KSU
KANSAS STATE UNIVERSITY

Department of Nuclear Engineering

Ward Hall
Manhattan, Kansas 66506
913-532-5624

October 7, 1985

Standardization and Special Projects Branch
ATTN: Cecil O. Thomas, Chief
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Docket 50-188
License R-88

Gentlemen:

Pursuant to 10CRF50.59(b), the following items are submitted for the Kansas State University TRIGA MkII Nuclear Reactor Facility for the interval 1 Oct. 84 - 30 Sept. 85.

A. CHANGES IN FACILITY

1. During the autumn of 1984, a smoke detection and alarm system for the reactor bay and control room was installed in stages. This was mandated by the revised Reactor Facility Emergency Plan , approved by the Reactor Safeguards Committee on 11 June 84 and by the NRC on 13 Aug 84. Emergency Plan requirements for a smoke detection system were fully implemented on 27 Nov 84. The last stage of system installation was completed on 14 Dec 84.

2. On 21 Apr 85, 18 TRIGA MkIII stainless-steel clad fuel elements were received from the Northrop Corporation. Authority for the transfer was received from the DOE Idaho Operations Office on 21 Mar 85. A quality Assurance Program for Receipt of TRIGA Fuel was approved by the NRC on 3 Apr 85. Certification of compliance for use of the fuel shipping cask was received from the NRC on 8 Apr 85.

3. On 6 May 85, the aluminum-clad safety (pulse) control rod was replaced by a General Atomic aluminum-clad control rod. The replacement and testing procedures had been approved by the Reactor Safeguards Committee on 10 Mar 78. In their approval, the Committee found that the procedures involved no unreviewed safety questions and could be accomplished with no risk to the integrity of the reactor or to safety of personnel.

B. CHANGES IN PROCEDURES

1. The following Operating Procedures were approved by the Reactor Safeguards Committee on 7 Dec 84:

No. 3: Annual Remote Area Monitor Calibration

This change eliminated the need for calibration at levels above 100 mR/h, thereby minimizing exposure of personnel.

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1/0

No. 7: Semi-Annual $1.00 Comparison Pulse

This change identified the need for activating a switch on the rod-drive system to change from steady to pulsing operations.

No. 8: Calibration of Iodine Monitor

This change reduced required air flow from 20 to 15 liters per minute.

In their approval, the Committee determined that the changes involved no unreviewed safety questions and constituted no threat to the integrity of the reactor or the safety of personnel.

2. On 7 Dec 84, the Reactor Safeguards Committee approved minor editorial changes in the Emergency Plan reflecting the following changes in Emergency Procedures:

No. 8: Fire Fighting

This change permitted use of a Halon extinguisher in the control room.

No. 12: Communications and Record Keeping

The change permitted the Emergency Director to delegate communication with off-site emergency organizations.

These changes were made in response to evaluation of an Emergency Exercise held during August, 1984. The Committee determined that the changes involved no unreviewed safety questions and constituted no threat to the integrity of the reactor or safety of personnel.

C. CHANGES IN EXPERIMENTS

1. On 7 Dec 84 a revision to Experiment 44, "Installation and Operation of a Neutron-Activated Nitrogen-16 Source," was approved by the Reactor Safeguards Committee. The experiment and safety analysis had been approved by the Committee on 31 Jan 84. At that time, additional testing requirements had been imposed. The change removed the requirements and permitted unrestricted execution of the experiment. The Committee found that performance of the experiment involved no unreviewed safety questions and posed no significant hazard to the integrity of the core or the safety of personnel.

2. On 12 Apr 1985, the Reactor Safeguards Committee approved Experiment 33a; "Fuel transfer to KSU TRIGA MkII Reactor." This experiment incorporated all procedures for the fuel transfer identified in item A2 above. The Committee found that the experiment involved no unreviewed safety questions and constituted no significant hazard to the integrity of the reactor or the safety of personnel.

Sincerely,

Richard E. Faw

Richard E. Faw, Director
KSU Nuclear Reactor Facility

cc: U.S. Nuclear Regulatory
Commission, Region IV