

NUCLEAR ENGINEERING SCIENCES DEPARTMENT  
Nuclear Reactor Facility  
University of Florida



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March 7, 1988

U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555  
Attn: Document Control Desk

Subject: University of Florida Training Reactor (UFTR)  
Facility License: R-56, Docket No. 50-83  
Technical Specifications (TS) Proposed Amendment No. 17

Dear Sir:

Per the request in your letter dated February 5, 1988, the proposed UFTR TS Amendment No. 17 pages submitted with our letter dated June 2, 1987 have been revised and are being resubmitted as attached to address the two areas of concern listed in the February 5 letter.

As requested for the first area to be addressed, the word "shall" is used in TS Section 3.3.1 Paragraph 1 (note the letter reference to TS 3.3.2 Paragraph 1 is incorrect) with exceptions to this condition listed within the same Paragraph of Section 3.3.1. Basically the listed conditions for exception include (1) loss of building electrical power, (2) equipment failure, (3) cycling console power to dump primary coolant or to conduct tests and surveillances, and (4) initiating the evacuation alarm for tests and surveillances including emergency drills. In each case, these are conditions occurring at reactor shutdown and are not limiting conditions for reactor operation which would require or cause a reactor trip or manual shutdown of the reactor should any of them (such as loss of building electrical power or equipment failure) occur while the reactor is operating.

The inclusion of the first two conditions is intended to 1) recognize that these occurrences cannot result in conditions consistent with a reportable TS violation, and 2) to assure that conditions will not occur where the requirements of one set of specifications do not require violating another specification. There is no technical basis for requiring operation of the Reactor Vent System at stack count rates greater than 10 cps. When the core vent system is secured, any effluent that would be released is contained within the core/reactor vent system with the only potential release path being backflow (diffusion driven) into the cell which has not been a problem (see original letter dated June 2, 1987) in the past but which can be monitored to include evacuation (if determined necessary) since backflow would be into a restricted area. There is also an Air Particulate Detector normally continuously operating and recording in the cell.

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The third condition is intended to allow the rapid cycling of the console power switch to effect a dumping of water to the storage tank or to conduct various tests and surveillances (as of interlocks and indicating light functions) without having to wait for the stack count rate to fall below 10 cps, which can take a number of hours following an extended full power run. In these cases, the interruption of power to the console and hence securing of the Reactor Vent System is usually only momentary (a few minutes at most). In such a time frame, there is no cause for concern about back leakage of stack effluents into the cell or control room. Such tests and surveillances are typically used as retest requirements to restore component and/or system operability, in addition to routine operability tests.

The fourth condition is included to allow evacuation drills and other tests and surveillances, which involve tripping the Reactor Vent System, to be conducted after a reactor run when stack effluent count rate remains above the 10 cps limit. This situation is similar to condition 3 except that in some cases, the Reactor Vent System may be secured for several hours. Here the effect is similar to that of condition 1 or 2; again there is no reason to preclude required tests and surveillances where the stack count rate is greater than 10 cps.

As requested for the second area to be addressed, provisions have been incorporated into TS Sections 3.3.1 and 3.4.3 allowing the controlled release of radioactive effluents to the environment during abnormal operating conditions. We consider it unlikely that situations would occur when such use of the stack vent would be desirable with the vent monitor inoperable. Nevertheless we agree that it is conceivable that venting might be warranted to reduce cell radionuclide concentrations. Therefore, Paragraph (6) has been added to Section 3.3.1 specifying that the Reactor Vent System must have a backup means for quantifying the radioactivity in the effluent in such emergency conditions where venting would be used to reduce cell radionuclide concentrations.

Since the existence of such a backup monitoring capability is specified in Section 3.3.1, Paragraph 6, a new Paragraph 2 is added to Section 3.4.3 to require that radioactivity in the effluent be quantified prior to initiating controlled venting whenever such venting is to be used to reduce cell radionuclide concentrations in addressing unlikely though possible abnormal or emergency conditions involving high concentrations of airborne radioactivity within ALARA guidelines.

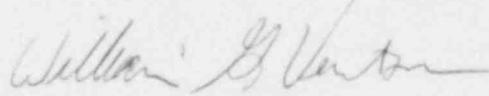
Implementation of this backup means to quantify the effluent will involve installing a sampling connection onto an existing line connected to the Reactor Vent System. This modification will be made and a sampling container and means of drawing a sample designated upon approval of this TS requirement; this modification has already been reviewed and approved by the Reactor Safety Review Subcommittee.

This submittal has been reviewed and approved by the UFTR Reactor Safety Review Subcommittee. The entire enclosure consists of one original and ten copies.

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We appreciate your consideration of this resubmission of the requested TS Amendment 17. Again, please let us know if additional information is needed.

Sincerely,



William G. Vernetson  
Director of Nuclear Facilities

WGV/ps

cc: NRC Region II  
Reactor Safety Review Subcommittee  
P.M. Whaley

Jean Morehouse March 7, 1988  
Notary Date

Notary Public, State of Florida  
My Commission Expires Aug. 27, 1989  
Bonded thru Fidelity Assurance, Inc.

ATTACHMENT I

UFTR TECH SPEC

PAGES 10-12 AS AMENDED

FOR TS AMENDMENT NO. 17