

Los Alamos

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Los Alamos, New Mexico 87545

DATE: January 14, 1985
IN REPLY REFER TO: Q-6-84-157 (R21W)
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Safety Assessment

Mr. D. M. Carlson
US Nuclear Regulatory Commission
Fuel Facility SG Licensing Branch
Division of Safeguards
Mail Stop 881-SS
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Silver Spring, MD 20955

Dear Don:

SUBJECT: NONPOWER REACTOR SABOTAGE STUDY (R21W) STATUS REPORT FOR
DECEMBER 1984

Calculations with CINDER 2 and CRAC2 were completed for the Missouri Research Reactor in December. These calculations give fission product inventory and the required release fraction for 10 CFR Part 100 and Part 20 releases. A special version of TRAC-PF1 with the capability of handling fuel plates was obtained, and a D₂O thermodynamic properties subroutine for TRAC was received. Work on input decks to consider loss-of-coolant accidents (LOCAs), loss-of-flow accidents, and cold-water accidents is beginning. DYNA2D was obtained for use in explosive effects calculations.

Approximately \$15,100 was charged against the project in December 1984. The cumulative charges to date total \$30,600. The breakdown of costs is as follows.

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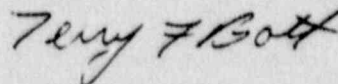
Mr. D. Carlson
Q-6-85-157 (R21W)

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	<u>December 1984 (\$k)</u>	<u>Fiscal Year to date (\$k)</u>
Man-months cost	12.7	25.4
Travel costs	0.1	0.3
A.D.P.	1.5	3.3
Outside contracts	0.0	0.0
Other costs	<u>0.8</u>	<u>1.6</u>
Total cost	15.1	30.6
 Man-months effort	 1.6	 3.1

Sincerely,



T. F. Bott

TFB/jl

Enc: As cited

Cys w/enc: Office of the Director, NMSS (Attn: Program Support)
M. G. Stevenson/W. L. Kirk, Q-DO, MS E561
L. H. Sullivan/J. R. Ireland, Q-DO/RS, MS K552
R. A. Haarman/W. S. Gregory, Q-6, MS K557
CRM-4 (2), MS A150
Q-6 File