

which the ECCS did not function adequately, the potential damage could be more than an order of magnitude greater than the above limit⁴. Does the nuclear industry now have enough confidence in the adequacy of existing ECCS technology to assume full liability? If not now, when will they have sufficient confidence? By 1977, when the ACT expires?

References

1. I. A. Forbes, D. F. Ford, H. W. Kendall, J. J. MacKenzie, *Environment* 14, no. 1, pages 40-47, Jan-Feb, 1972. Published by Scientists Institute for Public Information, 438 N. Skinker Blvd., St. Louis, Mo. 63130.
2. D. F. Ford, H. W. Kendall, *An Assessment of the ECCS Rulemaking Hearing*, available for \$8 from Union of Concerned Scientists, P.O. Box 289, MIT Branch Station, Cambridge, Mass 02139.
3. USAEC figures quoted in *Radiation Data and Reports* 14, 391 (1973).
4. USAEC report Wash-740.

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THE AUTHOR COMMENTS: The August article was intended to treat the subject of how the safety information required for emergency-core cooling-system licensing determinations is generated. It further describes the verification program to provide experimental support for the computer codes used in the licensing determinations. These are clearly important parts of the total reactor safety program.

Specifically Aerojet Nuclear is charged by the AEC with the production of computer codes for the safety analysis of plants and with the generation of experimental data and supporting logic to assess the accuracy of these computer codes. The purpose of the article was to present the logic and to indicate the overall approach for verifying computer models and codes. It is felt that more specialized journals are the proper media for the presentation of specific data and the results of the verification activities.

Gollon's points concerning the timing of experimental efforts, information distortion potential, and Price-Anderson Act implications are recognized by program principals, but were not felt to be germane for this article. The position of Aerojet Nuclear in safety matters has been consistently conservative, which might be expected since its business depends significantly upon the generating of objective safety information. The article facts and conclusions continue that position.

Readers might be interested to know that Aerojet Nuclear is responsible for

thirteen reactors, ten of which are operational, and four of which range in power from 40 to 250 MW (thermal). We are, therefore, very much involved in the "nuts and bolts" of operational problems and are actively involved in operational safety efforts.

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EDITOR'S NOTE: Confusion about the author's intentions may have been generated by the article title selected by the editorial staff, "How safe are reactor emergency cooling systems?" as opposed to the author's original title "Nuclear Safety: Emergency Core Cooling."

Working with children

As a result of reading the June 1972 issue devoted to "Physics for children," I have used one day a week, this past year, on working in physics activities with children along with one or two specially related projects in the natural sciences. The children with whom I am involved are primary-grade level (1-3) and are emotionally handicapped, attending a residential children's center school. My involvement has led me to the following conclusions: 1. There are many science programs in existence; one must choose carefully. 2. In working with children one should take his cues from the classroom lead teacher. 3. With respect to source materials, I have drawn from the programs described in *PHYSICS TODAY* along with publishers' teacher's guides recommended by the Rochester School System. This provides a fail-safe approach for the adult initially unversed in child-educational development with respect to the classroom situation. 4. Children have related to me in a straightforward and accepting manner; there is no "generation gap." 5. Emotionally handicapped teachable children can and have benefitted in a therapeutic manner as well as a learning experiential way from physics activities. 6. There are many opportunities for a physicist to use his skills besides teaching, such as developing teaching aids or computer-aided instruction methods; the situation is open-ended.

In conclusion, the physicist can aid the child and, in return, the child can aid the physicist by presenting him with an opportunity to rediscover the fact that the child has this in common with him; he (the child) is naturally curious and thus explores; he also describes things about him and does, indeed, search, experiment and discover.

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