but with the virtues (or lack thereof) of pressurized water reactors in general. Most probably, the inquiry will not now begin until the second half of 1982, implying that construction of the reactor system cannot begin until late in 1983.

For the electricity undertakings, the chief objective of the proposal to adapt an American design to British circumstances is the hope that pressurized water reactors could be built more quickly than indigenous gas-cooled designs. The Friends of the Earth document, however, is sceptical of the six-year construction time on which the generating board is counting.

Meanwhile, the Central Electricity Generating Board is somewhat encouraged that four of its oldest gas-cooled reactors, shut down some months ago after the discovery of cracks in the expansion joints of the gas-cooling circuits, can soon be started up again. The first of these reactors, at Berkeley on the Severn, is to be restarted in a few months following a demonstration that the cracks have not grown since the reactors were first built.

Czech nuclear power

Action on safety

Czechoslovakia's nuclear energy authorities have recently made overtures to their British counterparts, suggesting that the agreement on cooperation in nuclear safety, signed almost 15 years ago, should be revitalized. In particular, the Czechs are seeking an exchange of information and expertise on the disposal of nuclear waste and on the training of power station personnel.

The human factor in nuclear accidents has lately become a major concern in Czechoslovakia. Last August, after repeated denials, and without any attempts to prepare public opinion, the authorities suddenly admitted that in the past few years there had been two major accidents at the Jaslovské Bohunice nuclear power station.

During a recent phone-in programme on Prague radio, Dr E. Medke, director of the Nuclear Power Station Research Institute at Jaslovské Bohunice, described the institute's "high quality" research programme, aimed at the "long-term, safe, reliable and in particular, economically effective" operation of Czechoslovakia's nuclear power stations. This, he said, is to include work on the human element in safety. Analysis of nuclear accidents throughout the world, he said, shows that only 20 per cent were caused by equipment failure and the rest by operator error.

A training programme is under way to provide the 1,300 graduate engineers whom the country's nuclear programme will need by 1990. After taking a first degree in engineering, the candidate will go on to a two-year theoretical course, and then to a power station for practical

training. This will include work on a simulator, now being built at Trnava. After careful screening, the student will then become an assistant at a nuclear power station, and will finally take examinations set by the State Commission to qualify for a nuclear engineer's licence.

Czechoslovakia, which is more than self-sufficient in uranium, has a major commitment to nuclear energy, and accordingly tried to hush up the accidents at Jaslovské Bohunice, one of which involved two deaths. But in 1978 the Charter-77 movement published a detailed report on the incidents — and although then still unprepared to acknowledge that anything untoward had occurred, the authorities immediately inaugurated a policy of recruiting nuclear power station workers of a better psychological calibre — a major recommendation in the Chartists' report.

In the radio programme, Dr Medke made no mention of the accidents, and left his deputy, Dr S. Novak, to deal with public apprehensions about nuclear power. Regarding the station now under construction at Mochovce near the Hungarian frontier, Dr Novak said that there has never been a case in which one country has contaminated another's territory by nuclear effluent, and that all Czechoslovak power stations have adequate safety measures to prevent environmental damage in the case of breakdown or failure. This statement contradicts the Chartists' report which alleges that in one of the incidents at Jaslovské Bohunice, effluent reached a watercourse. It also contradicts claims from Bulgarian environmentalists that radioactive contaminants can be found in the Danube — although these are conventionally assumed to be of "capitalist" origin.

Vera Rich

Soviet space programme

Mongolia's turn

Last week's spaceflight of the Mongolian cosmonaut, Jugderdemidyn Gurrachaa, coincided with the start of the diamond jubilee celebrations of the Mongolian People's Republic. A few days before the launch, Mongolia's new Five Year Plan was published, extolling the value of science and technology to the development of the republic.

Not surprisingly, most of the experiments performed by Gurrachaa and his Soviet colleagues aboard the Salyut-6 were aimed at practical applications rather than basic research. One of the major tasks was the mapping of Mongolian natural resources, using conventional cameras and a Bulgarian "Spektr-15" multichannel spectrophotometer. This survey will provide data for existing joint Comecon research projects on Mongolian resources including the irrigation of the Gobi Desert. A programme of simultaneous photo-

Gurrachaa — applying science?

graphy of the Salyut spacecraft from Mongolia's two satellite tracking stations (in Ulan Bator and the Gobi) was intended to provide data on factors affecting space geodesy.

The biological programme involved the monitoring of the cosmonauts' biorhythms, work capacity, cardiovascular function and psychological response to the conditions of space travel. The biorhythm observations were started in 1977 during the selection of candidates for cosmonaut training — apparently the first time that a psychological and biochemical study of Mongolian citizens had ever been undertaken on a daily basis. Technological experiments included the study of natural quartz and of various alloys of copper under zero gravity.

Fundamental research was not completely ignored in Gurrachaa's mission. An experiment codenamed in Russian "Izlučenje" (radiation) continued the Mongolian work on primary cosmic rays with energies in the TeV range which was begun in 1972 with an experiment designed by S. Sugar and B. Chadraa of the Laboratory of High Energy Physics of the Academy's Institute of Physics for the joint Comecon Interkosmos-6 satellite in 1972.

Vera Rich

UK computer industry

ICL falters

International Computers Limited (ICL), Britain's largest computer manufacturer, announced last month that it has been trading at a substantial loss since the middle of 1980. The news of ICL's problems came only a few weeks after similar news from Imperial Chemical Industries (ICI). Until the beginning of this year, both companies had been regarded as profitable examples of Britain's otherwise ailing industry.

Unlike ICI, however, ICL is to be bailed out by government money. Sir Keith Joseph, Secretary of State for Industry, has said that the government will act as guarantor for up to £200 million worth of