BOOK REVIEW

Nuclear Safety after Three Mile Island & Chernobyl. G. M. Ballard, Ed. Elsevier Applied Science. US\$58.00. 480 pages.

The accidents at Three Mile Island and especially Chernobyl brought nuclear power and its social and political consequences into everyone's home. As a result there has been much greater pressure from the public, the press and governments to address and explain some of the more arcane aspects of nuclear reactor safety to a wider audience. Before this can be done with any hope of success, it is necessary for the experts themselves to agree on what is safe and what is not.

Fortunately, the nuclear scientific community are responding well to this challenge: at least at the technical level if not that of public confidence. A conference was held in Blackpool, U.K. in June 1988, sponsored by the Safety and Reliability Directorate of the United Kingdom Atomic Energy Authority. At this conference, various aspects of nuclear reactor safety were discussed as well as the consequences of nuclear reactor accidents.

A powerful introductory session in which Dr J. H. Gittus gave an overview of the industry and its problems was followed by the following sessions:

Design for safety
Man-machine interaction
Accident phenomenology
Source terms and consequences
Accident response

Altogether, the book comprises 20 full-length articles of very high quality, written mainly by British authors with some French contributions. It is a pity that other countries were unable to contribute, since this is an international problem. But, nevertheless, we are given an excellent summary of many important issues concerned with the safety of modern nuclear power plants. There are also many new ideas presented, whilst some subjects clearly remain in a state of development. We still need, however, some means for transferring the confidence of the nuclear engineer to the public.

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