



*MA.09-3*

**E. I. DU PONT DE NEMOURS & COMPANY**  
INCORPORATED  
WILMINGTON 98, DELAWARE

EXPLOSIVES DEPARTMENT

*EXTRACT*

This document consists of 4 pages

No. 1 of 7 Copies, Series A

January 2, 1957

Mr. H. L. Kilburn, Director (2)  
Technical and Production Division  
Savannah River Operations Office  
U. S. Atomic Energy Commission  
Post Office Box A  
Aiken, South Carolina

*Box 634*  
*Folder: BUDGET & FINANCE*  
*3-8A PROCESS DEV. - SRL*  
*(REG. JUNE 56)*

Dear Mr. Kilburn:

RESEARCH PROGRAMS IN SUPPORT OF SAVANNAH RIVER

In a letter to you dated April 19, 1956, DPW-56-218, we recommended that the Savannah River Operations Office set aside funds to cover certain research and related work by AEC National Laboratories and AEC contractors in support of the Savannah River project during Fiscal Years 1957 and 1958. At your request we have recently reviewed the requirements for FY-1957 and are herein recommending appropriate modifications.

Our original estimates for FY-1957 totaled \$1,630,000. Our current estimates total \$1,006,500. Although modifications have been made in a number of the individual items, the major factor responsible for the reduction from our original estimate is the transfer from the SR00 to du Pont of funds to cover the manufacture of uranium tubes for experimental use. Our current estimates are covered in the following paragraphs. In the event that du Pont undertakes a power reactor development program for the Commission, it is likely that additional work will be required by others. However, any such needs have been provided for in the du Pont December Financial Plan Revision, and if necessary funds will be transferred from du Pont to the SR00 if such contracts are made by the SR00.

NUCLEAR METALS, INC.

We originally recommended that \$500,000 be set aside to cover development work by Nuclear Metals. We now estimate that work by Nuclear Metals in FY-1957 will total \$700,000, consisting of \$400,000 for development, \$50,000 for equipping the additional space that was needed, and \$250,000 for the manufacture of 120 natural uranium tubes.

Classification Changed To  
UNCLASSIFIED  
By Authority of  
*J.M. BAUER*  
SR Classification Officer *1/12/57*

Date *1/28/57*  
for the U. S. Atomic Energy Commission  
*[Signature]*  
Division of Class.

This document contains data as defined in the Atomic Energy Act of 1954. Its transmission or disclosure of its contents to an unauthorized person is prohibited.

Mr. H. L. Kilburn

-2-

January 2, 1957

PLATE MANUFACTURE

We originally estimated that \$200,000 would be required to cover the manufacture of uranium plates by the Superior Steel Company. We see no further needs for manufacturing plates this Fiscal Year and believe that \$75,000 will cover the cost of such work to date.

TUBE MANUFACTURE

We originally recommended that \$500,000 be provided to cover the manufacture of uranium tubes for experimental use. The first such tubes are being made by Nuclear Metals. Additional tubes to be manufactured by the American Brass Company will be paid for with funds made available to du Pont. Accordingly no funds are recommended for this category.

BETA TREATMENT

We originally recommended that \$20,000 be set aside to cover the beta treatment of uranium cores by the Atlas Steel Company. We now recommend that this total be raised to \$60,000 to include the beta treatment of uranium tubes manufactured by Nuclear Metals and American Brass.

ZIRCONIUM FABRICATION

We originally recommended that \$50,000 be set aside to cover development work on the fabrication of zirconium. If such work is needed during the remainder of FY-1957 it will be covered with funds made available to du Pont.

ZIRCONIUM PURCHASE

We originally recommended \$30,000 for this item but will cover any such needs with funds available to du Pont.

IMPROVED ELEMENTS

We originally recommended that \$100,000 be set aside to cover possible work by unspecified AEC contractors on the development of improved fuel elements. We now see no need for such funds during the remainder of FY-1957.

BUREAU OF MINES

The Bureau of Mines at Albany, Oregon has prepared for us some stainless steels containing various amounts of gadolinium at a total cost of \$6,500. We see no need for further work by the Bureau of Mines this Fiscal Year.