

other potentially noxious exports.

Some of these reforms faced stiff opposition from the Reagan Administration before the Korean plane was downed. Now observers on Capitol Hill fear that Congress will reconvene in such a martial mood that the momentum that had been building in the House for export reform will be gone. Thus, the more conservative Senate version of this bill may be more likely to win approval.—**JEFFREY L. FOX**

## Britain Joins European Nations on Fast Breeder

Paris. Britain's secretary of energy, Peter Walker, announced last week that Britain has decided to join other Western European nations—rather than the United States—as its principal international partner for future research and development into fast breeder nuclear reactors.

Last November, faced with rising costs and declining predictions of future electricity demands, the British government announced that it was cutting back the scope of its fast breeder program and reassessing its future (*Science*, 10 December 1982, p. 1094). A report subsequently prepared by John Harsh, the chairman of the United Kingdom Atomic Energy Authority, that was submitted to the department of energy suggested that costs should be reduced by increasing international cooperation; it suggested either the United States or other European nations as collaborators.

In last week's statement, Walker said that the British government had decided to open formal negotiations with the existing fast breeder consortium formed by France, West Germany, Italy, Belgium, and the Netherlands. According to Walker, "by working with our European partners we can reduce our costs by cutting out duplication, and share our considerable collective technical expertise."

Three years ago, Britain's fast breeder research community, which was responsible for the world's first commercial breeder reactor at Dounreay in the north of Scotland, began to explore possible collaboration with France, whose 1200-megawatt Super-Phénix is due to start operating in late 1984 or early 1985. At the time,

however, the entry fee demanded by the French—rumored to be between \$75 million and \$110 million—was considered unacceptably high, and the deal fell through.

This time, although the details of the new collaboration are yet to be finalized, it is not expected that any money will change hands. France, in particular, is facing much higher cost estimates than originally expected for the construction of a planned 1500-megawatt successor to Super-Phénix, and is more enthusiastic than previously about making this a truly international project, with each country contributing its scientific, technical, and engineering expertise.

Still being discussed, however, is where a new fast reactor, with Britain, France, and Germany as the principal supporters, would be built. The French proposal is that this should be next to Super-Phénix on the river Rhône but this is unlikely to prove immediately acceptable to Britain; conversely, suggestions that the new reactor be based on the coast of Suffolk, in the east of England, have been dismissed as "premature" by the Central Electricity Generating Board, which would have responsibility for constructing and operating it.

Critics of Europe's fast breeder program, who argue that the changing patterns of future energy demands make breeders unnecessary, claim that the new eagerness for a formal international agreement is an attempt to secure the future of the program by making it impossible to cancel unilaterally. "What we fear is that it could turn into another Concorde," says Walter Patterson of Britain's Friends of the Earth.

The British government maintains that the decision to collaborate with the French, agreed in principle at a meeting between British Prime Minister Margaret Thatcher and French President François Mitterand earlier this year, is essentially pragmatic. And in his statement, secretary of energy Walker insisted that, although the choice of working with European partners "reflects our similarities of purpose and equivalent levels of expertise," Britain intended to keep open the possibility of extending international collaboration outside Europe—particularly with the United States and Japan—"when the time is right."—**DAVID DICKSON**

## FDA Speeds Approval of Cyclosporin

On 2 September, the Food and Drug Administration (FDA) approved cyclosporin, a new drug that suppresses the immune system. The drug has been used on an experimental basis in this country for the past 4 years as a means to prevent the rejection of transplanted organs. It is also being tested as a treatment for certain autoimmune diseases, such as multiple sclerosis. Because cyclosporin shows great promise as an immunosuppressant, the FDA evaluated it on an expedited basis, approving it in 9 months rather than the 2 years that would normally be expected.

Cyclosporin is produced by Sandoz, which plans to market the drug under the trade name Sandimmune. A maintenance dose of the drug, which recipients of organ transplants probably will have to take for the rest of their lives, is expected to cost \$4000 a year. Sandoz predicts, however, that the cost will drop as they begin to make more of it and that the current maintenance dose will be lowered as physicians become more familiar with the drug.

The advent of cyclosporin may bring with it some problems. Major health insurers are concerned that, with cyclosporin, heart, lung, and liver transplants may become successful enough to qualify for reimbursement, which raises the question of whether the nation should commit its resources to paying for such expensive procedures. A liver transplant can easily cost \$100,000.

But it is not yet clear whether cyclosporin will end up costing or saving the nation money. Heart and liver transplant patients cannot survive without a transplanted organ. Kidney transplant patients, however, can live without transplants by means of dialysis, which costs the federal government more than \$20,000 a year for each patient. Cyclosporin has increased the success rate for kidney transplants to 90 percent.

Sandoz also worries that patients with serious and untreatable autoimmune diseases will rush to take cyclosporin before the drug can be evaluated to see if it can help these patients.—**GINA KOLATA**