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November 5, 2002

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

14 Day Report:
Potential Tech Spec Violation –
Operation for Checkout
without Required Detector –
Sections 3.2.3 and 5.5.2

University of Florida Training Reactor
Facility License R-56, Docket No. 50-83

Pursuant to the reporting requirements of paragraph 6.6.2(g) of the UFTR Technical Specifications, a description of what is considered to be a potential violation of the technical specifications was reported by telephone and regular mail on October 22, 2002 and by fax one day later on October 23, 2002 per conversation with NRC Project Manager Alexander Adams on October 23. The required 14 day written report is submitted with this letter including occurrence scenario, NRC notification, evaluation of consequences, corrective action and current status. The potentially promptly reportable occurrence involved the improper so-called operation of the reactor for weekly preoperational checks without the required installed fission chamber in the wide range drawer.

Scenario

The UFTR has been unavailable for normal operations since failure of the fission chamber feeding the wide range drawer and Safety Channel 1 in late February 2002. Following extensive troubleshooting, the fission chamber was removed on March 26, 2002 and an identical replacement ordered. On April 5, 2002, the NRC project manager for the facility was consulted and confirmed that based on definitions in the UFTR Technical Specifications there can be no control blade removal, even for preoperational checks, to avoid violation of the wording in the Technical Specifications.

Due to extensive supplier delays, the fission chamber was finally received in late August 2002 and was installed in its thermal column slot with a successful plateau performed on the wide range. Subsequently, successful weekly and daily preoperational checks were performed with wide range channel calibration completed on August 30. However, because of excessive noise, extensive electrical ground isolation troubleshooting was performed with the fission chamber itself removed for installation of improved cabling and electrical shielding on October 16, 2002.

Subsequently, on the morning of October 21, 2002, the Reactor Manager/Facility Director (RM/FD) approved performance of the weekly preoperational checks with the unexpressed understanding that the fission chamber would be reinstalled prior to performing any control blade withdrawals. A facility SRO subsequently directed the performance of the weekly preoperational check by an operator trainee starting at 1430 hours with control blade Safety 1 removed for timing beginning at 1515 hours. At 1519 hours, the RM/FD returned and, noting the reactor light condition, asked if the fission chamber was installed as the

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first control blade was being driven in and the control blade Safety 2 was being removed for timing and at about 200 units removed. As the control blade Safety 2 removal was stopped, the RM/FD verified the fission chamber was not installed so the SRO directed the trainee to drop both blades full in with the reactor secured at 1520 hours and the situation discussed to assure that all concerned realized there had been a mistake.

NRC Notification

The NRC Project Manager was informed of the potential violation on October 22, 2002 and briefed on the occurrence including the definitions of "Reactor Operating" (whenever it is not secured) and "Reactor Secured" (basically reactor shutdown with electrical power to the control blade circuits switched off and the switch key in proper custody) and how the scenario had developed. The key sections of the Technical Specifications (3.2.3 and 5.5.2) requiring the fission chamber during reactor operation were reviewed and the potential violation agreed upon due to the standard definitions of "Reactor Operating" and "Reactor Secured."

The occurrence of operation without a required detector and the initial communication with NRC was then summarized in a one day report mailed on October 22, 2002 (Attachment I). Subsequently, the NRC Project Manager was informed that the one-day report fax transmission had been overlooked; this was completed on October 23, 2002 per his instructions.

Evaluation/Corrective Action

Based upon the definitions of "Reactor Operating" and "Reactor Secured" in Section 1.0 of the UFTR Technical Specifications, it is concluded that UFTR operation for weekly preoperational checks to time control blade removal times on the afternoon of October 21, 2002 without the required installed fission chamber is a potentially reportable occurrence per UFTR Technical Specifications Section 6.6.2 delineating requirements for special reports. The applicable sections of the Technical Specifications requiring the fission chamber are Section 3.2.3 (Reactor Control and Safety Systems Measuring Channels) requiring detector operability and providing information to the control room operator, and Section 5.5.2 (Reactor Safety System), Paragraph (1) Power Level Channels, and Paragraph (2) Wide Range Logarithmic Power Level and Period Channel, both of which describe the fission chamber's role in the Reactor Safety System.

It should be emphasized that there was never any intention to perform an actual operation such as a startup; the significance of the fission chamber removal was simply overlooked for the weekly preoperational checks directed by management. There has been no energization of the control blade circuits since the event occurred.

All operations staff were then and have been subsequently reminded of the technical specification definitions of "Reactor Operating" and "Reactor Secured" as well as the need to have all specified detectors and instrumentation channels when control blades are removed even for preoperational checks.

Current Status/Consequences

Several members of the RSRS were informed of this event but since the fission chamber had remained uninstalled for further noise checks, there has been no operation of the control blades since the event. The RSRS reviewed this event at its regular meeting on November 5, 2002. The committee essentially agreed with actions taken and with the initial staff evaluation that the occurrence did represent a potential violation of the UFTR Technical Specifications and should be treated as reportable. The RSRS has also reviewed this report submitted to NRC on this event and concurs with its conclusions. The RSRS also approved performance of preoperational checkouts and subsequent reinstallation and confirmation of proper operation of the fission chamber. Therefore, Reactor Management and the Reactor Safety Review Subcommittee agree there has been no significant compromise to reactor safety in the occurrence and no impact on the health and safety of staff or the public so this occurrence is now considered closed.

If further information is needed, please advise.

Sincerely,

William G. Vernetson
Director of Nuclear Facilities

WGV/dms
Attachment

cc: A. Adams, NRC Project Manager
C. Bassett, NRC Inspector
A. Vierbicky, SRO
Reactor Safety Review Subcommittee

Sworn and subscribed this 5th day of November 2002.

Notary Public

Daniel J Sanetz
MY COMMISSION # DD061176 EXPIRES
September 30, 2005
BONDED THRU TROY FAIN INSURANCE, INC.

ATTACHMENT I

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October 22, 2002

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As per my telephone conversation on October 22, 2002 with NRC Senior Project Manager Alexander Adams concerning UFTR operation for weekly checks on the afternoon of October 21, 2002 without the required installed fission chamber, we have concluded that this failure to have the detector installed while timing the control blades for removal is a potentially reportable occurrence per UFTR Technical Specifications Section 6.6.2 delineating requirements for special reports. The applicable sections of the Technical Specifications requiring the fission chamber are Section 3.2.3 (Reactor Control and Safety Systems Measuring Channels) requiring detector operability and providing information to the control room operator, and Section 5.5.2 (Reactor Safety System), Paragraph (1) Power Level Channels, and Paragraph (2) Wide Range Logarithmic Power Level and Period Channel, both of which describe the fission chamber's role in the Reactor Safety System.

Sincerely,

William G. Vernetson
Director of Nuclear Facilities

WGV/dms

cc: A. Adams, NRC Project Manager
C. Bassett, NRC Inspector
A. Vierbicky, SRO
Reactor Safety Review Subcommittee

Sworn and subscribed this 22nd day of October 2002.

Notary Public

Daniel J. Sanetz
MY COMMISSION # DD061176 EXPIRES
September 30, 2005
BONDED THRU TROY FAIN INSURANCE, INC.