NUCLEAR POWER

Two's Company

The reorganization of the nuclear power industry, completed to some people's satisfaction last week, ranks as one of the less inspired performances of the Industrial Reorganization Corporation. The purpose of the reorganization was to reduce the number of competing groups from three to two, and various schemes for doing this by Government supported mergers were proposed; but the final solution simply involves banishing one of the consortia into limbo, with the implication that it will get no more work unless it is able to merge with one or other of the new companies. The consortium which has been roughly handled, Atomic Power Constructions Ltd, is the one responsible for Dungeness B, the first commercial advanced gas-cooled reactor.

All that the reorganization involves, therefore, is the conversion of two of the consortia into companies, and the investment in these companies of substantial sums of Government money. As a result, the industry looks like this:

BABCOCK ENGLISH		NUCLEAR POWER GROUP	
ELECTRIC NUCLEA	R		
	Per		Per cent
Babcock and Wilcox	25	Reyrolle Parsons	20
English Electric	25	Sir Robert McAlpine	15
Taylor Woodrow	4	Clarke Chapman	10
IRC	26	John Thompson	10
AEA	20	IRC	10
		AEA	20
		Strachan and Henshaw	5
		Whessoe	5
		Head Wrightson	5

So far, it is not clear what is to happen to APC, which has two shareholders, Fairey Engineering and International Combustion. But it is clear that they are not simply going to disappear—as well as the Dungeness contract, Fairey won a contract last month to supply an experimental reactor to Chile, which could lead to an important new market. There are two important issues, of which the most urgent is the completion of Dungeness B, which has run into engineering difficulties. The programme is behind schedule, and APC is concentrating on catching up or at least preventing further slippage. It is possible that Babcock-English Electric could be involved in the completion of the contract, though the mechanics of organizing this might turn out to be difficult. Whatever else is done, it is likely to be most sensible to stick to the design and construction team already at work, whether it operates under the APC or the BEEN banner. If BEEN does get involved, it must increase the likelihood of a merger between APC and BEEN.

The announcement of the formation of the new TNPG also revealed that BEEN is not, after all, to take over responsibility for the 250 MW fast reactor at Dounreay. The original announcement of the formation of BEEN had implied that this was signed and sealed, but senior management at BEEN have evidently had second thoughts. Instead, TNPG is negotiating to take over the fast reactor and the design team at Risley. In effect, TNPG, which has always looked the strongest of the three groups, has

emerged on top—assuming it can manage to absorb the large numbers of people from the AEA without too much disruption. BEEN may now be able to take over the steam generating heavy water reactor at Winfrith, a contract in which Fairey has played a large part. This, perhaps, increases the chances that BEEN will absorb APC—a suggestion first put forward well over a year ago (see, for instance, *Nature*, 216, 629; 1967).

OIL POLLUTION

Coping with Disasters

THE British Government has tartly rejected the criticisms of its handling of the Torrey Canyon episode which were raised by the Select Committee on Science and Technology last August (Nature, 219, 993; 1968) in a White Paper, Coastal Pollution (HMSO, 2s 3d). The British Government maintains that the emergency measures it took to deal with the disaster "were as efficient as those which any other country could have mounted". It goes on to boast that its record in devising and promoting methods to deal with oil pollution "can stand comparison with that of any other country". The White Paper has all the appearance of reflecting the sense of injustice the Government felt over the Select Committee's strictures and its misinterpretation of the evidence it considered.

The Select Committee's report, which the White Paper concedes "contains a wide-ranging and useful review of oil pollution problems", accused the Government of being caught unawares when the Torrey Canyon went aground on March 18, 1967. The Select Committee set much store by the evidence of Sir Solly Zuckerman, the Government's Chief Scientific Adviser, who apparently astonished the committee by saying he could not name a single minister with overall responsibility for coordinating oil pollution research, that he had not been consulted until four days after the wrecking and that he had not been charged with overseeing pollution research and, in any case, had no executive power. It is known, however, that the Government felt strongly that Sir Solly's evidence had been misconstrued by the committee and that select committees are just as capable of making fools of themselves as governments.

Apart from saying the Government was ill prepared to cope with an oil tanker disaster on the scale of the Torrey Canyon, the committee made two chief recommendations. First, that a single minister should be made responsible for coordinating national research on oil pollution and, second, that one minister should be designated to take charge of any disasters there may be in the future.

The charge of being caught unawares has obviously upset the Government. The White Paper takes pains to list the research in progress before the disaster and the initiatives taken by Britain in the International Maritime Consultative Organization, and it firmly defends both the speed and effectiveness of its action during the emergency. In particular, the White Paper says that the bombing of the Torrey Canyon was inescapable once the ship began to break up. As for designating a minister in advance to be responsible for coordinating emergency action in oil tanker disasters, the White Paper says, "this would only confuse existing lines of responsibility, and might well not turn out to be the most appropriate form of organiza-

tion when the emergency actually occurred". The Select Committee's argument that the minister should be appointed now in order to gain the special expertise required has cut no ice; the Government apparently prefers what it calls the "flexibility" of having several departments partially responsible.

It has much the same answer for the suggestion that one minister should oversee research. Sir Solly, according to the White Paper, was invited by the Ministerial Sub-Committee on Hazardous Cargoes, which is chaired by the Home Secretary, "to keep in touch with the progress of the research, to coordinate the research of individual departments as required and to report to the ministerial sub-committee what action was needed in the light of the research undertaken", and the Government seems contented with these arrangements, considering, perhaps rightly, that "it would be wrong to go further and to make special arrangements, cutting across the normal responsibilities of ministers in various fields of scientific and technological research. . . . It would be counter to good management practice. Moreover, it would single out this type of research for preferential treatment over all others, however vital they may be to human life or national interest." As the Select Committee noted, under this system, "different departments with their responsibilities will undertake to do what they feel is appropriate to them, and might even try to push jobs which are appropriate to them on to other departments", but then that is part of the time honoured principle of dividing the responsibility so that nobody is responsible.

NATURE CONSERVATION

Epping Forest Centre

EPPING FOREST, 6,000 acres of woodlands in Essex, is to have its own nature conservation centre in the spring of next year. Last week, the Corporation of London agreed to spend £70,000 on the centre, which will be the corporation's contribution towards what is called European Conservation Year 1970.

The centre, which will be sited at High Beach in the eastern part of the forest, will have lecture theatres, laboratories and living quarters for the warden and his staff. It will be managed for the corporation by the Field Studies Council, which has had long experience of running centres for ecological studies. The Epping Forest centre, however, will differ in several respects from the Field Study centres. Instead of providing residential courses for students and teachers, it will concentrate chiefly on the younger age groups, the aim being to teach children in the area about the natural history and conservation of the forest. It will also cater, but to a lesser extent, for adult education classes, weekend and teacher training courses, and for natural history societies.

The Corporation of London has maintained Epping Forest as a beauty spot for 91 years and during this time has spent several million pounds on improving and preserving the forest. The annual expenditure of between £55,000 to £60,000 comes not from the rates but from a special long-standing fund known as the "City Cash". Extra money is also occasionally spent on special schemes such as the controversial one being planned at present to make riding paths through the forest to stop riders from going anywhere they like.



Epping Forest.

The conservation centre, on the other hand, is likely to be welcomed by local residents, children and Londoners alike.

PESTICIDES

Not Enough Known

As pollution of the global ecosystem by pesticides increases, so ministries of agriculture and international agencies, such as the Food and Agriculture Organization, spend more of their time trying to fix permissible limits for residues of pesticides in crops and foodstuffs. There is still, however, too much uncertainty in the process. In Britain, for example, the Advisory Committee on Pesticides and other Toxic Chemicals recommended in 1965 that a specialist working group should study the methods of analysis and sampling necessary for rational legislation. Inevitably, the working group's report, The Collection of Residue Data (HMSO, 4s 6d), calls for more research on most aspects of contamination by pesticides. It also recommends the setting up of a unit to collect samples for residue studies initiated by the Government and a new coordinating committee to organize research.

The working group considered evidence from 59 private and public organizations working on residues in food, and the catalogue of its conclusions and recommendations emphasizes current ignorance of most aspects of the problem. The accumulation in almost all foodstuffs of even the commonest pesticides—DDT, dieldrin, aldrin and gamma BHC, for example—needs further study. The same is true, only more so, of many of the specialized pesticides used in horticulture and fruit farming. The report says that existing analytical techniques, although adequate for the research laboratory, need to be developed into simpler and quicker procedures for routine analysis.