



UNIVERSITY OF MISSOURI

Research Reactor Facility

Research Park
Columbia, Missouri 65211
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December 3, 1962

Director of Nuclear Regulatory Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: Docket 50-186
License R-103

Dear Sir:

The University of Missouri Research Reactor requests an amendment to the Facility Operating License Number R-103. We request a change be made to Section 2, Part B(2) of our license regarding receipt, possession and use of Special Nuclear Material. Our present license states:

2B(2) Pursuant to the Act and 10CFR70, "Special Nuclear Material", to receive, possess, and use up to 49 kilograms of contained uranium 235 until January 1, 1978 (after January 1, 1978, the quantity of uranium 235, shall not exceed 45 kilograms), providing that no more than 20.5 kilograms of this amount be unirradiated; up to 80 grams of plutonium-beryllium neutron source, and up to 20 grams of plutonium-239 in the form of sheets enclosed in aluminum for use in connection with operation of the reactor.

Our proposed amendment is:

2B(2) Pursuant to the Act and 10CFR70, "Special Nuclear Material", to receive, possess, and use up to 55 kilograms of contained uranium 235, providing that no more than 4.999 kilograms of this amount be unirradiated; up to 80 grams of plutonium-beryllium neutron source, and up to 20 grams of plutonium-239 in the form of sheets enclosed in aluminum for use in connection with operation of the reactor.

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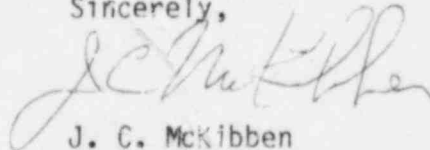
an equal opportunity institution

This inventory of irradiated fuel is needed to permit an efficient fuel cycle program. The increase is needed to compensate for the following factors:

- Required decay time for spent fuel has been increased by the NRC from 90 days to 150 days.
- Uncertainty in scheduling shipment of fresh fuel to the reactor and spent fuel away.
- Increased cost of shipments must be partially offset by building up a large inventory of spent fuel so that several sequential shipments can be made.
- Allow for more flexibility in scheduling spent fuel shipments to avoid costly delays due to weather, shipping strikes, etc.

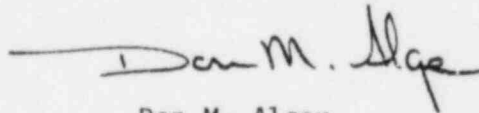
This request for a change in inventory of irradiated U-235 will increase our storage of irradiated fuel but will not change the fuel loading of our reactor core. Therefore we request that our proposed amendment be considered because of the above constraints and the need to operate our facility as cost efficient as possible.

Sincerely,



J. C. McKibben
Reactor Manager

Reviewed and Approved:



Don M. Alger
Associate Director

JCMK:vs