

C O L L E C T
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USAEC, GERMANTOWN, MARYLAND
DONALD A. NUSSBAUMER, CHIEF
SOURCE AND SPECIAL NUCLEAR MATERIALS BR.
DIVISION OF MATERIALS LICENSING

MARTIN COMPANY
NUCLEAR DIVISION
BALTIMORE, MARYLAND 21203

ATTENTION: MR. C. W. KELLER
NUCLEAR ACCOUNTABILITY
AND LICENSING REPRESENTATIVE

DISTRIBUTION:
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AUG 28 1964

SPECIAL NUCLEAR MATERIAL LICENSE NO. SNM-53, AS AMENDED, IS HEREBY FURTHER AMENDED TO AUTHORIZE THE RECEIPT, POSSESSION AND USE OF 127 KG OF U-235 AS URANIUM OXIDE PELLETS APPROXIMATELY 5% ENRICHED FOR FABRICATION OF A NUCLEAR CORE OF TUBULAR DESIGN IN ACCORDANCE WITH PROCEDURES DESCRIBED IN YOUR LETTERS DATED AUGUST 4 AND 19, 1964.

IN REFERENCE TO THE AUGUST 4, 1964 SUBMITTAL, A TYPOGRAPHICAL ERROR APPEARS IN FIGURE 1 IN THAT THE CRITICALITY CONTROL OF THE TUBE STORAGE WORK AREAS IS STATED TO BE 9.2" SAFE DIAMETER. ACTUALLY 9.2" IS THE MINIMUM CRITICAL VALUE (AS YOU STATE ON PAGE 6) WHICH SHOULD BE REDUCED BY 0.85 IN ORDER TO OBTAIN THE SAFE DIAMETER. ALSO, IN THE STORAGE AREA DESCRIBED ON PAGE 5, THE PROPOSED 23.8 KG OF URANIUM PER INDIVIDUAL CONTAINER EXCEEDS THE SAFE VALUE (MINIMUM CRITICAL MASS X 1/2.3) AND THEREFORE, K-EFF MAY NOT BE ASSUMED TO EQUAL 0.65. THE PROPOSED STORAGE ARRANGEMENT APPEARS TO BE SAFE, HOWEVER, BASED ON THE SAFETY OF THE 4" DIAMETER CONTAINER AND A K-EFF NOT EXCEEDING 0.58 FOR THE UNREFLECTED 4" CONTAINER. REFERENCE: DML:KEL 70-58

Handwritten: A154

OFFICE ▶	DML	DML	DML:CB			
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DATE ▶	8/27/64	8/27/64	8/27/64			