

Book Review

Local Energy Centers

Edited by N. J. D. Lucas, Applied Science Publishers Ltd, London, 1978,
260 pp., \$28 + p.p. \$1.20

The great importance of a book like "Local Energy Centers" to readers of *Journal of Power Sources* probably would derive from the background information which it offers to those whose technical responsibilities lie with the storage and disbursement of electrical energy or with minimizing the total energy consumed in a manufacturing plant.

It is an edited record of the proceedings of a conference on the subject held in mid-1977 in London by a distinguished group of (mostly British) economists and engineers from university, government, industry and public utilities. The book contains individually contributed chapters on four main themes: (a) European Practice and its Relationship to UK Policy, (b) The Potential of Typical Heat Loads as a Basis for Local Energy Centers, (c) Criteria for Allocation of Resources, (d) Implications for Policy.

The chapters vary in approach, from case histories, quantitatively documented, to position papers, including status and opinions. The content of the Discussion Section, which follows the three or four chapters on each theme, includes opinion, substantial criticism, and some added new information.

In his Preface, the Editor notes that "the aim of this book is to examine the topic of combined heat and power without the usual unproductive conflict... The book serves to identify the principal topics of dissent", and encourages the adoption of "suggestions it includes for encouraging local energy centers...". The Authors accomplish these aims very well, and the Editor has done a good job of exposing the issues and retaining just enough of the vitriolic to indicate that the world (*i.e.*, the UK) is indeed not unanimous on what to do about Local Energy Centers.

Central heating with power production, central power production with heat distribution, total industrial processing energy (heat and electricity), short-term and long-term factors, large-scale and small-scale installations — all receive mention in the Papers or the Discussion, although they are not systematically analyzed or discussed in any useful way. It is a background study.

Electrical energy storage *via* batteries (or any other device) for peaking power is not mentioned, nor are fuel cell power plants, MHD or other non-rotating prime movers which may be of interest to readers of this *Journal*. The diesel is a favored prime-mover in the discussion. Nuclear thermal-electric plants are the vision of the future, after another 25-year or so period of easy oil and gas.

The organizers of the Conference indeed stirred the pot and put the soup on the back-burner to marinate, but could have added a few more ingredients. The book provides thoughtful background for the serious practitioner in the energy field who is attempting to become less biased, although it is unlikely to change the course of civilization, even in the tight little island from which it originates. The communication of its information by Applied Sciences Publ. Ltd., the Editor, and the several Authors in such an attractive book-form is to commended.

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