

February 17, 2006

Dr. William G. Vernetson  
Director of Nuclear Facilities  
Department of Nuclear and  
Radiological Engineering  
P. O. Box 11830  
University of Florida  
Gainesville, FL 32611

SUBJECT: NRC INSPECTION REPORT NO. 50-083/2006-201

Dear Dr. Vernetson:

This letter refers to the inspection conducted on January 30 - February 3, 2006, at your University of Florida Test Reactor facility. The inspection included a review of activities authorized for your facility. The enclosed report presents the results of that inspection.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress. Based on the results of this inspection, no safety concern or noncompliance of NRC requirements was identified. No response to this letter is required.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning this inspection, please contact Craig Bassett at 404-562-4712.

Sincerely,

**/RA/**

Brian E. Thomas, Branch Chief  
Research and Test Reactors Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

Docket No. 50-083  
License No. R-56

Enclosure: NRC Inspection Report No. 50-083/2006-201

cc w/enclosure: Please see next page

University of Florida

Docket No. 50-083

cc:

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**U. S. NUCLEAR REGULATORY COMMISSION**  
**OFFICE OF NUCLEAR REACTOR REGULATION**

Docket No: 50-083

License No: R-56

Report No: 50-083/2006-201

Licensee: University of Florida

Facility: University of Florida Training Reactor

Location: Gainesville, FL

Dates: January 30 - February 3, 2006

Inspector: Craig Bassett

Approved by: Brian E. Thomas, Branch Chief  
Research and Test Reactors Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

## **EXECUTIVE SUMMARY**

University of Florida  
University of Florida Training Reactor  
Inspection Report No.: 50-083/2006-201

The primary focus of this routine, announced inspection was the onsite review of selected aspects of the licensee's Class II research reactor safety programs including: organizational structure and staffing, review and audit and design change functions, procedures, radiation protection, effluent and environmental monitoring, and transportation of radioactive materials since the last NRC inspection of these areas. The licensee's programs were acceptably directed toward the protection of public health and safety, and in compliance with NRC requirements.

### Organizational Structure and Staffing

- The operations organizational structure and staffing were consistent with Technical Specifications Sections 6.2.1 - 6.2.4 requirements.

### Review and Audit and Design Change Functions

- The review and audit program was being conducted acceptably by the Reactor Safety Review Subcommittee as stipulated in Technical Specifications Section 6.2.5.
- The design control program was being implemented as required.

### Procedures

- Review, revision, control, and implementation of facility procedures satisfied Technical Specification requirements.

### Radiation Protection Program

- Surveys were being completed and documented acceptably to permit evaluation of the radiation hazards present.
- Postings generally met the regulatory requirements specified in 10 CFR Parts 19 and 20.
- Personnel dosimetry was being worn as required and doses were well within the NRC's regulatory limits.
- Radiation monitoring equipment was being maintained and calibrated as required.
- The Radiation Protection Program being implemented by the licensee satisfied regulatory requirements.

### Effluent and Environmental Monitoring

- Effluent monitoring satisfied procedural and regulatory requirements and releases were within the specified regulatory and Technical Specification limits.

Transportation of Radioactive Materials

- Transfer of radioactive material from the University of Florida Training Reactor to the State of Florida (Agreement State) License was completed and documented in accordance with licensee procedural requirements.

## REPORT DETAILS

### Summary of Plant Status

The licensee's one hundred kilowatt modified Argonaut-UTR type research and test reactor continued to be operated in support of education, operator training, surveillance, contract or service work, and experiments. During the inspection, the reactor was not operated.

### 1. Organizational Structure and Staffing

#### a. Inspection Scope (Inspection Procedure [IP] 69001)

The inspector reviewed selected aspects of the following regarding the licensee's organization and staffing to ensure that the requirements of Sections 6.2.1 - 6.2.4 of Technical Specifications (TS), Amendment No. 25, dated January 12, 2006, were being met:

- current staff qualifications
- management responsibilities as outlined in the TS
- organizational structure for the University of Florida Training Reactor (UFTR)
- selected portions of the UFTR Operating Log pages for the past year through the present

#### b. Observations and Findings

The operations organizational structure had not functionally changed since the last NRC inspection (refer to NRC Inspection Report 50-083/2005-201). The operations staff comprised two Senior Reactor Operators, which included the Facility Director and one part-time person. Four other people worked part-time at the facility and functioned as laboratory (lab) and reactor facility technicians. TS Section 6.2.4 specifies that the training and qualification criteria contained in the ANSI/ANS (American National Standards Institute) Standard 15.4-1977, "Standards for Selection and Training of Personnel for Research Reactors," are required to be met by UFTR personnel. The inspector verified that the education, training, and experience of the operations staff met ANSI/ANS 15.4-1977 requirements. Staffing, during reactor operation, was the minimum required. Although the lab/reactor facility technicians provided assistance in the area of radiation protection, UFTR staff continued to receive other health physics support from the University of Florida Radiation Control Officer (RCO) and his staff. Review of records verified that management responsibilities were administered as required by the TS and applicable procedures.

#### c. Conclusions

The operations organizational structure and staffing were consistent with TS Section 6.2. Shift staffing met the minimum requirements for current operations.

## 2. Review and Audit and Design Change Functions

### a. Inspection Scope (IP 69001)

In order to verify that the licensee had established and conducted reviews and audits as required in TS Section 6.2.5, the inspector reviewed selected aspects of:

- facility design changes and records for the past two years
- Reactor Safety Review Subcommittee (RSRS) Executive Committee meeting minutes for 2005
- RSRS meeting minutes from October 2003 through December 2005
- safety review and audit records for the past two years and licensee responses to the reviews and audits
- UFTR Standard Operating Procedure (SOP)-0.1, "Operating Document Controls," Revision (Rev.) 3, dated September 2003 and the latest Temporary Change Notice (TCN), dated November 2005
- UFTR SOP-0.2, "Control of Maintenance," Rev. 5, dated September 2003
- UFTR SOP-0.3, "Control of Documentation of UFTR Modifications," Rev. 1, dated October 1999 and the latest TCN, dated September 2003
- UFTR SOP-0.4, "10 CFR 50.59 Evaluation and Determination," Rev. 2, dated July 2000 and the latest TCN, dated September 2003
- UFTR SOP-0.5, "UFTR Quality Assurance Program," Rev. 3, dated February 2003 and the latest TCN, dated November 2005
- UFTR Form SOP-0.2A, "UFTR Maintenance Log Page," Rev. 5, dated September 2003
- UFTR Form SOP-0.3A, "QA Document Checklist for Modification Packages," Rev. 1, dated October 1999
- UFTR Form SOP-0.4A, "10 CFR 50.59 Evaluation and Determination," Rev. 2, dated July 2000
- UFTR Form SOP-0.4B, "Supporting Material for 10 CFR 50.59 Determination," Rev. 2, dated July 2000
- UFTR Form SOP-0.5E, "Annual QA Audit Checklist," Rev. 3, dated February 2003 and the latest TCN, dated November 2005

### b. Observations and Findings

#### (1) Review and Audit Functions

The RSRS met 15 times during the period from October 2003 to December 2005. At least one meeting was held each quarter at intervals not to exceed four months as required by TS Section 6.2.5 (2). Committee membership satisfied the charter requirements stipulated in the TS. Review of the meeting minutes indicated that the committee provided guidance and direction to ensure suitable oversight of reactor operations. The RSRS minutes and audit records also showed that safety reviews and individual audits had been completed at the required frequency and submitted to the Dean of the College of Engineering within three months of completion for the functional areas specified by TS Section 6.2.5(4). The audits appeared to be comprehensive and well documented. The inspector noted that the licensee took



appropriate corrective actions in response to the audit findings when appropriate. Committee records documented that procedure changes were reviewed as required as well.

(2) Design Change Functions

The inspector reviewed the 10 CFR 50.59 evaluations and corresponding design change packages of selected changes for 2005. From these reviews, the inspector determined that the evaluations had adequate supporting documentation and information. Additionally, the inspector found that the 10 CFR 50.59 reviews and approvals were focused on safety and met TS and UFTR procedure requirements. Post installation verification testing of systems or equipment that had been changed was completed and adequately documented. Procedure and drawing changes were included in the change packages and were consistent with TS and UFTR requirements for facility changes. None of the changes posed a safety question or required a change to the TS.

c. Conclusions

Audits and reviews were being conducted by the RSRS in accordance with the requirements specified in TS Section 6.2.5. The licensee's design control program was being implemented as required.

**3. Procedures**

a. Inspection Scope (IP 69001)

The inspector reviewed selected aspects of the following to ensure that the requirements of TS Section 6.3 were met:

- records of changes and temporary changes
- RSRS meeting minutes from October 2003 through December 2005
- administrative controls for changing procedures
- UFTR SOP-0.1, "Operating Document Controls," Rev. 3, dated September 2003 and the latest TCN, dated November 2005
- UFTR SOP-0.5, "UFTR Quality Assurance Program," Rev. 3, dated February 2003 and the latest TCN, dated November 2005
- UFTR Form SOP-0.1A, "Cover Sheet/Change Request Form," Rev. 3, dated September 2003

b. Observations and Findings

Procedures were available for those tasks and items required by TS Section 6.3. The procedures were adequate to conduct reactor and other operations which they covered. The inspector verified that the facility procedures were being reviewed biennially as required by procedure and were revised as needed.

The inspector reviewed changes and temporary changes to selected procedures. The licensee implemented changes and temporary changes to procedures, and the associated review and approval processes, by use of administrative procedures UFTR SOP-0.1 and -0.5. The changes and temporary changes had been controlled, and reviewed and approved by the RSRS as required.

The inspector reviewed training records and interviewed the staff, and determined that the training of personnel on procedures and subsequent changes to procedures was effective. Personnel were also observed performing maintenance activities and a weekly survey in accordance with applicable procedures. The inspector determined that use of and adherence to the procedures was acceptable.

c. Conclusions

The inspector determined that the procedural change, control, and implementation program was acceptably maintained as required by TS and the applicable procedures.

**4. Radiation Protection Program**

a. Inspection Scope (IP 69001)

The inspector reviewed the following to verify compliance with 10 CFR Parts 19 and 20 and TS Sections 3.4.1 and 4.2.4:

- UFTR facility dosimetry records for 2004 through 2005
- University of Florida (UF) "Radiation Control Guide" last issued February 1997
- radiation and contamination survey records for 2005 through the date of the inspection
- calibration and periodic check records for radiation monitoring instruments documented on the applicable forms for 2004 to date
- ALARA Policy as outlined the "University of Florida Training Reactor Facility As Low As Reasonably Achievable (ALARA) Program," Rev. 1, dated August 2002
- UF Radiation Control Committee meeting minutes for 2005
- 1<sup>st</sup> through 4<sup>th</sup> Quarter ALARA Reports for 2005 of the UF Radiation Control and Radiological Services Department for the Radiation Control Committee
- UFTR SOP-D.1, "UFTR Radiation Protection and Control," Rev. 5, dated December 1993 and the latest TCN, dated October 2001
- UFTR SOP-D.2, "Radiation Work Permit," Rev. 11, dated October 2003
- UFTR SOP-D.3, "Primary Equipment Pit Entry," Rev. 4, dated October 2001
- UFTR SOP-D.4, "Removing Irradiated Samples from UFTR Experimental Ports," Rev. 7, dated October 2001
- UFTR SOP-D.1, Appendix I, Table 1, "Quarterly Exposure Limits for the UFTR Facility," Rev. 5, dated December 1993 and the latest TCN, dated April 1994
- UFTR Form SOP-D.1A, "UFTR Radiation Weekly Survey," Rev. 5, dated December 1993
- UFTR Form SOP-D.1B, "UFTR Swipe Survey Results," Rev. 5, dated December 1993

- UFTR Form SOP-D.2A, "Radiation Work Permit, University of Florida Training Reactor," Rev. 11, dated October 2003
- UFTR Form SOP-D.2C, "Radiation Work Permit Survey, University of Florida Training Reactor," Rev. 11, dated October 2003
- UFTR Quarterly #2 (Q-2 Surveillance), "Calibration Check of Area and Stack Radiation Monitors," Rev. 3, dated February 2003 and the latest TCN, dated September 2005 (controlled by UFTR SOP-0.5)
- UFTR Quarterly #4 (Q-4 Surveillance), "Unrestricted Area Indoor/Outdoor Radiation Survey," Rev. 3, dated February 2003 (controlled by UFTR SOP-0.5)
- UFTR Quarterly #5 (Q-5 Surveillance), "Restricted Area Radiation Survey," Rev. 3, dated February 2003 and the latest TCN, dated October 2003 (controlled by UFTR SOP-0.5)
- UFTR Quarterly #6 (Q-6 Surveillance), "Check of Posting Requirements," Rev. 3, dated February 2003 and the latest TCN, dated September 2005 (controlled by UFTR SOP-0.5)
- UFTR Quarterly #9 (Q-9 Surveillance), "Quarterly Calibration of Air Particulate Detector," Rev. 3, dated February 2003 (controlled by UFTR SOP-0.5)
- UFTR Radiological Control Technique #37, "Instructions for Periodic Calibration Checks of the UFTR Area and Stack Radiation Monitors," dated January 1997

The inspector also toured the facility, conducted a radiation survey of selected areas, and observed the use of dosimetry and radiation monitoring equipment. Radiological signs and other postings were observed as well.

b. Observations and Findings

(1) Surveys

The inspector reviewed weekly radiation and contamination surveys conducted by reactor staff personnel. These were surveys of facility controlled areas including the Radiochemistry Laboratory (Lab) and classroom, the Neutron Activation Analysis (NAA) Lab, the Control Room, and the Reactor Cell from 2005 to date. The inspector also reviewed quarterly general area radiation surveys of restricted and unrestricted areas completed by the licensee and UF Environmental Health and Safety (EH&S) Department personnel. The results were documented on the appropriate forms and were evaluated and reviewed as required. No readings or results were noted that exceeded set action levels but the licensee indicated that corrective action would be taken if a problem were detected.

During the inspection, the inspector conducted a radiation survey of the Reactor Cell and compared the readings detected with those found by the licensee. The results were comparable and no anomalies were noted.

(2) Postings and Notices

The inspector reviewed the postings at the entrances to various controlled areas including the Control Room, the Reactor Cell, and the Radiochemistry Lab in the UFTR facility. The postings were acceptable and indicated the radiation and

contamination hazards present. Other postings also showed the industrial hygiene hazards present in the areas. The facility's radioactive material storage areas were noted to be properly posted. No unmarked radioactive material was detected in the facility. Copies of notices to workers were posted in various locations throughout the facility, including on a bulletin board in the Control Room. However, the inspector noted that the copies of NRC Form-3, "Notice to Employees," that were posted at the facility, as required by 10 CFR Part 19.11, were not the current versions. This issue was brought to the attention of the licensee and copies of the correct version were immediately obtained from the campus RCO. Subsequently additional current copies were ordered to replace the outdated ones.

### (3) Dosimetry

The licensee used a National Voluntary Laboratory Accreditation Program-accredited vendor (Landauer) to process personnel dosimetry. Through direct observation, the inspector determined that dosimetry was acceptably used by facility personnel.

The inspector noted that the licensee used Optically Stimulated Luminescent (OSL) dosimeters for whole body monitoring of beta and gamma radiation exposure with an additional component to measure fast/thermal neutron radiation. The licensee used thermoluminescent dosimeter (TLD) finger rings for extremity monitoring as needed, although none had been used recently.

An examination of the OSL dosimeter results for the past two years showed that the highest occupational doses, as well as doses to the public, were within 10 CFR Part 20 limitations. The records showed that the highest annual whole body exposure received by a single individual for 2004 was six millirem (mr) deep dose equivalent (DDE). No extremity exposure monitoring was required that year. For 2005, the highest routine annual whole body exposure received by a single individual was six mr DDE. It was noted that, in 2005, a special project was completed involving the replacement of thermocouples in the reactor. This resulted in a whole body exposure of 13 mr DDE for one individual and a total of 18 mr DDE for that individual for 2005. In addition, the individual received a total of 43 mr exposure to the extremities for that job. As noted above, these doses were well within 10 CFR Part 20 limitations.

### (4) Radiation Monitoring Equipment

The calibration records of portable survey meters, friskers, fixed radiation detectors, and air monitoring instruments in use at the facility were reviewed. The records showed that the calibrations were completed by either reactor staff or campus EH&S Division personnel. The calibrations were tracked and controlled using a Microsoft Access database. The inspector confirmed that the frequencies of the calibrations, completed quarterly or semiannually, satisfied the requirements established in the TS Section 4.2.4 and 10 CFR 20.1501(b). All instruments checked by the inspector had a current calibration sticker attached.

The inspector visited and observed the calibration facility on campus. It appeared to be properly posted, with adequate precautions and interlocks installed to provide for personnel safety during instrument calibrations.

(5) Radiation Protection Program

The licensee's Radiation Protection Program was established in the UF "Radiation Control Guide", dated February 1997 and the UFTR SOPs. The program required that all personnel who had unescorted access to work in a radiation area or with radioactive material receive training in radiation protection, policies, procedures, requirements, and facilities prior to entry. The program was being reviewed annually as required.

The ALARA Policy was outlined and established in the UF "Program for Maintaining Occupational Radiation Exposure for Non-Medical Licensed Activities at the University of Florida, As Low As Reasonably Achievable (ALARA)," dated January 18, 2005, in Section 7 of the TS, and in the "University of Florida Training Reactor Facility As Low As Reasonably Achievable (ALARA) Program," Rev. 1, dated August 2002. The ALARA Policy provided guidance for keeping doses as low as reasonably achievable and was consistent with the guidance in 10 CFR Part 20.

(6) Radiation Work Permit Program

The inspector reviewed the Radiation Work Permits (RWPs) that had been written as stipulated in UFTR SOP-D.2 and used during 2004 and 2005. It was noted that the controls specified in the RWPs were acceptable and applicable for the type of work being done. The RWPs had been initiated, reviewed, and approved as required. Following completion of the work covered by the various RWPs, they had been terminated as required.

(7) Radiation Protection Training

The inspector reviewed the radiation worker (rad worker) training given to staff members and to part-time assistants such as students. Initial training included attending the UF EH&S Division's "Radiation Safety Short Course." Refresher training for licensee personnel was given every two years, basically through the Reactor Operator Requalification Program.

The initial and refresher training covered the topics specified in 10 CFR Part 19 as required. Training records showed that personnel were acceptably trained in radiation protection practices. The training program was acceptable.

(8) Facility Tours

The inspector toured the Control Room, Reactor Cell, and other selected support laboratories and offices. Control of radioactive material and control of access to radiation and high radiation areas were acceptable. As noted earlier, the postings and signs for these areas were appropriate.

c. Conclusions

The inspector determined that the Radiation Protection Program being implemented by the licensee satisfied regulatory and TS requirements because: 1) surveys were being completed and documented acceptably; 2) postings generally met regulatory requirements; 3) personnel dosimetry was being worn as required and doses were well within the NRC's regulatory limits; 4) radiation monitoring equipment was being maintained and calibrated as required; and, 5) the radiation protection training program was acceptable.

**5. Effluent and Environmental Monitoring**

a. Inspection Scope (IP 69001)

The inspector reviewed the following to verify compliance with the requirements of 10 CFR Part 20 and TS Sections 3.4.2 - 3.4.6 and 4.2.4:

- results of the analyses of air samples taken from the Reactor Room and the stack
- results of the analyses of liquid samples taken from the primary system, the secondary system, and the shield tank
- data concerning environmental releases and effluent monitoring contained in the licensee's "Monthly Utilization and General Activities Reports" for 2004 and 2005
- UFTR SOP-D.1, "UFTR Radiation Protection and Control," Rev. 5, dated December 1993
- UFTR SOP-D.7, "Circulation, Sampling, Analysis, and Discharge of Holdup Tank Wastewater," Rev. 1, dated April 2002 and the latest TCN, dated November 2005
- UFTR Form SOP-D.1C, "Portable Air Sample Activity and LLD Calculation," Rev. 5, dated December 1993
- UFTR Form SOP-D.1D, "Liquid Sample Activity and LLD Calculation," Rev. 5, dated December 1993
- UFTR Form SOP-D.7A, "Liquid Sample Activity and LLD Calculation," Rev. 1, dated April 2002
- UFTR Form SOP-D.7B, "UFTR Waste Water Holdup Tank Release Authorization," Rev. 1, dated April 2002
- UFTR Quarterly #2 (Q-2 Surveillance), "Calibration Check of Area and Stack Radiation Monitors," Rev. 3, dated February 2003 and the latest TCN, dated September 2005 (controlled by UFTR SOP-0.5)
- UFTR Quarterly #4 (Q-4 Surveillance), "Unrestricted Area Indoor/Outdoor Radiation Survey," Rev. 3, dated February 2003 (controlled by UFTR SOP-0.5)
- UFTR Semiannual #4 (S-4 Surveillance), "Measurement of Argon-41 Stack Concentrations," controlled by UFTR SOP-E.6, "Argon-41 Concentration Measurement," Rev. 2, dated October 2003 and the latest TCN, dated October 2005

b. Observation and Findings

The inspector reviewed the records documenting liquid and airborne releases to the environment for the past two years. The inspector determined that gaseous releases continued to be calculated as required by procedure and were adequately documented.



The releases were determined to be within the annual dose constraints of 10 CFR 20.1101 (d), 10 CFR Part 20 Appendix B concentrations, and TS limits. This was documented in the licensee's "Monthly Utilization and General Activities Reports" issued for information and review by the RSRs. COMPLY code calculations conducted by the UF EH&S Division for the UFTR indicated an effective dose equivalent to the public of 0.4 mr for 2004 and 0.3 mr for 2005. As the result of observation of the facility by the inspector, no new potential release paths were found.

Liquid releases were approved by the Facility Director or Reactor Supervisor and the Radiation Control Officer after analyses indicated that the releases would meet regulatory requirements for discharge into the sanitary sewer.

The inspector also reviewed the cumulative environmental monitoring OSL dosimeters results for 2004 and 2005. The effective dose equivalent to the public was well within the regulatory limits.

The inspector reviewed the calibration records of the area and stack monitoring systems. These systems had been calibrated quarterly as required by TS Section 4.2.4.

c. Conclusions

Effluent monitoring satisfied procedural and regulatory requirements and releases were within the specified regulatory and TS limits.

**6. Transportation**

a. Inspection Scope (IP 86740)

The inspector reviewed the following to verify compliance with TS Section 3.4.6 and procedural requirements for transferring licensed material:

- records of radioactive material transfers from the reactor license to the State of Florida materials license for 2004 and to date documented on various forms
- UFTR SOP-D.4, "Removing Irradiated Samples from UFTR Experimental Ports," Rev. 7, dated October 2001
- UFTR SOP-D.5, "UFTR Reactor Waste Transfer," Rev. 2, dated June 2002
- UFTR SOP-D.6, "Control of UFTR Radioactive Material Transfers," Rev. 1, dated April 2000 and the latest TCN dated October 2003
- UFTR Form SOP-D.4A, "Record of Sample Irradiation and Disposition," Rev. 7, dated October 2001
- UFTR Form SOP-D.5A, "Radioactive Reactor Waste Transfer Checklist," Rev. 2, dated June 2002
- UFTR Form SOP-D.5B, "Radioactive Reactor Waste Container Inventory," Rev. 2, dated June 2002
- UFTR Form SOP-D.5C, "Swipe Samples Analysis Report," Rev. 2, dated June 2002
- UFTR Form SOP-D.5D, "Radioactive Waste Container Radiation Survey," Rev. 2, dated June 2002

- UFTR Form SOP-D.6A, "University of Florida Training Reactor/University of Florida Radioactive Material Transfer Record," Rev. 1, dated April 2000
- UFTR Form SOP-D.6B, "University of Florida/University of Florida Training Reactor Radioactive Material Transfer Record," Rev. 1, dated April 2000
- UFTR Form SOP-D.6C, "University of Florida Training Reactor/University of Florida Activated Foil Transfer Record," Rev. 1, dated April 2000
- UFTR Form SOP-D.6D, "University of Florida Training Reactor/University of Florida Neutron Radiography Film Cassette Transfer Record," Rev. 1, dated April 2000
- UFTR Form SOP-D.6E, "University of Florida Training Reactor/University of Florida Rabbit System Sample Package Transfer Record," Rev. 1, dated April 2000

b. Observations and Findings

Through records review and discussions with licensee personnel, the inspector determined that the licensee had transferred radioactive material and solid waste produced by reactor operations to the UF's "State of Florida Radioactive Materials License" (Agreement State License), License No. 356-1, expiration date March 31, 2010, for possession, shipment, or disposal. All transfers were recorded on the appropriate and applicable forms. Transfer documentation was kept on file as required.

c. Conclusions

Transfer of radioactive material from the UFTR to the State of Florida (Agreement State) License was completed and documented in accordance with facility procedural requirements.

**7. Exit Meeting Summary**

The inspector reviewed the inspection results with members of licensee management at the conclusion of the inspection on February 3, 2006. The licensee acknowledged the findings presented and did not identify as proprietary any of the material provided to or reviewed by the inspector during the inspection except for certain documents pertaining to security.



## **PARTIAL LIST OF PERSONS CONTACTED**

### Licensee Personnel

M. Berglund	Senior Reactor Operator
A. Haghighat	Chairman, Nuclear and Radiological Engineering Department
M. Holman	NAA Lab/Reactor Facility Technician
W. Vernetson	Facility Director

### Other Personnel

D. Munroe	Radiation Control Officer, Radiation Control and Radiological Services Department, EH&S Division, University of Florida
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## **INSPECTION PROCEDURE (IP) USED**

IP 69001	Class II Research and Test Reactors
IP 86740	Inspection of Transportation Activities

## **ITEMS OPENED, CLOSED, AND DISCUSSED**

### Opened

None.

### Closed

None.

## **PARTIAL LIST OF ACRONYMS USED**

ANSI	American National Standards Institute
ALARA	As Low As Reasonably Achievable
CFR	Code of Federal Regulations
DDE	Deep dose equivalent
EH&S	Environmental Health and Safety Department
LLD	Lower limit of detection
mr	millirem
NAA	Neutron Activation Analysis
NRC	Nuclear Regulatory Commission
OSL	Optically Stimulated Luminescent (dosimeters)
RCO	Radiation Control Officer
Rev.	Revision
RSRS	Reactor Safety Review Subcommittee
RWP	Radiation Work Permit
SOP	Standard Operating Procedure
TLD	Thermoluminescent dosimeter
TCN	Temporary Change Notice
TS	Technical Specifications
UF	University of Florida
UFTR	University of Florida Training Reactor