

OCTOBER 1984

Sandia National Laboratories

Albuquerque, New Mexico 87185

November 1, 1984

Dr. Thomas J. Walker
Containment Systems Research Branch
U. S. Nuclear Regulatory Commission
7915 Eastern Avenue
Silver Springs, Maryland 20910

Dear Tom:

This letter summarizes the Severe Accident Sequence Analysis (SASA) Program Activities at Sandia during [REDACTED]

Programmatic Activities

Eric Haskin and Andy Peterson met with Ray DiSalvio of BCL on October 9, 1984. The primary objective of this meeting was to discuss accident management. The two hour meeting primarily consisted of Eric discussing in detail the analyses that SNL SASA has performed and what has been obtained from these analyses that would assist the operator in accident management.

As you recall, you visited SNL on October 11 and 12, 1984 to discuss the SNL SASA program. At this time, we re-prioritized the Bellefonte analyses. The TMLB' and S₂D analyses will be delayed until multi-compartment containment analyses of the potential of local hydrogen detonations are completed and documented, which will be by June 1, 1985. At this time, we also changed the schedule for completion of the report documenting the CLWG summary from December 1984 to March 1985 and for completion of the ice-condenser follow up studies from June 1985 to December 1985.

Greg Moses from the University of Wisconsin met with SASA and CONTAIN personnel on October 17, 1984 to discuss the status of linking MEDICI with HECTR. The current schedule is to have the M1 module linked by November 1984 and the M3 module by February 1985.

Susan Dingman, Clint Shaffer and Andy Peterson attended the 12th Water Reactor Safety Information Meeting during the week of October 22-24, 1984. Presentations on the analyses performed for the CLWG were made at this meeting by Susan Dingman and Clint Shaffer. Two papers documenting the results presented were also completed and transmitted for inclusion in the proceedings of the meeting.

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Thermal-Hydraulic Analysis Activities

PWR Large Dry Containments (Bellefonte): The development of input for a multi-compartment HECTR model of the Bellefonte containment for analysis of local hydrogen detonations continued. The model under development presently uses 35 compartments.

PWR Ice Condenser Containments (Watts Bar/Sequoyah): The report documenting containment pressure-temperature response to a variety of accident sequences is still in Sandia management review.

Upgraded Computational Capability Activities


MARCH 2: The reference version of March 2 is operational on the Sandia computer system and sample problems are being run as a final check out of the code.

MARCON: Revisions to the documentation describing the final MARCON models and links to MARCH were continued this month.

LTAS: A version of the LTAS computer code is operational on the Sandia computer system. Recent discussions with Mike Harrington of ORNL revealed that he has made significant changes to this code from the version that we have and that he will be sending us another, more user convenient version, in the next few weeks. An LTAS input deck for the La Salle BWR is nearly completed.

HECTR: Pressure/temperature dependent leakage models were incorporated into MARCON and are also being incorporated into HECTR. The final checkout of these models in HECTR is still being performed.

Sincerely,



Andrew C. Peterson
Reactor Systems Safety Analysis
Division 6411

ALC:6411:cgt

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