Department of Nuclear Engineering



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October 3, 1984

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 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. 83 - 30 Sep. 84.

A. Changes in the Facility

None

B. Changes in Procedures

On 31 Jan. 84 the Reactor Safeguards Committee gave final approval to Emergency Procedures 2-15:

- 2. Radiologica! Surveys
- 3. Personnel Monitoring and Decontamination
- 4. Evacuation of On-Site Areas
- 5. Personnel Accountability
- 6. Assessment Actions
- 7. First Aid and Medical Care
- 8. Fire Fighting
- 9. Re-Entry Operations
- 10. Facility Security
- 11. Recovery Operations
- 12. Communications and Record Keeping
- 13. Equipment and Supplies
- 14. Training and Evaluation
- 15. Preparation, Distribution, and Maintenance of Plan and Procedures

This approval completed action on all Emergency Procedures required by the Reactor Facility Emergency Plan.

On 4 May 84, comments were received from the Nuclear Regulatory Commission on the Facility's proposed Emergency Plan. Revisions of the Plan were approved by the Peactor Safeguards Committee on 30 May 84 and the Plan was resubmitted on 20 June 84. The Plan was approved by the Nuclear Regulatory Commission on 13 Aug 84, with implementation to be achieved with 120 days thereafter.

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C. Tests and Experiments

At their meeting of 31 Jan 84, the Reactor Safeguards Committee considered proposed Experiment No. 44: "Installation and Operation of a Neutron-Activated Nitrogen-16 Source." The proposed experiment involved pumping up to 92 gallons per minute of water from the reactor central thimble to a 2.8 liter chamber outside the reactor, and thence to the reactor tank at a depth of 12 ft. The estimated maximum exposure rate in an unrestricted area was 1.8 mR/h. A smaller-scale preliminary experiment, proposed for testing purposes, resulted in an estimated maximum exposure rate of 0.12 mR/h in an unrestricted area. The Committee approved the preliminary experiment only, with the requirement that personnel could be present in the vicinity of the N-16 source only when the reactor was operating at power levels less than 10 kW. Full-scale experimentation will be considered by the Reactor Safeguards Committee at a later date. In their action, the Committee concluded that the (preliminary) experiment could be performed without significant hazard to the integrity of the core or to the safety of personnel.

Sincerely,

Richard E. Fan

Richard E. Faw KSU Nuclear Reactor Facility

REF/cs

cc: U.S. N.R.C. (Region IV) KSU Reactor Safeguards Committee