

## Foreword

At Aviemore, in 1980, in association with the Highlands and Islands Development Board, the Royal Society of Edinburgh organised a seminar on “Energy in the '90s”. The picture that emerged of energy availability and the relative importance of different production modes in the United Kingdom and, in certain regards, the distinctive Scottish factors with respect to energy and fuel, provided an essential background to studies of the Scottish economy as it operated at the time and as it might be expected to develop during the remainder of the 20th century.

It was to be expected that this energy background would change, albeit slowly, with time. However, since the 1980 Seminar was held, the picture has changed considerably. It was much affected by the industrial dispute between the Coal Board and the National Miners Union, which ran from 12 March 1984 to 3 March 1985. Also public debate on nuclear energy continued, stimulated by lengthy inquiries into nuclear power developments, and led to different political stances being adopted. In the light of these changes, the spring of 1986 seemed an appropriate time to again authoritatively review the energy field, with particular emphasis placed on the distinctive Scottish factors. While the arrangements were being made for this second seminar, there was a dramatic drop in oil prices which altered the balance of economic attractiveness of one mode of energy production as against another and underlined the desirability of taking stock of the cost and benefits of the various energy options in the light of the new circumstances. It was decided for the purposes of the proposed Seminar to extend the definition of “cost” to include the risk of serious accidents and to include in the proceedings a discussion of the public perception of the risks associated with energy production. The Seminar went forward on this basis and was held in the Glasgow Exhibition Centre on 19 and 20 March, 1986.

We have included, as an addendum, tables from the Scottish Abstract of Statistics which provided the basic data for several of the contributions. In these tables, and in the contributions, different units for energy, power, etc. are used. We have provided a Glossary which appears after the contributions and, where it seemed appropriate, we give definitions and conversion factors. We have gathered together in the glossary various acronyms that were in common use during the Symposium.

The value of the following papers is much increased by the occurrence on 26 April, 1986, of the Russian reactor accident at Chernobyl. This occurrence has put, in all countries, the question of energy production in the melting pot. The report of the proceedings in March, 1986, has consequently taken on an unexpected importance as giving the position obtaining before Chernobyl and in providing a record of the ideas then current on safety and perceived risks before the perception was affected, perhaps irreversibly, by Chernobyl.

We are grateful to the contributors for their timeous responses in regard to the submission of their material and to the Royal Society officials for the expedition in dealing with the publication of the Proceedings.

We are also grateful to the many organisations who contributed so generously to

the costs of the symposium and its publication. They include: the Bank of Scotland, British Coal, The British Petroleum Company plc, Britoil plc, the Department of Energy (in association with Energy Efficiency Year—Scottish Office), Dounreay Nuclear Power Development Establishment, the Eastern Electricity Board, Esso Exploration and Production U.K. Ltd, the National Radiological Protection Board, the North of Scotland Hydro-Electric Board, the Royal Bank of Scotland plc, the Scottish Development Agency, Shell U.K. Ltd. and the South of Scotland Electricity Board.

J.M.R. and G. W.