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INTERIM REPORT

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Contract Program or Project Title: Experimental Criticality Data for Code
Validation

Subject of this Document: Informal monthly progress report

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Author(s): S. R. Bierman

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Responsible NRC Individual and NRC Office or Division: _____

Donald E. Solberg, Chief, Systems Performance Research Branch, SAFER:RES

This document was prepared primarily for preliminary or internal use. It has not received full review and approval. Since there may be substantive changes, this document should not be considered final.

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NRC FIN No. B2094

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NRC Research and Technical
Assistance Report

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December 3, 1979

Mr. Donald E. Solberg
Fuel Cycle Research Branch
Division of Safeguards, Fuel Cycle & Environment
Office of Nuclear Regulatory Research
Nuclear Regulatory Commission
Mail Stop 1130
Washington, DC 20555

Dear Mr. Solberg:

Subject: Review of Program - Experimental Criticality Data
for Code Validation (Fin. No. B2094, TDO-777)

Data reduction and analysis is continuing for the criticality experiments completed in FY-1979 with 2.35 wt% and 4.3 wt% ^{235}U enriched UO_2 rods in water at a water-to-fuel ratio of 1.6. Also the experimental assembly is being modified to permit completing the experiments, at this moderation ratio, with Boral, Boroflex, and Cadmium plates in a three fuel cluster arrangement. As you probably recall, and as anticipated, there was insufficient 2.35 wt% ^{235}U enriched fuel for these experiments in a four cluster arrangement.

Very truly yours,

S R Bierman

S. R. Bierman, Project Manager
Criticality Analysis

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SRB:lt

cc: Mr. Richard H. Odegaarden

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