



## UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

March 28, 1980

Docket No. 50-538

Mr. D. W. Jones Director, Center for Nuclear Studies Memphis State University Memphis, Tennessee 38152

Dear Mr. Jones:

The Commission has completed the review of your application dated March 23, 1979 and supplements dated August 3 and 28, 1979, and has issued the enclosed Amendment No. 1.

This amendment pertains to your AGN-type reactor redesignated Model AGN-201H. It authorizes steady state power not to exceed 20 watts thermal and intermittent operation not to exceed 1000 watts thermal. The amendment further incorporates revised Technical Specifications for the authorized power levels.

This amendment also authorizes Memphis State University (MSU) to increase possession limits of special nuclear materials (SNM) in connection with reactor operation to 1400 grams of contained U-235 enriched equal to or less than 20%. This amount of SNM places the MSU in the "low" or "moderate" categories for strategic nuclear materials, as defined by 10 CFR 73.67 (formerly 73.47).

In accordance with your request to ship and receive 700 grams of AGN-201 fuel from Oak Ridge National Labs, 10 CFR 70 and 71 already provide the necessary authority as long as MSU maintains the procedures delineated in the license application.

This new classification requires that MSU submit an upgraded Physical Security Plan prior to August 22, 1980. Background information on physical protection for Non-Power Reactor Licensees was mailed to you in a packet dated January 7, 1980.

In order to operate your reactor above 0.1 watt, all modifications described in your application and supplemental information shall be completed and the Commission so notified by letter.

Copies of the Safety Evaluation/Environmental Impact Appraisal and the Notice/ Negative Declaration are also enclosed.

Sincerely,

Robert W. Reid, Chief

Operating Reactors Branch #4
Division of Operating Reactors

Enclosures and cc: See next page

## Enclosures:

1. Amendment No. 1

2. Safety Evaluation/Environmental Impact Appraisal

Notice/Negative Declaration

cc w/enclosures & incoming dated: 3/23/79, 8/3 & 28/79

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