

# international news

At the opening last week of the annual conference of the International Atomic Energy Agency in Vienna, the Director General, Mr Sigvard Eklund, expressed confidence in the continuing expansion of nuclear power technology. He suggested that nuclear energy based on fission provided the only immediately available alternative to fossil fuels in spite of recent optimism about the potential of alternative energy sources.

Addressing the delegates of 107 member nations of the IAEA Mr Eklund said that as alternative resources from solar, geothermal and wind power, and from nuclear fusion would not become readily available for some time and that even then those sources would provide less power than current estimates suggested.

Mr Eklund was, however, optimistic that largely under the guidance of the IAEA the problems associated with the use of fission reactors could be overcome. These included three main issues which have recently formed the focus of public debate, namely, the safety and reliability of the reactors, the disposal of radioactive waste, and the need to ensure that the spread of nuclear technology does not lead to a proliferation of nuclear arms development among the non-nuclear powers.

Dealing with the first of these points Mr Eklund said that the IAEA is engaged on a programme to formulate a comprehensive system of international

## IAEA head puts faith in nuclear power

by Allan Piper

safety codes and guidelines for nuclear power plants. The agency believes, he said, that the "teething troubles" undergone by the larger reactors have now been eliminated, and that it is no longer fair to regard nuclear power stations as unreliable.

Many of the problems associated with the satisfactory management of waste products remain to be resolved, however. In particular, the IAEA is establishing a standing advisory group to examine the feasibility of burying waste in geologically stable terrain. Referring to that concept Mr Eklund drew attention to the point raised during an earlier agency conference that plutonium formed in the Oklo Formation about 1,700 million years ago decayed quite harmlessly without escaping into the environment.

On the question of preventing an escalation of nuclear weapons proliferation as more countries obtain the materials for developing nuclear power plant Mr Eklund stressed the need for the adoption of internationally accept-

able IAEA safeguards. He expressed disappointment that though the Non-Proliferation Treaty Conference held in Geneva in May expressed strong support for safeguards controlled by IAEA their recommendations had not been considerably more decisive.

Calling upon the present nuclear powers as the major exporters of nuclear materials and technology, Mr Eklund urged them to take the lead by supplying nuclear resources only to those nations prepared to place their "entire nuclear activity" under international safeguards.

He stressed that commercial and political interests should not prevail over that objective, adding that further progress towards a comprehensive ban on nuclear tests by the nuclear powers themselves would assist by setting an example to the developing countries. He also proposed that the explosion of nuclear devices necessary to the development of nuclear technology be placed under international control.

Though Mr Eklund's speech reflects a confidence in the future of nuclear fission as a major source of energy he indicated that IAEA are not discounting altogether other possible sources. The agency, together with the World Health Organisation, is, he said, co-operating with the International Institute of Applied Systems Analysis on a programme to evaluate the viability of every available option. □

M. d'ORNANO, the French Minister for Industry, has presented the conclusions of the consultative commission on energy, chaired by M. B. Gregory, the Director General of the CNRS (National Centre for Scientific Research). This commission was set up to examine the future direction of government energy policy, and includes representatives from a very wide spectrum of interests—specialists, energy users, and "social partners"—so that all shades of opinion can be expressed. Three criteria were drawn up to help the working of the commission—low financial cost, political independence, and ecological and social aspects, but the commission "regretted that it could not report within this framework any coherence in the proposed courses of action". In fact, the commission's report is not always in agreement with decisions reached by the government.

In its plans for 1985, the commission

places special emphasis on efforts to reduce energy consumption. By comparison with 1973 forecasts, the total consumption hoped for would be 240 Mtpc (millions of tons petroleum equivalent) instead of 285 Mtpc, and the amount derived from petroleum products would be 96 Mtpc instead of 178 Mtpc. The report stresses that "this is compatible with an annual growth rate of 5.5% only at the price of a policy involving strict restraint, but it is well worth the effort to attempt to reach this goal". The feasibility of the 5.5% rate as the basis of a working hypothesis has, in any case, been thrown into doubt by some members of the commission. Coal consumption (30 Mtpc) would continue to decline progressively, while gas consumption would rapidly increase to 37 Mtpc.

The recommendations of the commission regarding electricity are very

precise: whereas electricity production would, at the present rate, have approximately doubled by 1985, the commission underlines the dangers of a policy exclusively favouring electricity; it urges that major research and development efforts be made on solar, hydrogen and other energy sources.

The most striking point of the report is without doubt the split which has appeared within the commission over the nuclear programme. Some of its members advocate, for safety reasons, the construction of nuclear power stations of lower output than that proposed by the government, the balance of the energy being provided by traditional power stations even if this seems less favourably economical. M. d'Ornano has perhaps shown excessive optimism in making the report of the Gregory commission public, for it seems to call into question many aspects of government policy. □