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UNITED NUCLEAR CORPORATION, CHEMICALS DIVISION - AMENDMENT TO  
BLEND U(93.5)O<sub>2</sub> WITH ThO<sub>2</sub> - DOCKET NO. 70-36, MARCH 17, 1964

SYMBOL: DML:RHO

UNC has requested a license amendment to blend fully enriched UO<sub>2</sub> with natural ThO<sub>2</sub> in the Pellet Plant. Prior to completing the initial blending, the material is handled in 350 g U-235 batch. The UO<sub>2</sub>-ThO<sub>2</sub> mixture following the initial blending operation will be handled, processed and stored in a safe batch size assuming the thorium to be all U-238. This is a conservative assumption for water systems. The maximum enrichment would be 6.5 w/o U-235 in a uranium-thorium mixture.

In order to approve this license amendment request, it will be necessary for UNC to satisfactorily answer the questions concerning the Pellet Plant that we raised in our memorandum, Luke to Nussbaumer, dated October 22, 1963.

We recommend that you inform UNC that this does not authorize shipment of this material unless they treat the pellets as fully enriched and ship in accordance with their currently approved procedures. In this connection, we have within the past year approved two containers (BE Permits 1351 and 1483) which meet the current structural integrity requirements and which may be used for this shipment.

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CDLuke

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