regulations and guidelines.

6.2 Review and Audit

6.2.1 Charter and Rules

- a. The Reactor Committee shall be composed of at least five voting members, one of whom shall be a Health Physicist designated by the campus Radiation Safety Officer for the University, one whom shall be the Reactor Administrator, and one whom shall be the Reactor Health Physicist. The remaining members shall be appointed by the Head of the Department of Nuclear, Plasma and Radiological Engineering, so as to maintain a balanced knowledge of reactor safety and regulation.
- b. The Reactor Committee shall have a written statement defining such matters as the authority of the committee, the subjects within its purview, and other such administrative provisions as are required for the effective functioning of the Reactor Committee. Minutes of all meetings of the Reactor Committee shall be kept.
- c. A quorum of the Reactor Committee shall be a majority of not less than one half of the members and the reactor staff shall not constitute a voting majority.
- d. The Reactor Committee shall meet at least semiannually not to exceed nine months

6.2.2 Review Function

The review function of the Committee shall include, but is not limited to the following:

- a. Determinations that proposed changes in equipment, systems, tests, experiments, or procedures do not involve an unreviewed safety question.
- b. All new procedures and major revisions thereto having safety significance, proposed changes in reactor facility equipment, or systems having safety significance.
- c. All new experiments or classes of experiments for determination that an unreviewed safety question does not exist.
- d. Proposed changes in the technical specifications or license.
- e. Violations of technical specifications or license.
- f. Operating abnormalities having safety significance.
- g. Reportable occurrences as listed in 6.8.
- h. Audit reports.

A written report or minutes of the findings and recommendations of the Committee shall be submitted to the Head, Department of Nuclear, Plasma and Radiological Engineering, and the Reactor Committee members in a timely manner after each meeting.

6.2.3 Audit Function

The audit function of the Reactor Committee shall include selective (but comprehensive) examination of records, logs, and other documents. Discussions with cognizant personnel and observation of evolutions should be used also as appropriate. In no case shall the individual immediately responsible for the area perform an audit in that area. The following items shall be audited:

- a. Facility operations for conformance to the technical specifications and license, at least once per calendar year (interval between audits not to exceed 15 months).
- b. The requalification program for the operating staff, at least every other calendar year (interval between audits not to exceed 30 months).
- c. The action taken to correct those deficiencies that may occur in the reactor facility equipment, systems, structures, or methods of operations that affect reactor safety, at least once per calendar year (interval between audits not to exceed 15 months).
- d. The reactor facility emergency plan, and implementing procedures at least once every other calendar year (interval between audits not to exceed 30 months).

Deficiencies uncovered that affect reactor safety shall immediately be reported to the Head, Department of Nuclear, Plasma and Radiological Engineering. A written report of the findings of the audit shall be submitted to the Reactor Committee within three months after the audit is completed and then forwarded to the Head, Department of Nuclear, Plasma and Radiological Engineering.