October 17, 2005

Mr. Paul E. Benneche, Reactor Director University of Virginia Charlottesville, VA 22904-4322

SUBJECT: TERMINATION OF FACILITY OPERATING LICENSE NOS. R-66 AND R-123 FOR THE UNIVERSITY OF VIRGINIA RESEARCH REACTORS (TAC NOS. MB8233 AND MC7054)

Dear Mr. Benneche:

The U.S. Nuclear Regulatory Commission (NRC) has reviewed University of Virginia's (UVA's) request dated June 18, 2004, to terminate Facility Operating License No. R-66 for the UVA Research Reactor (UVAR). Pursuant to 10 CFR 50.82(b)(6), the NRC staff has concluded that the terminal radiation survey and associated documentation demonstrate that the decommissioning is finished and the facility and site meet the criteria for license termination in accordance with the NRC-approved UVAR decommissioning plan submitted February 9, 2000, updated by letter dated April 26, 2000, and supplemented by letters on June 6 and December 19, 2000, and May 4 and 11, 2001. The NRC approved the UVAR decommissioning plan by Amendment No. 26 to Facility Operating License No. R-66 on March 26, 2002.

The U.S. Nuclear Regulatory Commission (NRC) has also reviewed UVA's request dated April 4, 2003 and affirmed the request by letter dated September 26, 2005, to terminate Facility Operating License No. R-123 for the UVA Cooperatively Assembled Virginia Low Intensity Education Reactor (CAVALIER) Research Reactor. Pursuant to 10 CFR 50.82(b)(6), the NRC staff has concluded that the final radiation survey and associated documentation demonstrate that the decommissioning and the facility and site meet the criteria for license termination in accordance with the NRC-approved CAVALIER decommissioning plan submitted by letter dated February 26, 1990, and supplemented on June 17, 1991.

The NRC completed its review of the April 2004 UVAR Final Status Survey Report, submitted to NRC by letter dated June 18, 2004, and the Evaluation of Radiological Characterization Results Relative to the Termination of NRC License No. R-123 dated March 2003, submitted by letter dated April 4, 2003. Both reports documented the level of radioactivity remaining at the facility and stated that compliance with the criteria of the NRC-approved decommissioning plan for the two reactors has been demonstrated.

On the basis of decommissioning activities carried out by UVA, the NRC's review of your final survey report, the results of NRC inspections conducted at the UVA, and the results of NRC confirmatory surveys, the NRC concludes that decommissioning is finished and the facility and site are suitable to be released for unrestricted use. Facility Operating License Nos. R-66 and R-123 are hereby terminated.

P. E. Benneche

In connection with the license termination, we are enclosing two copies of Amendment No. 15 to Indemnity Agreement No. E-28. Please sign and return one copy to this office.

Also enclosed is a copy of the Notice of Approval of Decommissioning Plan and Notice of License Termination, which is being sent to the Office of the Federal Register for publication.

Sincerely,

/**RA**/

Brian E. Thomas, Section Chief Research and Test Reactors Section New, Research and Test Reactors Program Division of Regulatory Improvement Programs Office of Nuclear Reactor Regulation

Docket Nos. 50-62 and 50-396

- Enclosures: 1. Amendment No. 15 to Indemnity Agreement No. E-28
 - 2. Federal Register Notice

cc w/enclosures: See next page

University of Virginia

CC:

Department of Environmental Quality Office of Grants Management and Intergovernmental Affairs 629 East Main Street, Sixth Floor Richmond, VA 23219

Dr. William Vernetson Director of Nuclear Facilities Department of Nuclear Engineering Sciences University of Florida 202 Nuclear Sciences Center Gainesville, FL 32611

Office of the Attorney General 900 East Main Street Richmond, VA 23219

Radiological Health Program Virginia Department of Health P.O. Box 2448 Richmond, VA 23218

Dr. Ralph O. Allen, Chairman Reactor Decommissioning Committee Environmental Health and Safety University of Virginia P.O. Box 3425 Charlottesville, VA 22904

Mr. Paul E. Benneche, Supervisor Nuclear Reactor Facility Environmental Health and Safety University of Virginia P.O. Box 400322 Charlottesville, VA 22904-4322

Test, Research, and Training Reactor Newsletter University of Florida 202 Nuclear Sciences Center Gainesville, FL 32611 P. E. Benneche

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Sincerely,

/RA/

Brian E. Thomas, Section Chief **Research and Test Reactors Section** New, Research and Test Reactors Program **Division of Regulatory Improvement Programs** Office of Nuclear Reactor Regulation

Docket Nos. 50-62 and 50-396

Enclosures:	1. Amendment No. 15 to	
		-

Indemnity Agreement No. E-28

2. Federal Register Notice

cc w/enclosures: See next page

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TEMPLATE #: NRR-106

Docket Nos. 50-62 and 50-396

AMENDMENT TO INDEMNITY AGREEMENT NO. E-28 AMENDMENT NO. 15

Effective October 17, 2005, Indemnity Agreement No. E-28 between the University of Virginia Research Reactor (UVAR) and the Cooperatively Assembled Virginia Low Intensity Education Reactor (CAVALIER) and the Nuclear Regulatory Commission (formerly the Atomic Energy Commission), dated December 6, 1962, as amended, is hereby terminated.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Eileen McKenna, Acting Program Director Policy and Rulemaking Program **Division of Regulatory Improvement Programs** Office of Nuclear Reactor Regulation

Accepted:_____ 2005

By:_____ University of Virginia

Docket Nos. 50-62 and 50-396

AMENDMENT TO INDEMNITY AGREEMENT NO. E-28 AMENDMENT NO. 15

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FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Eileen McKenna, Acting Program Director Policy and Rulemaking Program **Division of Regulatory Improvement Programs** Office of Nuclear Reactor Regulation

Accepted:_____ 2005

By:_____ University of Virginia

UNITED STATES NUCLEAR REGULATORY COMMISSION

NOTICE OF LICENSE TERMINATIONS

FOR

UNIVERSITY OF VIRGINIA RESEARCH REACTOR (UVAR)

DOCKET NO. 50-62

<u>AND</u>

UNIVERSITY OF VIRGINIA COOPERATIVELY ASSEMBLED VIRGINIA LOW INTENSITY EDUCATIONAL REACTOR (CAVALIER)

DOCKET NO. 50-396

The U.S. Nuclear Regulatory Commission (NRC) is noticing the termination of Facility Operating License No. R-66 for the UVAR and Facility Operating License No. R-123 for the CAVALIER.

The NRC has terminated the license of the decommissioned UVAR, in the reactor facility on the UVA campus in Charlottesville, Virginia, and has released the site for unrestricted use. The licensee requested termination of the license in a letter to NRC dated June 18, 2004. The UVAR was a 2-MW-thermal, light-water-moderated, -cooled, and -reflected reactor fueled with plate-type fuel. It was licensed and first operated in June 1960. The reactor was permanently shut down on June 30, 1998. The licensee submitted a decommissioning plan to NRC for review and approval in a letter dated February 9, 2000, updated by letter dated April 26, 2000, and supplemented by letters on December 19, 2000, and May 4 and May 11, 2001. The NRC approved the UVAR decommissioning plan by Amendment No. 26 to the Facility Operating License No. R-66 on March 26, 2002.

The NRC has also terminated the license of the decommissioned CAVALIER, which was in the same reactor facility on the UVA campus in Charlottesville, Virginia, and has released the site for unrestricted use. The licensee requested termination of the license in an April 4, 2003 letter to NRC. The request for termination was affirmed by letter dated September 26, 2005. The CAVALIER was a 100-MW-thermal, light-water-moderated, -cooled, and -reflected reactor fueled with plate-type fuel. It was licensed and first operated in October 1974. The licensee submitted a decommissioning plan by letter February 26, 1990, and supplemented the plan on June 17, 1991. The NRC Commission issued an Order Authorizing Dismantling of Facility and Disposition of Component Parts for the CAVALIER, Facility Operating License No. R-123, on February 3, 1992.

A Notice and Solicitation of Comments Pursuant to 10 CFR 20.1405 and 10 CFR 50.82(b)(5) Concerning Proposed Action To Decommission the University of Virginia, University of Virginia Research Reactor appeared in the *Federal Register* on December 6, 2001 (65 FR 17684). All comments received were considered by the staff during the review of the UVAR decommissioning plan for Facility Operating License No. R-66.

A Notice of Proposed Issuance of Orders Disposition of Component Parts and Terminating Facility License appeared in the *Federal Register* on April 22, 1991 (56 FR 16350). No request for a hearing or petition for leave to intervene was filed following notice of the proposed action concerning Facility Operating License No. R-123.

The NRC completed its review of the April 2004 UVAR Final Status Survey Report submitted to NRC by letter dated June 18, 2004, and the March 2003 Evaluation of Radiological Characterization Results Relative to the Termination of NRC License No. R-123 dated, March 2003, submitted by letter dated April 4, 2003. Both reports documented the level of residual radioactivity remaining at the facility and stated that compliance with the criteria in the NRC-approved decommissioning plan for both reactors has been demonstrated.

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Pursuant to 10 CFR 50.82(b)(6), the NRC staff has concluded that both reactors have been decommissioned in accordance with the approved decommissioning plans and that the terminal radiation surveys and associated documentation demonstrate that the facilities and sites may be released in accordance with the criteria in the NRC-approved decommissioning plans. Further, on the basis of the decommissioning activities carried out by UVA, the NRC's review of the licensee's final status survey report, the results of NRC inspections conducted at the UVAR and CAVALIER, and the results of NRC confirmatory surveys, the NRC has concluded that the decommissioning process is complete and the facilities and sites may be released for unrestricted use. Therefore Facility Operating License Nos. R-66 and R-123 are terminated.

For further details concerning UVAR see the licensee's application for decommissioning dated February 9, 2000, updated by letter April 26, 2000 and supplemented by letters on December 19, 2000, May 4, and May 11, 2001; the NRC approval of the UVAR decommissioning plan by Amendment No. 26 to Facility Operating License No. R-66 on March 26, 2002; the licensee's request for license termination by letter to NRC dated June 18, 2004; the April 2004 UVAR Final Status Survey Report submitted to NRC by letter dated June 18, 2004; and NRC Inspection Report No. 50-62/2002-202, dated September 2, 2005. For further details about CAVALIER, see the licensee's February 26, 1990 application for decommissioning, supplemented on June 17, 1991; the February 3, 1992, Order Authorizing Dismantling of Facility and Disposition of Component Parts for the CAVALIER, Facility Operating License No. R-123; licensee's April 4, 2003, request for termination of the license; the March 2003 Evaluation of Radiological Characterization Results Relative to the Termination of NRC License No. R-123, submitted by letter dated April 4, 2003; and NRC Inspection Report No. 50-62/2002-202, dated September 2, 2005.

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for a fee, at the NRC's Public Document Room (PDR) at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records for UVA dated after January 30, 2000, will be accessible electronically from the Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, <u>http://www.nrc.gov/reading-rm/adams.html</u>. Persons who do not have access to ADAMS or who have problems in accessing the documents in ADAMS should call the NRC PDR reference staff at 1-800-397-4209 or 301-415-4737 or e-mail <u>pdr@nrc.gov</u>.

Dated at Rockville, Maryland, this 17th day of October 2005.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Brian E. Thomas, Section Chief Research and Test Reactors Section New, Research and Test Reactors Program Division of Regulatory Improvement Programs Office of Nuclear Reactor Regulation