claim that it is a very good design. The airlines which will have to buy it are naturally taking a more cautious line, and can hardly be expected to do more until the specification and costs are more clearly defined. And because the airlines put a high value on their independence, they are reluctant to make encouraging noises too soon.

There is also the possibility that Boeing may decide to enter the competition. Although Boeing has not yet made a definite statement of intention, it has worked on a design with some similarities to the European airbus, and this is enough to make the airlines hedge their bets until the position is clearer. Boeing has a loyal following among the airlines; British European Airways, for example, would have bought Boeing aircraft rather than the Hawker-Siddeley Trident if it had been allowed to. The delay in the airbus project gives Boeing a chance to get into the short-haul airbus market if it decides to. The best hope for the companies in the European airbus would be for Boeing to get so involved in the task of redesigning the American SST that it had no time to contemplate more mundane aircraft.

Despite the uncertainty, the three firms involved in the European airbus have now formed a new company, to be called Airbus International. The task of the new company, which comprises Hawker Siddeley Aviation, Sud Aviation and Deutsche Airbus, will be to sell the airbus to the airlines, and to coordinate the activities of the three companies. Shares in the company have been taken up in proportion to the share of the cost of the project—37·5 per cent for France and Britain, and 25 per cent for West Germany. The chairman of the company is Dr Bernhardt Weinhardt, of Deutsche Airbus.

Why Britain Withdrew

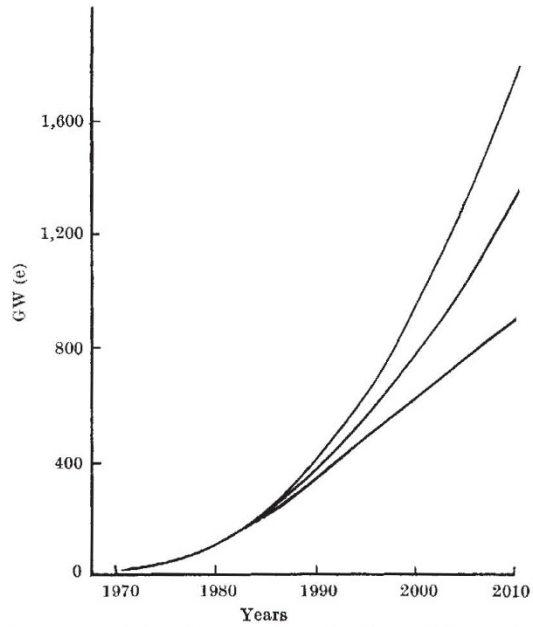
Mr Edward Short, the Secretary of State for Education and Science, is clearly not a man to shirk unpleasant duties. Last week he appeared before the Council for Scientific Policy to explain why the British Government had declined to accept its advice on the CERN 300 GeV accelerator. Mr Short said that the Government had decided that it could not afford any new commitment. If the Government had signed the agreement, he said, it would not have been able to withdraw later, and the cost of the machine would probably increase. It felt that there were no short or medium term prospects of economic benefits from so costly a scheme and little chance of movement into industry of skilled manpower trained by participation in international high energy physics projects.

The Government had rejected the SRC proposal that the proportion of resources allocated to nuclear physics could be reduced by closing down obsolete national facilities and spending part of the money on the 300 GeV machine, on the grounds that unless the CERN machine was built in Britain there would be no adequate facilities to train British scientists. Mr Short also said that this plan of the council assumed a substantial growth of the SRC budget over the next decade and the Government was not prepared to commit itself or its successor so far ahead. The minister assured the meeting that the decision was not the thin end of the wedge of Government interference in the disposal of the Research Council's funds and, presumably as a word of encouragement to the countries left in the scheme, he said the decision was not an attempt to discourage the project.

Nuclear Estimates

The European Nuclear Energy Agency has just made a courageous attempt to estimate the growth of nuclear power in Western Europe, and how different mixtures of reactors will affect the demand for uranium and for enrichment facilities. The attempt is courageous because estimates of this sort are notoriously tricky to do, and always likely to be overtaken by technical developments of one sort or another. The report, *Illustrative Power Reactor Programmes* (ENEA), covers itself by allowing generous margins for error—its low nuclear demand forecast for the year 2000 is less than half its high demand forecast—but the effort is nevertheless worthwhile.

By 1980, the report estimates, the amount of electricity generated by nuclear power in Europe will have risen to 110 GW (10^9 watts), from 10 GW in 1970 and 40 GW in 1975. Estimates after that are clearly more dubious, but the report suggests a demand of 392 GW in 1990, 800 GW in 2000 and 1,350 GW in 2010. There are many ways in which this electricity could be generated, and the report considers some of



High, mean and low forecasts for the demand for nuclear power in Western Europe, 1970–2010. (OECD.)

the possible combinations of reactor types. The introduction of advanced thermal converters and fast breeders, certain to happen over the period under consideration, would be particularly important because of the effect it could be expected to have on uranium requirements. A nuclear power programme involving light water reactors only, for example, would by the year 2000 have used up nearly 2 million metric tons of uranium, and would be using it at an annual rate of 150,000 metric tons a year. A mixed system using light water reactors and fast breeders, on the other hand, would reduce the annual uranium requirements