

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20055

Connection, D.C. 2000

JAN 8 1993

Dr. David L. Morrison, Chairman Nuclear Safety Research Review Committee The MITRE Corporation 7525 Colshire Drive McLean, VA 22102-3481

Dear Dr. Morrison:

Your letter of December 30, 1992, with the enclosed report of the NSRRC's Severe Accident Subcommittee meeting held on June 2-3, 1992, states the following conclusions concerning the Severe Accident Research Plan:

- Concurrence with the goals of the revision of the Severe Accident Research Plan (NUREG-1365).
- Concurrence on the priorities assigned to the 11 major severe accident (S.A.) issues, and on the RES programs underway on them.
- Endorsement of the use of peer reviews to reach consensus and resolution of the S.A. technical issues.
- Endorsement of the various international and cooperative S.A. research programs underway.
- Recognition that S.A. knowledge and insight are the primary product of research activities, and these should guide the limitations and application of code development.
- 6. Recognition of the continuing need for research involving ongoing code improvements; encouragement of RES to continue to resolve code deficiencies, and to hold code developers to strict standards of scrutability; and the intention of NSRRC to address RES programs for reducing the number of codes under development and RES assessments of the remaining codes at future meetings.
- 7. Intention to review the elements of the RES plan for S.A. closure at a future meeting.
- 8. Noting of progress made with the Mark I Liner Failure issue, including the Risk-Oriented Accident Analysis Methodology, and of the plan for resolving DCH by means of tests undertaken at Sandia and Argonne, and application of the Severe Accident Scaling Methodology.
- 9. Noting of progress on the data base and analytical studies for fission product release and transport.

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I take the Committee's report as evidence and encouragement that RES is on the right track with the recent revision of the Severe Accident Research Program. RES also takes heed of your advice on S.A. code development and S.A. issue resolution, and will guide its research activity to respond to your observations. I suggest that we discuss an appropriate schedule for future review of these topics at the Committee's next agenda planning session.

With respect to the plans for integral testing of the AP600 plant design in JAERI's ROSA V facility, your letter, with the enclosed report of the Advanced Reactor Subcommittee on its meeting of July 1-2, 1992, states the NSRRC's concurrence with the RES recommendation to proceed with that program. The Committee notes that this activity needs to be part of a well integrated program involving careful code enhancement and assessment, and possibly well-selected separate-effects tests for phenomena that cannot be fully explored in these integral facilities.

The Committee's endorsement of these plans, based on the detailed analysis of the issues contained in your letter, enables us to proceed with confidence in this important confirmatory testing program.

We look forward to further discussion of the AP600 confirmatory research program at the January 14-15 NSRRC meeting and as the work proceeds.

Sincerely,

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Eric S. Beckjord Director Office of Nuclear Regulatory Research

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