

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

UNIVERSITY OF VIRGINIA

DOCKET NO. 50-62

AMENDMENT TO AMENDED FACILITY OPERATING LICENSE

Amendment No. 22 License No. R-66

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to Amended Facility Operating License No. R-66 filed by the University of Virginia (the licensee), dated October 10, 1995, as supplemented on October 19 and 26, 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.

- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph II.C.(2) of Amended Facility Operating License No. R-66 is hereby amended to read as follows:
 - (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 22, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

4. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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 9, 1995

ENCLOSURE TO LICENSE AMENDMENT NO. 22

AMENDED FACILITY OPERATING LICENSE NO. R-66

DOCKET NO. 50-62

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

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4.9. Surveillance of Activity in Secondary Cooling System

Applicability: This specification applies to the surveillance frequency of cooling tower (secondary system) water for identification of potential radioisotope concentrations.

Objective: The objective is to discover incipient primary-to-secondary heat exchanger leaks, either newly-formed or due to secondary tube plug failure(s), by identification of sodium-24 or other reactor-produced radionuclides in the secondary water. A second and related objective is to satisfy TS 3.1.4 (Radioactive Effluents; Airborne Effluents), TS 3.4.2 (Radioactive Effluents; Liquid Effluents), and 10 CFR 20 limits. If sodium-24 or other radionuclide activity is observed in secondary system water, appropriate maintenance on the secondary system will be initiated.

Specification: Cooling tower (secondary system) water shall be sampled and analyzed for radionuclides, at least weekly.

Bases: The plugging of heat exchanger secondary tubes and the impact of primary-to-secondary heat exchanger leaks are analyzed in UVAR LEU-SAR Section 9.19 and Section 9.20, respectively. It is reasoned that incipient secondary tube plug failures and new secondary tube pinhole leaks (possibly caused by corrosion and/or erosion) would be associated with initially very small and slowly-increasing leak rates. This TS 4.9, "Surveillance of Activity in Secondary Cooling System", specifies a secondary system water sampling and counting interval appropriate to ensure small leak identification long before time-averaged liquid and airborne release concentration limits are challenged.

This TS 4.9 is not material to the secondary tube double-ended-guillotine-break (DEGTB) analyzed in LEU-SAR Section 9.20.8, which would result in a leak rate sufficiently large for rapid (<1 day) discovery (by visible and noticeably rapid falling pool water level). Mitigation of the consequences of this hypothetically most-severe case would also occur before time-averaged liquid and airborne release concentration limits are challenged. Specification of a very short secondary water sampling interval is not appropriate for large-scale leaks.