

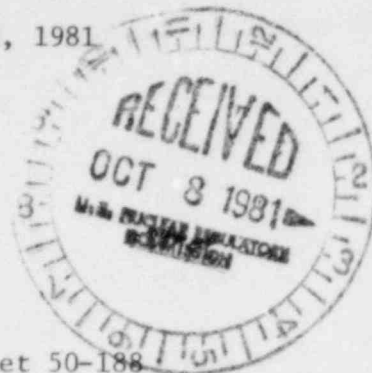


## Department of Nuclear Engineering

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October 2, 1981

Standardization and Special Projects Branch  
Attn: James R. Miller  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555



Re: Docket 50-188

Gentlemen:

Pursuant to 10CFR50.59(b), the following items are submitted for the Kansas State University TRIGA Mk II Nuclear Reactor Facility for the interval 1 Oct 80 - 30 Sep 81.

### A. Changes in Procedures

1. Facility Procedure No. 9, "Entrance to the Reactor Bay-Visitor Control," was revised to allow substitution of TLD badges for film badges used for personnel dosimetry. This change, patently involving no unreviewed safety questions, was approved by the Reactor Safeguards Committee on 24 Oct 80. It was necessitated by a campus-wide conversion to TLD personnel dosimetry. For the Reactor Facility, the conversion took place on 26 Jan 81. The revised procedure also explicitly forbade eating, drinking, or smoking in the Reactor Bay.
2. Facility Procedure No. 8, "Calibration of Iodine Monitor," was revised to remove ambiguities about the calibration source and to require checking of air flow rate through the monitor. The revision, patently involving no safety questions, was approved by the Reactor Safeguards Committee on 23 Jan 81.
3. Facility Procedure No. 13, "Portable Radiation Survey Meter Calibration," was revised to specify acceptable calibration sources and to require that instruments be calibrated on all routinely used scales. The revision, patently involving no unreviewed safety questions, was approved by the Reactor Safeguards Committee on 23 Jan 81.
4. Facility Procedure No. 14, "Pocket Dosimeter Calibration," was revised to specify acceptable calibration sources and to require that initial readings be within the lowest 20% of the dosimeter scale rather than precisely zero. This revision, patently involving no unreviewed safety questions, was approved by the Reactor Safeguards Committee on 23 Jan 81.

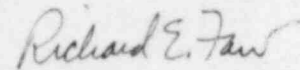
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James R. Miller  
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- B. Tests and Experiments conducted without prior Commission approval
1. Tests were carried out to investigate fluctuations in power observed during high-power operation. The tests were prompted by Open Item 8101-01 from IE Inspection Report 50-188/81-01. Preliminary tests involving rotation of the reactor primary coolant inlet nozzle were authorized by the Reactor Facility Director after a review of the Technical Specifications, Hazards Summary Report, and Facility Plans revealed no specifications for vertical placement or angular orientation of the nozzle. Preliminary test results were reviewed by the Reactor Safeguards Committee on 22 Jul 81. The Committee endorsed continuation of tests and recorded by vote that such tests involve no unreviewed safety questions and can be carried out without significant hazard to the integrity of the core or to the safety of personnel. An informal report on the tests, entitled "KSU TRIGA Mk II Power Fluctuations," was transmitted on 13 Aug 81 to R. Carter of the Standardization and Special Projects Branch, Division of Licensing, U.S. N.R.C.

Sincerely,



Richard E. Faw, Director  
KSU Nuclear Reactor Facility

- cc: 1) Reactor Safeguards Committee  
2) Office of Inspection & Enforcement  
U.S. Nuclear Regulatory Commission, Region IV  
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