

DRAFT

Dr. James Gieseke
Battelle Columbus Laboratory
505 King Avenue
Columbus, OH 43201

Dear Dr. Gieseke:

We have received your report of November 9, 1984 on "Source Term Code Package Specifications" and are providing below the feedback and approval that is called for in the contract proposal.

In general, we agree with the incorporation of minor improvements in some of the individual codes provided that these improvements are made in a way that preserves the basic science that was reviewed by the peer reviewers. That is, we want to view these changes as changes made in moving from a hand-built prototype to a 1984 production model rather than as developing an improved 1985 model.

The specific changes that we concur in are as follow:

1. Incorporate CORSOR in the MARCH code to replace the existing fission product release model.
2. Use the Arrhenius form CORSORM to eliminate the multi-zone temperature complexity.
3. Use the CORCON Mod 2 code instead of the Mod 1 version.
4. Incorporate CORCON in MARCH to replace the existing INTER code.
5. Couple TRAPMELT and MERGE so they can iterate properly.
6. Use TRAPMELT-2.1, which corresponds to the imminent user's manual.

The code interfaces described in your report appear to be appropriate. The MARCH-2, TRAP-MERGE, and NAUA model selections and input specifications described in your report also appear to be appropriate.

For programmatic reasons it is necessary to keep this task moving rapidly toward completion and to keep the costs down. Therefore, we agree that no plotting packing should be included, and we do not want to pursue interactive software for input selection. We will, however, need to employ some quality assurance measures to produce a reliable code package for regulatory analyses. To accomplish this, we intend to place an independent code verification program at BNL, so cooperation with such an effort should be anticipated.

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