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

OHIO STATE UNIVERSITY

DOCKET NO. 50-150

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 15
License No. R-75

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to Facility Operating License No. R-75, filed by the Ohio State University (the licensee), dated August 28, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the regulations of the Commission 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 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 regulations of the Commission 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 Operating License No. R-75 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 15, 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 the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Seymour H. Weiss

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
Specifications Changes

Date of Issuance: November 13, 1995

ENCLOSURE TO LICENSE AMENDMENT NO. 15

FACILITY OPERATING LICENSE NO. R-75

DOCKET NO. 50-150

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified be Amendment number and contain vertical lines indicating the areas of change.

Remove	Insert
31	31
32	32
33	33
34	34

(6) A minimum of three people shall be present during fuel handling. One shall be a licensed senior reactor operator, and one shall be at least a licensed reactor operator.

6.1.4 Selection and Training of Personnel

The selection, training, and requalification of operations personnel shall meet or exceed the requirements of American National Standard for Selection and Training of Personnel for Research Reactors, ANSI/ANS-15.4-1977, Sections 4-6.

6.2 **Review and Audit**

There shall be a Reactor Operations Committee (ROC) which shall review and audit reactor operations to assure the facility is operating in a manner consistent with public safety and within the terms of the facility license. The Committee advises the Director of the NRL, and is responsible to the Provost of The Ohio State University.

6.2.1 Composition and Qualifications of the ROC

Committee members shall be appointed annually by the Provost of The Ohio State University. The Committee shall be composed of at least nine members including ex-officio members. The Director and Associate Director of the Nuclear Reactor Laboratory, and the Director of the Office of Radiation Safety shall be ex-officio voting members of the Committee. The remaining Committee members shall be faculty, staff, and student representatives of The Ohio State University (but not part of the staff of the Reactor Lab), having professional backgrounds in engineering, physical, biological, or medical sciences, as well as knowledge of and interest in applications of nuclear technology and ionizing radiation.

6.2.2 ROC Meetings

The Committee shall meet at least twice each year. It should meet on or about six month intervals. A quorum shall consist of at least 50 percent of the members. Ex-officio members shall be counted in the quorum as follows:

(1) The Provost is an ex-officio member. Since the Provost is not appointed as a member of the ROC, the Provost is not required to act as a member, is not counted as a member when counting a quorum, but does have the right to vote.

(2) Ex-officio members who are under the authority of the Provost serve in the same capacity as those who are appointed by the Provost, i.e., they have the right to vote and are counted as members when counting a quorum.

(3) Ex-officio members, if any, who are not under the authority of the Provost, have the right to vote, but have no obligation to participate. Accordingly, they are not counted as members when counting a quorum.

(4) All ex-officio members hold membership by virtue of their office. They cease to be members when they cease to hold office.

6.2.3 Sub-Committees

The chairperson may appoint a Subcommittee from within the Committee membership to act on behalf of the full committee on those matters which cannot await the regular semi-annual meetings. The full Committee shall review the actions taken by the Subcommittee at the next regular meeting.

6.2.4 ROC Review and Approval Function

The responsibilities of the ROC include, but are not limited to the following:

(1) Review and approval of experiments utilizing the reactor facilities

(2) Review of procedures

(3) Review and approval of all proposed changes to the license and technical specifications

(4) Determination of whether a proposed change, new test, or experiment would constitute an unreviewed safety question or require a change in the technical specifications per 10CFR50.59

(5) Review of audit reports

(6) Review of abnormal performance of plant equipment and operating abnormalities having safety significance

(7) Review of unusual occurrences and incidents which are reportable under 10CFR19, 20, 21, and 50, or Section 6.6.4 of this document, and

(8) Review of violations of technical specifications, license, or procedures having safety significance.

Relative to item (1), responsibility for review of experiments on a day-to-day basis shall lie with the Director of the Nuclear Reactor Laboratory or his designee. This day-to-day review shall determine whether a specific experiment has previously been approved in the generic sense by the ROC. A semi-annual report of performed experiments shall be provided for ROC review.

Relative to item (2), the NRL Director or his designee shall be responsible for approval of procedures or changes to procedures on a day-to-day basis. He shall provide a summary of all procedure changes to the ROC for their review.

A complete set of minutes of all Committee and Subcommittee meetings, including copies of all documentary material reviewed, and all approvals, disapprovals, and recommendations shall be kept. Minutes or reports of all Committee meetings or Subcommittee meeting should be disseminated to the Committee members prior to the next regularly scheduled meeting, and should be read for approval as the first item on each Agenda. A copy of the minutes, or any reports reviewed, should also be forwarded to the Director of the Engineering Experiment Station in a timely manner.

6.2.5 ROC Audit Function

A three member Subcommittee shall meet annually to perform an audit of NRL operations and records or review the results of an independent audit completed by another qualified agency. At least two individuals on the Audit Subcommittee shall be ROC members. The third may be a staff member from the Reactor Laboratory or another individual appointed by the ROC chairperson. No member shall audit a function that he is responsible for performing. Each person should serve for three consecutive audits, at which time he or she should be replaced by a new member. In this way, each Subcommittee should consist of two holdovers and one new member. The member serving for his or her second audit should be the Audit Subcommittee Chairperson. The following items shall be audited:

(1) Reactor operations for adherence to facility procedures, Technical Specifications, and license requirements

(2) The requalification program for the operating staff,

(3) The facility Emergency Plan and implementing procedures,

(4) The facility Security Plan and implementing procedures, and

(5) The results of actions taken to correct any deficiencies that affect reactor safety, and

(6) Conformance with the ALARA Policy and the effectiveness of radiologic control.

Deficiencies found by the Audit Subcommittee that affect Reactor Safety, shall be reported immediately to the Director of the Engineering Experiment Station. A written report of audit findings should be submitted to the Director of the Engineering Experiment Station and the full Reactor Operations Committee within three months of the audit's completion.

6.3 Procedures

6.3.1 Reactor Operating Procedures

Written procedures, reviewed and approved by the Director, or his/her designee, and reviewed by the ROC, shall be in effect and followed. The procedures shall be adequate to assure the safety of the reactor, but should not preclude the use of independent judgement and action should the situation require such. All new procedures and changes to existing procedures shall be documented by the NRL staff and subsequently reviewed by the ROC. At least the following items shall be covered:

(1) Startup, operation, and shutdown of the reactor,

(2) Installation, removal, or movement of fuel elements, control rods, experiments, and experimental facilities,

(3) Actions to be taken to correct specific and foreseen potential malfunctions of systems or components; including responses to alarms, suspected cooling system leaks, and abnormal reactivity changes,

(4) Emergency conditions involving potential or actual release of radioactivity including provisions for evacuation, re-entry, recovery, and medical support,

(5) Preventive and corrective maintenance procedures for systems which could have an effect on reactor safety,

(6) Periodic surveillance of reactor instrumentation and safety systems, area monitors, and radiation safety equipment,

(7) Implementation of Security, Emergency and Operator training and requalification plans, and

(8) Personnel radiation protection.