

October 1, 2015

Dr. Sean McDeavitt, Director
Nuclear Science Center
Texas Engineering Experiment Station
Texas A&M University System
1095 Nuclear Science Road
M/S 3575
College Station, TX 77843-3575

SUBJECT: TEXAS ENGINEERING EXPERIMENT STATION/TEXAS A&M UNIVERSITY
SYSTEM – ISSUANCE OF RENEWED FACILITY OPERATING LICENSE
NO. R-83 FOR THE TEXAS ENGINEERING EXPERIMENT
STATION/TEXAS A&M UNIVERSITY SYSTEM NUCLEAR SCIENCE CENTER
REACTOR (TAC NO. ME1584)

Dear Dr. McDeavitt:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Renewed Facility Operating License No. R-83 for Texas Engineering Experiment Station/Texas A&M University System Nuclear Science Center Reactor in response to the application for license renewal dated February 27, 2003, as supplemented on July 22, 2009; July 28, August 30, August 31, and December 9, 2010; May 27, June 9, and November 21, 2011; January 12, April 11, and November 14, 2012; January 31, 2013; February 3, February 11, and November 13, 2014; and March 2, June 5, June 11, and June 30, 2015. The renewed facility operating license is effective on date of issuance, and shall expire at midnight, 20 years from the date of issuance, unless terminated sooner.

In accordance with agency practice, the NRC has restated the license in its entirety, incorporating all changes and amendments made since the issuance of the original license as appropriate. Also enclosed with the renewed facility operating license is the safety evaluation report associated with the license renewal. A Notice of Issuance of Renewed Facility Operating License No. R-83 has been sent to the Office of the *Federal Register* for publication. The environmental assessment was sent to you under separate cover dated August 24, 2015.

S. McDeavitt

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If you have any questions, please contact me at 301-415-0893 or by electronic mail at Geoffrey.Wertz@nrc.gov.

Sincerely,

/Alexander Adams for RA/

Geoffrey A. Wertz, Project Manager
Research and Test Reactors Licensing Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket No. 50-128

Enclosures:

1. Facility Operating License No. R-83
2. Safety Evaluation Report

cc: See next page

Texas A&M University

Docket No. 50-128

cc:

Mayor, City of College Station
P.O. Box Drawer 9960
College Station, TX 77840-3575

Governor's Budget and Policy Office
P.O. Box 12428
Austin, TX 78711-2428

ATTN: Dr. Dimitris C. Lagoudas
Deputy Director
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Radiation Program Officer
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Technical Advisor
Office of Permitting, Remediation &
Registration
Texas Commission on Environmental
Quality
P.O. Box 13087, MS 122
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Test, Research and Training
Reactor Newsletter
202 Nuclear Sciences Center
University of Florida
Gainesville, FL 32611

Scott Miller, Manager
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Texas A&M University
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College Station, Texas 77843

State Energy Conservation Office
Comptroller of Public Accounts
P.O. Box 13528
Austin, TX 78711-3528

S. McDeavitt

- 2 -

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SE: ML13030A448; *concurrence via e-mail NRR-106**

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NAME	GWertz	CHsu	GLappert	AAdams
DATE	02/07/2013	12/13/2012	03/30/2015	07/29/2015
OFFICE	OGC	DPR/DD	DPR/D	NRR/D
NAME	BMizuno (NLO)	MGavrilas	LKokajko	WDean
DATE	08/11/2015	09/23/2015	09/24/2015	09/29/2015
OFFICE	PRLB/PM			
NAME	(AAdams for) GWertz			
DATE	10/01/2015			

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Enclosure 1

Texas Engineering Experiment Station
Texas A&M University System
Docket No. 50-128
Facility Operating License

ADAMS Accession No. ML13030A410

TEXAS ENGINEERING EXPERIMENT STATION/TEXAS A&M UNIVERSITY SYSTEM

DOCKET NO. 50-128

FACILITY OPERATING LICENSE

License No. R-83

1. The U.S. Nuclear Regulatory Commission (“the Commission”) has found that:
 - A. The application for renewal of Facility Operating License No. R-83 filed by the Texas Engineering Experiment Station/Texas A&M University System (“the licensee”), dated February 27, 2003, as supplemented on July 22, 2009; July 28, August 30, August 31, and December 9, 2010; May 27, June 9, and November 21, 2011; January 12, April 11, and November 14, 2012; January 31, 2013; February 3, February 11, and November 13, 2014; and March 2, June 5, June 11, and June 30, 2015 (“the application”), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (“the Act”), and the Commission’s rules and regulations set forth in Title 10, Chapter I, of the *Code of Federal Regulations* (10 CFR);
 - B. Construction of the Texas Engineering Experiment Station/Texas A&M University System Nuclear Science Center (“the facility”) TRIGA-type nuclear research reactor was completed in substantial conformity with the Construction Permit No. CPRR-38, issued in August 1959, and the application, as amended; the provisions of the Act; and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as supplemented, the provisions of the Act, and the rules and regulations of the Commission;
 - D. There is reasonable assurance that: (i) the activities authorized by this license can be conducted without endangering the health and safety of the public, and (ii) such activities will be conducted in compliance with 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 rules and regulations of the Commission;
 - F. The applicable provisions of 10 CFR Part 140, “Financial Protection Requirements and Indemnity Agreements,” have been satisfied;

- 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, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession and use of byproduct and special nuclear materials as authorized by this facility operating license will be in accordance with the Commission's regulations in 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material."
2. Accordingly, Facility Operating License No. R-83 is hereby renewed in its entirety to read as follows:
- A. This license applies to the Texas Engineering Experiment Station/Texas A&M University System Nuclear Science Center (herein "the facility") TRIGA-type nuclear research reactor owned by the Texas Engineering Experiment Station/Texas A&M University System (herein "the licensee"), located on the campus of Texas A&M University at College Station, Texas, and described in the licensee's application for license renewal, dated February 27, 2003, as supplemented.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the Texas Engineering Experiment Station/Texas A&M University System as follows:
 - 1. Pursuant to subsection 104c of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess, use, and operate the facility as a utilization facility at the designated location in accordance with the procedures and limitations described in the application and set forth in this license.
 - 2. Pursuant to the Act and 10 CFR Part 70, the following activities are included:
 - a. to receive, possess, and use, but not separate, in connection with the operation of the facility, up to 15 kilograms of contained uranium-235 enriched to less than 20 percent in the form of TRIGA-type reactor fuel;
 - b. to receive, possess, and use, but not separate, in connection with the operation of the facility, up to 40 grams total of special nuclear material, of any enrichment, in the form of detectors, fission plates, foils, and solutions; and,

- c. to receive, possess, and use, but not separate, in connection with the operation of the facility, such special nuclear material as may be produced by the operation of the facility.
 3. Pursuant to the Act and 10 CFR Part 30, the following activities are included:
 - a. to receive, possess, and use, in connection with the operation of the facility, a sealed antimony-beryllium neutron startup source,
 - b. to receive, possess, and use, in connection with the operation of the facility, a sealed 2.5-curie americium-beryllium neutron source; and,
 - c. to receive, possess, and use, in connection with operation of the facility, such byproduct material as may be produced by operation of the reactor, which can not be separated except for byproduct material produced in reactor experiments.
 4. Pursuant to the Act and 10 CFR Part 40, "Domestic Licensing of Source Material," to receive, possess, and use in connection with operation of the facility, not more than 6.8 kilograms of source material.
- C. This license shall be deemed to contain, and is subject to the conditions specified 10 CFR Parts 20, 30, 40, 50, 51, 55, 70, and 73 of the Commission's regulations; is subject to all provisions of the Act, and to the rules, regulations and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified or incorporated below:
 1. Maximum Power Level

The licensee is authorized to operate the reactor at a steady-state power level up to a maximum of 1000 kilowatts (thermal) and to pulse the reactor in accordance with the limitations in the Technical Specifications.
 2. Technical Specifications

The Technical Specifications contained in Appendix A are hereby incorporated in their entirety in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. Physical Security Plan

The licensee shall maintain and fully implement all provisions of the Commission-approved physical security plan, including changes made pursuant to the authority of 10 CFR 50.54(p). The approved physical security plan, entitled "Texas A&M Engineering Experiment Station, Nuclear Science Center, Physical Security Plan for the Protection of Special Nuclear Material, Facility Operating License R-83, Docket Number 50-128, March 2015," consists of documents withheld from public disclosure pursuant to 10 CFR 73.21.

This license is effective as of the date of issuance and shall expire at midnight, 20 years from the date of issuance.

For the Nuclear Regulatory Commission

/RA/

William M. Dean, Director
Office of Nuclear Reactor Regulation

Attachment:
Appendix A, Technical Specifications

Date of Issuance: October 1, 2015