February 15, 2011

Dr. John G. Williams, Director Nuclear Reactor Laboratory Engineering Building (20), Room 104 University of Arizona P.O. Box 210020 1127 East James E. Rogers Way Tucson, AZ 85721-0020

SUBJECT: UNIVERSITY OF ARIZONA - ISSUANCE OF AMENDMENT NO. 19 TO

FACILITY LICENSE NO. R-52 FOR THE UNIVERSITY OF ARIZONA

RESEARCH REACTOR (TAC NO. ME3989)

Dear Dr. Williams:

The U. S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 19 to Facility License No. R-52 for the University of Arizona Research Reactor. The amendment consists of changes to the Facility License and the facility Technical Specifications in response to your application dated May 20, 2010, as supplemented on August 13, September 20, October 8, 2010, January 7, and January 25, 2011.

The amendment consists of changes to the Facility License from possess, use, and operate to possession only license and the facility Technical Specifications to eliminate those specifications which are no longer needed and to relax those applicable specifications since the reactor is permanently shutdown. These changes were developed in preparation for decommissioning of your reactor.

A copy of the related safety evaluation supporting Amendment No. 19 is enclosed.

Sincerely,

/RA/

Linh N. Tran, Senior Project Manager Research and Test Reactors Licensing Branch Division of Policy and Rulemaking Office of Nuclear Reactor Regulation

Docket No. 50-113

Enclosures: 1. License Amendment No. 19

2. Safety Evaluation

cc w/encls: See next page

February 15, 2011

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Sincerely, /RA/

Linh N. Tran, Senior Project Manager Research and Test Reactors Licensing Branch Division of Policy and Rulemaking Office of Nuclear Reactor Regulation

NRR-058

Docket No. 50-113

Enclosures: 1. License Amendment No. 19

2. Safety Evaluation

cc w/encls: See next page <u>DISTRIBUTION</u>:

PUBLIC PRT r/ f GLappert, NRR RidsNrrDpr RidsOgcRp JHickman, FSME LTran, NRR

ACCESSION NO: Package: ML102980438 Letter: ML102980413, SE ML102980425, TS ML102980416

OFFICE	PRLB:PM	PRLB:LA	PROB:PM	OGC	PRLB:BC	PRLB:PM
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NAME	LTran	GLappert	Plsaac		JQuichocho	LTran
	2/11/11	2/14/11	1/17/11	1/31/11	2/15/11	2/15/11
DATE						

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UNIVERSITY OF ARIZONA

DOCKET NO. 50-113

AMENDMENT TO

FACILITY LICENSE

Amendment No. 19 License No. R-52

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for an amendment to Facility License No. R-52 filed by the University of Arizona (the licensee) on May 20, 2010, as supplemented on August 13, September 20, October 8, 2010, January 7, and January 25, 2011, 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 maintained 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 a notice for this amendment is not required by 10 CFR 2.106.

2. Accordingly, the license is amended by changes to paragraphs 1.C., 1.E., 2.B.(1), 2.B.(1), 2.B.(2), 2.B.(3), 2.C.(1), 2.C.(2), 2.C.(3), and 2.D to read as follows:

Paragraph 1.C:

The facility will be maintained in conformity with the application, the provisions of the Act, and the regulations of the Commissions;

Paragraph 1.E:

The licensee is technically and financially qualified to engage in the activities authorized by this license in accordance with the regulations of the Commissions;

Paragraph 2.B.(1):

Pursuant to Section 104c of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess the facility at the designated location in Tucson, Arizona, in accordance with the procedures and limitations set forth in this license.

Paragraph 2.B.(2):

Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material, " to possess up to 3.5 kilograms of uranium-235 contained in uranium enriched to less than 20% in the isotope uranium-235.

Paragraph 2.B.(3):

Pursuant to the Act and 10 CFR Part 30, "Rule of General Applicability to Domestic Licensing of Byproduct Material," to possess a 5-curie sealed americium-241 beryllium neutron source in connection with operation of the facility.

Paragraph 2.C.(1):

The licensee is not authorized to operate the facility.

Paragraph 2.C.(2):

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 19, are hereby incorporated in the license. The licensee shall maintain the facility in accordance with the Technical Specifications.

Paragraph 2.C.(3):

Physical Security Plan

The licensee shall maintain in effect and fully implement provisions of the Commission approved physical security plan, including all amendments and revisions made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p), which are part of the license. This plan, which contains information withheld from public disclosure under 10 CFR 2.390 is entitled "Physical Security Plan for the University of Arizona Research Reactor," dated May 2009.

Paragraph 2.D:

This license is effective as of the date of issuance and will be terminated when the decommissioning has been performed in accordance with the approved decommissioning plan and the terminal radiation survey and associated document demonstrate that the facility and site are suitable for release in accordance with the criteria for decommissioning in 10 CFR Part 20, Subpart E.

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

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Jessie F. Quichocho, Chief Research and Test Reactors Licensing Branch Division of Policy and Rulemaking Office of Nuclear Reactor Regulation

Enclosures:

Changes to Facility License Changes to Appendix A Technical Specifications

Date of Issuance: February 15, 2011

UNIVERSITY OF ARIZONA

ENCLOSURE TO LICENSE AMENDMENT NO. 19

FACILITY LICENSE NO. R-52

DOCKET NO. 50-113

Replace the following pages of the Facility License No. 52. The revised pages are identified by amendment number and contain marginal line indicating the area of change.

Appendix A Technical Specifications is being replaced in its entirety with the enclosed pages identified by amendment number.

Facility License

Remove	<u>Insert</u>
Page 1	Page 1
Page 2	Page 2
Page 3	Page 3

Appendix A Technical Specifications

Remove	<u>Insert</u>
All Pages	All Pages

RENEWAL OF FACILITY LICENSE

DOCKET NO. 50-113

UNIVERSITY OF ARIZONA

Amendment No. 15 License No. R-52

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for renewal of Facility License No. R-52 filed by the University of Arizona (the licensee) dated October 17, 1988, as supplemented on July 17, 1989, September 15, 1989 and January 30, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. Construction of the facility was completed in substantial conformity with Construction Permit No. CPRR-30 dated November 21, 1958 and CPRR-111 dated January 13, 1971, the provision of the Act, and the regulations of the Commission;
 - C. The facility will be maintained in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance the Commission's regulations;
 - E. The licensee is technically and financially qualified to engage in the activities authorized by this license in accordance with the regulations of the Commission;
 - F. The licensee is a nonprofit educational institution and will use the facility for the conduct of educational activities, and has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's Regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. The issuance of this license is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and

- I. The receipt and possession of the byproduct and special nuclear materials as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30 and 70, including Sections 30.33, 70.23 and 70.31.
- 2. Facility License No. 52 is hereby amended to read as follows:
 - A. The license applies to the TRIGA Mark I nuclear reactor (the facility) owned by the University of Arizona (the licensee). The facility is located on the licensee's site in Tucson, Arizona, and is described in the licensee's application for renewal of the license dated October 17, 1988, as supplemented on July 17, 1989, September 15, 1989, and January 30, 1990.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the University of Arizona:
 - (1) Pursuant to Section 104c of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess the facility at the designated location in Tucson, Arizona, in accordance with the procedures and limitations set forth in this license;
 - (2) Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," to possess up to 3.5 kilograms of uranium-235 contained in uranium enriched to less than 20% in the isotope uranium-235.
 - (3) Pursuant to the Act and 10 CFR Part 30, "Rule of General Applicability to Domestic Licensing of Byproduct Material," to possess a 5-curie sealed americium-241 beryllium neutron source in connection with operation of the facility.
 - (4) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
 - C. This license shall be deemed to contain and is subject to the conditions specified in Parts 20, 30, 50, 51, 55, 70 and 73 of 10 CFR Chapter I, to all applicable provisions of the Act, and to the rules, regulations and orders of the Commission now or hereafter in effect and to the additional conditions specified below:

(1) <u>Maximum Power Level</u>

The licensee is not authorized to operate the facility.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 19, are hereby incorporated in the license. The licensee shall maintain the facility in accordance with the Technical Specifications.

(3) Physical Security Plan

The licensee shall maintain in effect and fully implement provisions of the Commission approved physical security plan, including all amendments and revisions made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p), which are part of the license. This plan, which contains information withheld from public disclosure under 10 CFR 2.390 is entitled "Physical Security Plan for the University of Arizona Research Reactor," dated May 2009.

D. This license is effective as of the date of issuance and will be terminated when the decommissioning has been performed in accordance with the approved decommissioning plan and the terminal radiation survey and associated document demonstrate that the facility and site are suitable for release in accordance with the criteria for decommissioning in 10 CFR Part 20, Subpart E.

FOR THE NUCLEAR REGULATOR COMMISSION

/original signed by Gary M. Holahan/

Gary M. Holahan, Acting Director Division of Reactor Projects – III, IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosure:
Appendix A Technical
Specifications

Date of Issuance: May 22, 1990

CC:

Office of the Mayor P.O. Box 27210 Tucson, AZ 85726-7210

Director, Arizona Radiation Regulatory Agency 4814 South 40th Street Phoenix, AZ 85040

Dr. Leslie Tolbert Vice President for Research University of Arizona Tucson, AZ 85721-0066

Rob Offerle, Reactor Supervisor Nuclear Reactor Laboratory Engineering Building (20), Room 104 P.O. Box 210020 1127 East James E. Rogers Way University of Arizona Tucson, AZ 85721-0020

University of Arizona ATTN: Director, Arizona Research Labs Gould-Simpson Bldg. 1011 P.O. Box 210077 Tucson, AZ 85721-0077

University of Arizona ATTN: Daniel Silvain, Radiation Safety Officer 1640 North Vine Tucson, AZ 85721-0020

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