

Sandia National Laboratories

Albuquerque, New Mexico 87185

June 26, 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] JUNE 84

Programmatic Activities

V. L. Behr and F. E. Haskin presented papers on ice-condenser containment calculations for the Containment Loads Working Group (CLWG) and combustion loads in large-dry containments at the Containment Integrity Workshop held on June 13-15, 1984.

A. L. Camp, A. S. Benjamin, S. E. Dingman, and C. J. Shaffer attended the SASA review meeting on June 19 and 20, 1984. Presentations were made outlining progress made since January 1984. Presentations were made regarding MARCON development and applications to the CLWG MK I and II standard problems, the MARCON-HECTR calculations for the CLWG ice-condenser standard problem, and the CLWG MK III standard problem.

S. E. Dingman, F. E. Haskin, and C. J. Shaffer made a series of presentations on June 18, 20, and 26, 1984 to NRC personnel from the Office of Inspection and Enforcement. These presentations addressed accident progression and containment response in PWRs.

Thermal-Hydraulic Analysis Activities

PWR Large Dry Containments (Bellefonte): Work is continuing on preparations for Bellefonte calculations. A MARCON input deck has been prepared and tested, and the RELAP calculations for the TMLB' sequence have been received from INEL.

PWR Ice-Condenser Containments (Watts Bar/Sequoyah): No progress to report. Revisions to the draft report describing

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the containment pressure-temperature response to a variety of accident sequences should resume in July.

Containment Loads Working Group Support

Final documentation has been completed for the MARCON-HECTR calculations of the ice-condenser standard problem. Also, Sandia has reviewed the Consensus Summary prepared for the ice-condenser standard problem, and comments have been transmitted to Battelle.

Final documentation has been submitted for the MARCON calculations for the BWR MK I and II standard problems and for the Consensus Summary for the BWR MK III standard problem.

With the submittal of the documentation noted above, our participation in the Containment Loads Working Group is essentially complete, with the possible exception of providing comments on other documentation produced by the working group. Sandia will also complete a task early in FY 85 to summarize our participation in the Containment Loads Working Group and assess the impact of this work on the SASA program.

Upgraded Computational Capability Activities

MARCON: With the approval of the NRC contract monitor for the CORCON program, we have sent a current version of MARCON containing CORCON Mod2 to ORNL. ORNL will begin incorporating improved BWR models into MARCON and provide the revised version of MARCON to Sandia. Thus, both laboratories will have the same up-to-date version of the code.

CONTAIN/HECTR: The SASA program is continuing to support and consult with the CONTAIN program in preparation for Bellefonte calculations to begin this fall. Versions of HECTR and CORCON Mod2 have been sent to the University of Wisconsin. These codes have been successfully brought up on the Wisconsin system and work on linking the MEDICI reactor cavity models to HECTR has begun.

LTAS: Contacts have been established with ORNL to allow transmittal of the LTAS code to Sandia for LaSalle calculations in support of RMIEP. ORNL has been extremely helpful and cooperative in this effort.

Structural Analysis Activities

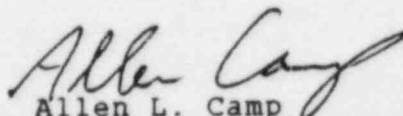
The report documenting the Watts Bar, Maine Yankee, and

Bellefonte structural analyses is ready for publication, pending final NRC authorization.

Problems

There are none at this time.

Sincerely,



Allen L. Camp
Reactor Safety Technology
Division 6411

ALC:6411:cgt

Copy to:

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TVA J. A. Raulston
INEL R. C. Gottula
LANL B. E. Boyack
ORNL S. A. Hodge
RMA C. J. Shaffer
SAI L. N. Smith
BCL A. Walters
1524 J. Jung
6410 J. W. Hickman

6411 A. S. Benjamin
6411 V. L. Behr
6411 F. E. Haskin
6411 S. E. Dingman
6411 R. D. Gasser
6424 K. D. Bergeron
6424 W. R. Trebilcock
6442 W. A. von Riesemann