## 1emorandum

: Donald A. Nussbaumer, Chief TO

DATE: July 28, 1964

Source & Special Nuclear Materials Branch, ML

FROM: Charles D. Luke, Chief

Criticality Evaluation Branch, ML

MARTIN COMPANY, DOCKET NO. 70-58, APPLICATION DATED JULY 7, 1964

AS SUPPLEMENTED JULY 20, 1964

SYMBOL: ML:TGM

We have reviewed the subject application, as supplemented, requesting authorization for uranium particle coating, extrusion and hydrostatic pressing and have the following comments:

"We can not agree with your statement that uranium particle coating be termed as a "dry" operation in that you are intentionally introducing hydrogenous materials during the operation. In fact, it appears that there may be sufficient hydrogenous material present to act as an optimum moderator should the heat lamps fail to perform their function. Therefore, we request that you either: (1) limit the maximum uranium-235 within the coating operation to the always safe mass of 350 grams; or (2) provide a detailed nuclear safety analysis demonstrating the safety of the proposed operations while considering the uranium in optimum geometry obtainable within the process and while optimumly moderated."

Aliys