

West German fast breeder

Kalkar may fall at last hurdle

Bonn

THE future of the uncompleted fast breeder reactor SNR 300 at Kalkar (Niederrhein) in West Germany is still in doubt. The Social Democratic Party (SPD) is contemplating the consequences of refusing planning permission for the 17th step of the construction programme which would mean that nuclear fuels could not be brought onto the site or loaded into the reactor, so making Kalkar, a "masterwork of this century" (according to SPD in the 1970s), the most expensive waste of investment in Europe.

There are many reasons why SPD has now started to express doubts about the project. The permit to store nuclear fuel on the site is seen as irrevocable. According to Friedhelm Farthmann, leader of SPD in the Landtag (state parliament) of Nordrhein-Westfalen, it would be impossible to prevent the reactor being commissioned once it had been loaded, and it is in any case far more expensive to dismantle a reactor site once it is radioactive.

After an overwhelming election victory in Nordrhein-Westfalen, SPD feels powerful enough to act on the decision made at the 1984 federal party meeting in Essen to phase out nuclear technology, and to put an end to the "nightmare of the fast breeder" (SPD in the 1980s). SPD has supported the fast breeder through the previous 16 planning permits. Political pressure from the Green Party and from other sections of the community have certainly played a part in SPD's change of heart. By withdrawing from the fast breeder project at Kalkar, SPD expects to gain significant support from the Greens at the next federal elections in January 1987.

The history of the fast breeder reactor is one of controversy, court cases and enormous increases in estimated costs. In 1970, the former head of the fast breeder project at the nuclear research facility in Karlsruhe and the "father" of Kalkar, Wolf Häfele, estimated that less than DM 500 million would be necessary. As the foundations were being laid in 1973, it was announced that DM 940 million would be required, and that the reactor would be in service in 1978. Even then, the reactor was not expected to produce electricity economically, and the research aspect was brought to the fore. A year later, a spokesman for the fast breeder nuclear energy plant said that the project should be stopped for economic reasons. By January 1976, estimates had risen to more than DM 2,000 million, by August 1977 to DM 2,600 million, by the end of 1981 to DM 5,400 million and the cost is now expected to be about DM 7,000 million.

Ninety per cent of this has to be financed by the taxpayer. The Ministry of Research and Technology, now led by Dr

Heinz Riesenhuber (CDU), had spent DM 3,093 million by the end of 1984; a further DM 418 million is foreseen in this year's budget. The energy industry is responsible for only the remaining 10 per cent; otherwise, according to Farthmann and to August Wilhelm Eitz, head of the construction company Schnellbrüter-Kraftwerksgesellschaft, Kalkar would have been stopped long ago.



The reactor was nearly cancelled once before, in 1978. Then the Economy Minister of Nordrhein-Westfalen, Horst Ludwig Riemer (FDP), refused to issue planning permission for the third building stage; this would have enabled the reactor to produce plutonium and thus to build atomic bombs, which West Germany has declined to do.

At the same time, the federal constitutional court was considering the constitutionality of fast breeder technology. On 8 December 1978, the court decided in favour of the project. After heavy internal dissension within the SPD-FDP coalition, this ruling was followed on 20 December 1978, by Riemer, who was under pressure particularly from the former Chancellor Helmut Schmidt (SPD) and the FDP leader Hans-Dietrich Genscher.

SPD has now found new reasons to delay. Shortly after his election victory earlier this year, Johannes Rau (SPD), the Minister President of Nordrhein-Westfalen and now a likely social democratic candidate as federal chancellor, wrote to Helmut Kohl, the present CDU chancellor, expressing doubts about the present policy. Friedhelm Farthmann was blunter in an interview: he saw "no purpose" in continuing with the fast breeder project, since all of the original reasons put forward to justify it were no longer tenable.

Electricity from the reactor would be more expensive than from conventional sources, including the existing nuclear plants, which produce 30 per cent of East Germany's total electricity. The expected

shortage of uranium supplies has not occurred, and they are now seen to be sufficient for centuries. In addition, since the design of the reactor core was altered, the expected "breeding rate" has fallen to a point where it could never produce fuel for light water reactors.

Klaus Matthiesen (SPD), Minister for the Environment in Nordrhein-Westfalen, was equally blunt. The man who will have to decide whether to grant permission for the latest stage, Reimut Jochimsen, the Economy Minister, was more cautious, although he is reluctant to assent because there is at present no acceptable place or method for disposing of the nuclear waste that will result from loading and running the reactor.

On the other hand, Federal Minister Riesenhuber sees no reason for not completing construction and putting the reactor into service. He feels that cancellation of the Kalkar project would undermine all "sensible support of research". August Wilhelm Eitz thinks similarly: "The object (of the project) is not to produce cheap electricity or extra plutonium but to prove that the system functions as a power plant, as a basis for future power plants of this type."

Farthmann denies however that there is still a useful research element in the project. Another fast breeder in Germany is unthinkable. No similar reactors are planned elsewhere, so that West Germany would not be able to sell its know-how. There would be more interest in the French *Super-Phénix* technology. Wolf Häfele still believes that "the breeder is the only technology that at present allows uranium to be managed with negligible use of resources", denying that the present developments can be extrapolated into a distant future.

Minister Riesenhuber is aware of the seriousness of the opposition. He promised Reimut Jochimsen on 16 August that he would issue a policy declaration about the nuclear disposal problem and about fast breeder technology in general. He insists there will be no problem about issuing permits for nuclear disposal.

The Economy Minister of Nordrhein-Westfalen was more hesitant; apart from the question of disposal, he is not convinced of the political need for the project. Jochimsen will probably make his decision later this month. That decision will probably be the first to throw light on the question whether or not the Federal Republic has sunk DM 7,000 million in a research disaster. If Jochimsen says no, however, there will almost certainly be a protracted lawsuit before the issue is finally settled. The federal government can, if it wishes, force the Nordrhein-Westfalen government to grant a permit. A Land government for its part can object through the courts to such federal instructions. The proceedings would be protracted. And then the fast breeder project could be killed by more delay. **Jürgen Neffe**