Summaries and abstracts

Regulation-deregulation of electricity supply industry, by L. De Paoli

The environment of electricity supply industry (ESI) is undergoing numerous changes since a decade for many reasons. The slackening of demand growth and other environmental and technical transformations are among them. But the most important is the rethinking of regulation. The problem facing regulators and economists is to find out new solutions to improve ESI performances. The choice is between more competition and more cooperation or, perhaps more of both. But it is difficult to make compatible competition and cooperation among utilities. The same is true when designing new rules intended to enhance efficiency in the decisions and behavior of ESI in the short as well in the long run.

This article, reporting the opening speech of a IEPE-EdF Seminar held in Grenoble on February 25th 1989, summarizes and briefly discusses the pros and cons of the main solutions proposed or proposable to reshape ESI organization and conduct.

Is nuclear power suitable? Some lessons from 35 years of making civilian nuclear reactor, by L. De Paoli

How to assess if nuclear power is worthwhile for society? The author holds that the economics of nuclear power is a good synthetic tool to answer this question. But the economics, in this case, is not simply a result of technique and costs, but includes the pressures the society exerts to make nuclear reactors safer. Therefore the more the balance of forces in the society is against the nuclear power, the more it will be difficult and expensive to build and operate nuclear reactors.

Institutions also weigh heavily on the result, as can be seen by international comparison. Apart from politicians, the other category which counts more in the choice and in the economic competitiveness of nuclear power are managers of electric utilities. In this respect, public or private utilities may be expected to choose differently because the system of penalties and rewards they are subject to is different. Private indu-

stry is much less willing to accept the risks of nuclear power on economic grounds, as the privatization of Cegb has shown.

Obviously, technical and organizational aspects are important too. Past experience has made it possible to establish some general lessons, such as the need of standardization, more in-factory construction, cooperation between utilities, constructors and regulatory agency.

Overall, the perspective of nuclear power appears to be rather bleak in the international scene, although more promising in some countries.

International economic comparisons continue to show a good margin in favour of nuclear reactors, but only where public acceptance is quite good is this advantage real. In the other cases, the uncertainty is so important to eliminate nuclear power among the options open to the electric utility managers.

The greenhouse effect: the evolution of the scientific message and of its transfer, by L. Braicovich and F. Amman

The greenhouse effect is not anymore confined to scientific journals and is becoming a policy issue and, possibly, a nightmare for the public opinion. The evolution of the scientific message and of its transfer to policy makers and to public opinion is analyzed.

In the first part of the paper the more recent trends in the related research activity and in the transfer processes of the results are considered in quite general terms. The second part examines in more detail the progress achieved in the years 1989-1990 by scientific research in various aspects of the greenhouse effect. It is confirmed that for the time being the scientific results leave many important points unresolved; policy decisions on the matter cannot therefore rely on present scientific knowledge as if it were firmly established.