

## Fuel to the nuclear debate

Ortwin Renn

### **Nuclear Power in Crisis**

Andrew Blowers and David Pepper  
(editors)

£10.95 paperback, £25.00 hardback, 327 pages  
(New York, Nichols; London and Sydney,  
Croom Helm, 1987)

Nuclear energy is one of the most popular topics of today's publication market. The literature about the pros and cons of nuclear power may easily fill a whole library. Is there anything new to add to this voluminous body of arguments and contra-arguments that would justify editing another book on nuclear energy?

Andrew Blowers and David Pepper obviously felt that way and published a reader on *Nuclear Power in Crisis*. The book consists of 13 articles covering mainly the political, social and health aspects of nuclear power. Several of the chapters were papers presented at the Annual Conference of the Institute of British Geographers at Leeds, UK, in 1985.

Except for the two editorials, all chapters were written before the Chernobyl accident. Nevertheless, the publishers selected a cover for the book that illustrates the fallout from the Chernobyl accident on Europe and North Africa. This gives the potential buyer the false impression that the book deals with this issue. The editors should have urged the publisher to refrain from such a phoney sales gimmick and to exercise more honesty.

The selection of topics for the book seems rather arbitrary and represents the usual collection of conference papers that do not relate well with each other. For example, Part 3 entitled 'Risk and impact: the social dimension' consists of a chapter on local attitudes towards the Sellafield nuclear waste reprocessing plant in the UK, health effects of low dose radiation, and evacuation decision making. I would have expected to find

---

Ortwin Renn is Associate Professor at the Environment, Technology and Society Program, Clark University, 950 Main Street, Worcester, MA 01610-1477, USA.

here papers on risk management or risk perception given the title of this part. Style and quality of the papers are also very incoherent. Not all chapters can be discussed here, but I would like to point out some of the weak and strong contributions before summarizing my overall impressions.

The book has two editorial-type introductions which seems odd for a volume of 13 papers. The editorial by Blowers and Peppers tries to analyse the transition from consensus to conflict in the nuclear policies of the UK. The authors develop an explanatory context for this transition consisting of four key elements: legitimacy, accountability and control, changing political environment, and international political dimension. Although these factors may be relevant for the changes in nuclear policies and public perception, the authors fail to provide any theoretical or empirical evidence for their claim. Aspects such as energy demand, changes in value and lifestyle, or equity issues may be just as important for the rise of a growing opposition to nuclear energy. In addition, the authors rely heavily on newspaper articles for illustrating the impact of nuclear power and particularly the Sellafield reprocessing plant. Given the abundance of good scientific data about the consequences of the Sellafield operation, the selection of typical newspaper headlines as proof for factual claims is unnecessary and also detrimental to the credibility of the total argumentation.

In contrast, the editorial by Timothy O'Riordan provides a thoughtful and empirically sound introduction to the book. Starting with the shifts in public opinion towards nuclear energy and describing the major phases in nuclear policies over the last 30 years, O'Riordan discusses six major themes that he has identified as key issues in the contemporary nuclear debate and that he observes as major subjects of the book's other chapters. These subjects, including the decision-making process and the fusing of science with social values, are not meant to explain the nuclear debate, but to highlight the conflictual elements of this debate. At the end, he draws some conclusions on the likely strategies of the pro- and anti-nuclear lobbies to influence the policy-making process. The lack of

overt biases and the clear analytical style make this chapter one of the most enjoyable to read.

The same can be said for the chapter on health effects of low dose radiation by Alan Craft and Stan Openshaw. Although this subject has gained extensive coverage in the past, this chapter differs from most of the other publications on the same subject as it focuses on the contrast between ideologies presented by the pro- and anti-nuclear lobbies and the scientific facts and their legitimate interpretation. The chapter does not provide any new insights into the subject, but is well suited for a well-balanced and popular discussion on low dose effects.

I was also positively impressed with the description of an attitude study in Sellafield (Chapter 10 by Sally Macgill and Sian Phipps), although the article contained too many details of the actual survey procedure which may only interest other survey researchers. I had more difficulties with the chapter on nuclear policies in France (Chapter 3) which compiled an impressive amount of statistical data, but failed to draw some general conclusions beyond common sense.

### **Structural mix**

But the major problem of the book is the structural mix of approaches. There are a few pro and con papers on the same subject (such as Chapters 7 and 8 on nuclear waste), purely technical papers (such as Chapter 2 on interregional factors in siting power plants), attempts of unbiased reviews of a subject (such as the chapter on health effects), typical outsider views of critical scientists who do not represent the majority of their fellow experts (such as Chapter 12 on behavioural issues in evacuation), descriptions of new research results (such as Chapter 10 on local attitudes), and typical opinion papers with a decisive anti-nuclear touch such as Chapter 6 on the politics of nuclear waste in the UK. If the editors had followed a coherent style for their volume by either stating both sides of the issue or gathering new psychological or sociological research results or writing a brilliant advocacy for or against nuclear power, the criticism could have been much more positive. This collection, however, is confusing and incoherent.

In conclusion, the book may be recommended for readers that are already familiar with the subject and are interested in getting some additional information on the specific situation in the UK. For an audience that would prefer a more

comprehensive view on the issues of nuclear power or would like to have a review of the social science contributions to the nuclear debate, I would recommend other edited volumes or monographs.