

FRANCE

Mixed fortunes

French nuclear fortunes followed a mixed path last week. A correspondent reports

THE French Cabinet was apparently expected to discuss nuclear issues last week, but reportedly failed to do so. The minor controversy caused by a leak of uranium hexafluoride gas at a plant in southern France couldn't have helped. But there was some glory to bask in too—the signing of a cooperation agreement with West Germany covering fast breeder reactors.

The agreement is not unprecedented, being in line with an arrangement reached in Nice in February last year which involved the two countries pooling risks over both breeders and high temperature reactors. Given the new US policy, however, its timing may be awkward.

A key feature of the latest agreement is the exchange of information on fast breeder R&D over a 20-year period. This involves the French

Atomic Energy Commission (CEA) on the one hand and Interatom, a subsidiary of the German company Siemens, and the Nuclear Research Centre of Karlsruhe on the other. Reports suggest that the French will maintain their fast breeder research effort at existing levels, at about FF400–500 million annually—the Germans pitch in a similar sort of amount—but that both sides are hoping for more efficient use of the funds.

Commercialisation of the fast breeder becomes the object of a new French-dominated company established under the agreement known as Serena. This allows the participation of Belgian, Dutch and Italian interests along with the principal partners from France and Germany.

Paralleling this development is one concerning French uranium supplies. In a deal with a South African corporation, the CEA is reportedly to receive 900 tonnes of uranium oxide over 10 years in return for funding the capital investment programme of the mine which will produce it. □

BANGLADESH

Energy projection

The Bangladesh government recently received a report on its energy prospects. A report from M. Kabir

OVERALL demand for energy is increasing with population growth and with greater industrialisation, and the government of Bangladesh has felt the need for a major study to guide long term policy and advise on specific projects that should be implemented over the next 5 to 10 years. Responding to a government request, the United Nations Development Programme (UNDP) agreed to support and finance through the Asian Development Bank a study involving Canadian, American and Italian firms. This began in mid-1973.

An 8-volume draft of the final report was submitted recently. It considers the energy sector as part of the larger economic system of Bangladesh, attempting to identify interdependence both within the energy sector and between this and other sectors of the economy.

In Bangladesh, about 90% of the people living in the villages consume about 80% of the total energy. But only a small part of total energy requirement for a massive population of 75 million is supplied in commercial

form as electricity, gas or petroleum products. Most derives from the burning of traditional fuels, for which estimation of the energy equivalent is difficult given the lack of statistics.

The existing electric power system consists of two separate zones, the East Zone and the West Zone, divided by the river Jamuna. The most recent year for which data were available for the study was the financial year 1973–74, and in this period generation for public supply amounted to some 1,260 GWh—980 GWh in the East Zone and 280 GWh in the West. In addition there are facilities directly owned by users, known as 'captive power', generation of which in 1973–74 was about 460 GWh, the bulk of it in the East Zone.

In assessing demand a major effort was made in the study to project the likely growth of agriculture. That meant considering the speed with which farmers will adopt new technologies, for example, but also examining the institutional framework within which development occurs. An analysis of demand based on various 'scenarios' in a macro-economic model yielded various projections anticipating population, agricultural production and production in other sectors. The 'mid-demand' scenario, which was adopted as an ap-

CHINA

Conference plan

A NATIONAL CONFERENCE on science and technology is being organised in the People's Republic of China, according to Professor Ren Ci-gong of the Applied Physics Laboratory at Johns Hopkins University. He left China on 30 June after an extended 2½-month tour. Interviewed by reporters in Hong Kong, he said its scale would "greatly exceed anything that we can imagine". During his tour he had come to know of many regional conferences, attended by specialists as well as representatives of the broad mass, and these served as preparations for the planned event.

The news accompanies intense activities in China within the past seven months both in matters of science policy and others involving modernisation of agriculture, industry, communication and defence. On the international level, a Chinese delegation which included such leading scientists as Chien San-chiang of the Peking Institute of Atomic Energy and T. C. Tung of the Institute of Zoology has just returned from a visit to Australia. And last month a team of American scientists headed by Philip Handler, President of the US National Academy of Sciences, went to China.

One of the aims of these exchange visits is no doubt to lay the path for further increases of mutual understanding and cooperation in the field of the natural sciences between the Chinese and other peoples. A long article appeared in *The People's Daily* (Peking) on 30 June signed by the 'Theoretical Group of the Academia Sinica'. In it the validity of a previously published document, "Summary of Reports from the Academia Sinica", was re-affirmed. This was frequently referred to in the campaign to criticise Teng Hsiao-ping, with whose explicit approval it was originally released for internal circulation among state departments. Its content is now widely known and may prove to be a good indication of China's science policy now that the so-called Gang of Four and their followers have been removed from the leadership.

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appropriate basis for energy planning, projects 3,971 GWh for the East Zone and 2,292 GWh for the West. The equivalent figures on the 'high-demand' scenario were 5,004 GWh and 2,608 GWh. □