November 15, 1989

DOCKET NO: 70-36

LICENSEE: Combustion Engineering, Inc. (CE)
Hematite, Missouri

SUBJECT: SAFETY EVALUATION REPORT, AMENDMENT APPLICATION DATED OCTOBER 23, 1989, RE USE OF NATURAL URANIUM IN NEW PELLETIZING PROCESS

Background

On July 28, 1989, Materials License No. SNM-33 was amended authorizing CE to conduct startup and testing activities on the new pellet production line using depleted uranium.

On October 23, 1989, CE submitted an application for license amendment requesting authorization to use natural uranium for the new pelletizing process in Building 254.

Discussion

This request is based on the need to adequately qualify the blending operation in the new air mix blenders. To properly qualify this operation, two different U-235 enrichments of UO_2 powder are employed with the enrichment values as far apart as practical. CE intends to accomplish this by blending natural uranium with depleted uranium. By using natural uranium, no controls are necessary for nuclear criticality safety. Existing radiation safety criteria from the license will be extended for the use of natural uranium and are adequate.

Conclusion/Recommendation

The staff concludes that the proposed activities will have no adverse effect on the public health and safety or the environment. Approval of the amendment application is recommended.

The Region III Principal Inspector has no objection to this proposed action.

Original Signed By

David A. McCaughey
Uranium Fuel Section
Fuel Cycle Safety Branch
Division of Industrial and
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Approved by: Original Signed By
George H. Bidinger, Section Leader

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