Erol Caglarcan of Serano accuses FDA of using "unnecessary pressure" and says the Serano product, which has the trade name Asellacrin, will still be used outside the United States. Serano hopes in time to market a genetically engineered growth hormone being developed by Celltech in England, but that product is not yet at the stage of clinical trials. KabiVitrum's recombinant product, developed under licence from Genentech, is already in clinical trials in Europe: the company is correspondingly less concerned about FDA's action in banning human growth hormone.

The pressure on FDA to approve Genentech's recombinant product as quickly as is seemly arises because testing the pituitary samples for presence of the CJD infective agent has to be done by bioassay, using squirrel monkeys or chimpanzees. Besides being expensive, results of tests now being mounted by NIH will not be available for two years. In any case, negative results from such tests would not provide much reassurance, given that so little is known about the disease. If Genentech's product can be shown to be safe, FDA might be tempted to abandon pituitary-derived growth hormone permanently.

A decision to abandon pituitary products would, however, affect other substances besides growth hormone. Dr A.F. Parlow of the University of California at Los Angeles, who has supplied pituitary products to NIH since 1977, is concerned that research into other pituitary hormones could be set back; clinical trials of prolactin and thyroid-stimulating hormone, for example, have had to be put on ice. Parlow believes that FDA will have to embark on a convincing demonstration that viruses can be effectively excluded by modern purification methods in order to prevent a complete halt in pituitary research.

Genentech first produced a recombinant growth hormone product several years ago, but — perhaps because of the ready availability of the human-derived product — progress towards FDA approval has been slow. The Genentech hormone has an extra methionine residue tagged on that is not found in the natural substance, and in early clinical trials many patients developed antibodies to the product.

Last year, FDA asked Genentech to provide further safety data on a trial population to be monitored for a full year; that study is now under way but the data requested by FDA will not be complete until the start of 1986 at the earliest. Recently, however, FDA officials have been saying publicly that the Genentech product, which has now been improved, is likely to be approved within the next two or three months.

Genentech, for its part, is playing it cool, saying the decision is entirely up to FDA; a recombinant growth hormone without the extra methionine is also believed to be in the pipeline. **Tim Beardsley**

French science budget

Fabius goes for growth

M. HUBERT Curien, French minister for research and technology, at last has his figures.For the past few weeks he has been waiting to hear from the Prime Minister, M. Laurent Fabius, how much money there is in the kitty for French research for the next three years, to put some substance in his "three-year plan" for research — an instrument which parliament must vote on and which should give a new impetus to the political emphasis on science in France. The Prime Minister's answer is four per cent real growth per year in civil research and development spending to 1988, excluding defence research spending.

And that is just the government side. There will also be increased incentives to industry to carry out research (a doubling of tax allowances on research and development budgets) which will give industry another FF 600-700 million (£60-70 million) a year to spend, so that overall it is estimated that French national research and development spending will rise over the next three years from 2.25 per cent of gross national product now to 2.6 per cent in 1988. At its nadir in 1979-80, this fraction had touched 1.8 per cent.

Thus the growth in French research spending should continue, provided there are no global budget "corrections" in future, corrections which rather reduced the true impact of the ambitious "law for science" introduced in 1982 by M. Curien's predecessor, M. Jean-Pierre Chevenement. But Chevènement also increased the number of jobs for scientists, and this trend is to continue. While British research councils have lost around a fifth of their posts since 1981, their French counterparts have gained something around 3 per cent a year. Curien's plan offers 1,400 new jobs for scientists over the next three years, less annually than last year's 1,000, but still a substantial figure.

So where are the French after all this attention to science? Doing fairly well, but could do better, particularly in industry, is the informed verdict in Paris.

Briefly, the tally is thought to be this. First, a reversal of the decline of support for French science in the 1970s. The decline was brought about initially by President Pompidou's massive indifference, and continued by successive administrations until Pierre Aigrain, science minister under President Giscard d'Estaing, reversed the trend. Second, M. Chevènement, under President Mitterrand, made science a political touchstone, and changed the whole French political mentality towards science, and of scientists towards industry. Third, the research councils — such as the Centre National de la Recherche Scientifique (CNRS) with its 10,000 scientists — were accorded looser legal ties, which allowed them to make profitable associations with industry, set up affiliates and so on. And fourth, science and technology were given weight, and budgets, in the regional administrations of France, which gave an opportunity for a more flexible response to local industrial and social needs. A fifth bonus, the new impetus given to universities to compete with one another for students and research cash, has come too late to yet have any real impact.

Failures, however, include a poor response from industry, too much centralization of decision-making and too little realistic assessment of the successes and failures of the policy.

There is hope, however, that Curien will be able to correct many of these failings. The new three-year plan, agreed at ministerial level but not yet voted upon, is one of his instruments. A practical man, Curien seems to be taking many of the right steps to put the rebirth of French science back on course. **Robert Walgate**

Australia's NDP in disarray

Canberra

AUSTRALIA's single-issue Nuclear Disarmament Party (NDP), whose 8,000 members include many former Labor Party supporters disaffected by the Hawke Labor government's decision in June last year to mine and export uranium, has lost its only parliamentary representative-elect, Ms Jo Vallentine, who resigned last week, announcing that she would set up a new anti-nuclear political party to be known as Peace and Nuclear Disarmament Action (PANDA).

This move follows NDP's first national conference in Melbourne last month in which Senator-elect Vallentine, former Labor Senator Ms Jean Melzer and narrowly-defeated NDP Senate candidate and rock singer, Mr Peter Garrett, staged a walkout, claiming that NDP was in danger of falling under the domination of entryist members of the Socialist Workers Party, a Marxist grouping of Trotskyite tendency. The conference was to have given some direction to NDP policy, because the party had only six months to organize before last December's half-Senate elections.

One of the chief reasons given by the breakaway group for leaving NDP was the party's "infiltration" by people who were already members of other political parties: their proscription is likely to be a feature of membership of PANDA. The members of Ms Vallentine's West Australian branch of NDP were canvassed by a postal ballot that ended in a vote to cut all ties with the national body and form a separate party. Breakaway groups in most other states are holding similar ballots whose results will be known next month. Jeffrey Sellar