Board offers to contribute to the cost. Meanwhile, the authority plans to use the prototype reactor, commissioned in 1974, for further studies of the fast reactor fuel cycle.

Against the general trend, the authority increased its skilled work-force by a hundred to 2,925 during the past year, but expects now to be stationary. There seems to be some concern that the Harwell establishment may not be able to sustain its

present level of contract work for industry, worth more than £25 million a year.

The authority's annual accounts, traditionally among the most laconic of public corporations', are further made obscure this year by the large increase (of

£40 million) in the net cost of operations in the year ending last March, partly attributable (to the tune of £12.5 million) to the cost of writing off the capital cost of miscellaneous fissile material and equipment.

Internees in Poland

Psychiatric abuse claim

Four political internees in Poland have appealed to the World Psychiatric Association, claiming to be victims of psychiatric repression. The four had been temporarily transferred from internment camp to the municipal hospital in Lowicz for treatment in the departments of surgery, internal medicine and laryngology respectively. On 18 August, however, their treatment was discontinued, and they were transferred to the psychiatric wing of a hospital at Zgierz (near Lodz) and placed in the ward for alcoholics. Their letter appeals to the World Psychiatric Association for "speedy intervention".

As the claimants themselves point out, this appears to be the first case of psychiatric reprisals against internees. One Solidarity activist, the logician Jan Waszkiewicz, who was arrested on charges of organizing a strike in the Lenin shipyard in Gdansk and of continuing union activities after the proclamation of martial law, was sent by the court to a mental hospital after the major charge of organizing the strike had been dropped. Friends of Waszkiewicz have said, however, that he seemed to be in a genuinely disturbed state, and that there was nothing sinister in his being transferred to the hospital, where he seems to be undergoing a normal rest cure. He is not receiving any medication or other treatment and is allowed to leave the hospital once a week.

The use of psychiatry as a means of political reprisal has always been abhorrent to Polish psychiatrists. In 1975 there was considerable concern that proposed new mental health legislation would make easier the incarceration of political dissidents in mental hospitals. But after a public outcry, the proposed bill was dropped and Polish psychiatrists — unlike their colleagues in the Soviet Union — avoided the possibility of having to diagnose political dissent or religious enthusiasm as a symptom of schizophrenia.

During its five years' existence (1976–1981), the Workers' Defence Committee KOR, which documented abuses of human and civil rights in Poland, recorded only one attempt at psychiatric confinement — the case of a young man petitioning for the broadcasting of Sunday Mass — and this fell through because psychiatrists were unwilling to certify him.

Under martial law, however, the security services have taken renewed interest in the possibility of psychiatric internment. After

the demonstrations over the May Day weekend, according to underground Solidarity sources, the commandant of one of the departments of the mid-town district of Warsaw, Magistrate Czepinski, applied to Dr Zielinski, director of the Nowowiejski hospital, for facilities for the hospitalization by the civil police of "mentally deviant persons who exhibit a tendency to disrupt public order when various festivities are organized".

Dr Zielinski refused to comply with this request, and reminded Czepinski that the law on psychiatric admissions permits the hospitalization of a mentally sick patient only at his own request, the request of a close relative, or, under carefully defined conditions, by a general practitioner.

The Zgierz incident, however, indicates that not all Polish doctors have the courage and quick-wittedness to follow his example.

Vera Rich

Cryo-transmission microscopy

Fading hopes

Bonn

The three German laboratories developing an electron microscope to operate at the temperature of liquid helium have jointly agreed that at least one of the supposed advantages of their machine is not nearly as great as originally thought. That conclusion, however, is based on observations with only one crystalline sample, and opinions differ as to how serious a setback it represents.

At 4 K, the cryo-transmission electron microscope (cryo-TEM) has the theoretical advantages over conventional machines that molecular movement should be damped and damage to the sample from the beam of electrons minimized. Initially, the reduction in beam damage was estimated to be only modest, so that there was considerable excitement a few years ago when Dr I. Dietrich's laboratory at Siemens AG in Munich — where the superconducting lens for the cryo-TEM was developed — claimed that beam damage at 4 K could be reduced by as much as several hundredfold.

Now the Siemens group has agreed with Dr Jacques Dubochet's group at the European Molecular Biology Laboratory (EMBL) in Heidelberg that the protection gained by working at 4 K compared with room temperature is not more than tenfold for standard samples of L-valine.

A few weeks ago, the two groups

Electronics giant

Brussels

While Mrs Margaret Thatcher was in Japan expressing the United Kingdom's concern at Japan's excessive imbalance between imports and exports and attempting to encourage cooperation between Japanese and British high technology companies, another strategy for coping with Japan's exports of electronic goods was under discussion in Brussels. Max Grundig, the founder of the German electronics group that carries his name, recently put before EEC Industry Commissioner Etienne Davignon and Karl-heinz Narjes, the European Commissioner from West Germany responsible for innovation and the internal market his own solution for improving the competitiveness of the European electronic components industry.

Grundig proposed that the European Commission should support a European company for the development and production of electronic components, bringing together the resources of Grundig-Telefunken, Blaupunkt-Bosch and ITT-Schaub-Lorenz. Other European producers would be welcome to join in, with the exception of The Netherlands' Philips and the French group Thompson — the company might be too large and unwieldy if such industrial giants were included.

Grundig is anxious to gain EEC support for his idea in order to side-step both German and EEC anti-trust and monopoly laws. Grundig argues, however, that something must be done soon to meet the threat of Japan's rapidly growing dominance; otherwise he fears there will be grave repercussions for both the consumer electronics industry and for Europe's defence technology companies. He would like his project to be launched as soon as next spring.

The idea of an aggressive new European electronics company met with a warm reception in EEC circles, although there will have to be many further discussions before anything is decided. A meeting has, however, already been arranged of representatives of leading European manufacturers at which Davignon will take the chair.

Jasper Becker

together with that of Dr E. Zeitler of the Fritz Haber Institute in Berlin (the only other recipient of a Siemens superconducting lens) agreed, within limits, on a revised estimate of L-valine beam damage at 4 K. A brief statement of their measure of agreement has been sent to the *Journal of Molecular Biology* which in 1980 published an estimate (by Dr E. Knapik of Siemens and Dubochet) of a cryoprotection factor of about 70 for L-valine.

The note implies that beam damage can vary greatly with specimen preparation, and especially with the characteristics of the material that supports the sample. Dr Knapik also believes that orientation of the sample and support relative to the electron beam is important, and may account for the discrepancy between the original and revised cryoprotection factors. A more

rigorous test of cryoprotection will come, he feels, from a planned comparison of four further compounds whose orientation is known.

One of these specimens will be the "purple membrane" of a peculiar bacterium. The results will be anxiously awaited at EMBL, which has devoted much time and effort to the development of a cryo-TEM. Even if the cryoprotection factor turns out to be minimal, the decrease in molecular movement at 4 K should still improve resolution to a worthwhile degree.

But nobody now confidently predicts that the cryo-TEM will be much better than existing electron microscopes for the study of biological samples. And it is hard to know if the scanning version of the cryo-electron microscope will be any better.

Peter Newmark

Genetic manipulation

What future for regulation?

UK committee's role disputed

The future of the UK Genetic Manipulation Advisory Group (GMAG) remains uncertain; its third report, published on 24 September (Cmd 8665, HMSO, £7.75), concludes that health risks involved in recombinant DNA technology are and are likely to remain negligible. GMAG's terms of reference remain the same as when it was set up in 1976 except that it must now submit annually, and not when the fancy seems to take it. Despite a formal pat on the back in the foreword from Sir Keith Joseph, Secretary of State for Education and Science, and a note in the report that long-term monitoring is still necessary, GMAG seems on the point of working itself out of a job.

The Association of Scientific, Technical and Managerial Staffs (ASTMS), which has three members on GMAG, is clearly alarmed not only that GMAG will not survive but that its terms of reference are no longer appropriate. A delegation of six members of parliament sponsored by ASTMS and the three ASTMS representatives on GMAG — Donna Haber, Professor Derek Ellwood and Professor Bob Williamson — met Mr William Shelton, the minister responsible for GMAG, last week to put the union's case.

The delegation pointed out that GMAG had played an important role in ensuring the safe development of genetic manipulation and in reassuring public opinion. It argued that despite the successful identification of potential health and safety risks, there remained some areas where knowledge is limited and which would need to be carefully scrutinized case by case.

The delegation also pressed for an extension of GMAG's role to cover the

ethics of human genetic engineering. ASTMS says that gene replacement therapy will affect the population as a whole and should not be decided by hospital ethical committees alone. ASTMS also wants GMAG's function to include problems of environmental contamination which could result from the large-scale use of genetically manipulated organisms. The union feels that GMAG has kept up a dialogue with industry and is well placed to advise on the safety of industrial biotechnology.

The minister appears to have told the delegation that the government is fully aware of the issues in genetic engineering, especially because biotechnology would make an important impact on industry in the next five years. But he insisted that GMAG is not an appropriate body to advise on ethical issues.

The GMAG report notes that the group's advice on the large-scale use of genetically manipulated organisms would be restricted to the biological properties of the organisms in use. The Health and Safety Executive (HSE) will be concerned with the physical aspects of safety. In this spirit, GMAG seems to have delegated responsibility for site visits to laboratories in the past year entirely to HSE.

On the future of GMAG, it is planned that a full meeting of the group will discuss various options in November. GMAG members are themselves divided. Some see the group's importance as residing in its capacity as public watchdog and reassurer. Many feel that GMAG was set up to advise on the safety of certain experiments and that its remit should end there. Others point to the existence of local safety committees and their dwindling workload as evidence that the group has become redundant. The government may well share this view and reorganize GMAG into an expert committee.

Jane Wynn

Greens gain in Hesse

Heidelberg

The Hesse election on 26 September provided the latest in a string of surprising events in West German politics. Upsetting all predictions, the Christian Democrats (CDU) and Social Democrats (SPD) emerged neck and neck with 52 and 49 seats respectively in the regional parliament. The Green environmentalist party (see *Nature* 17 June, p.528) will be represented in the Hesse parliament for the first time with a crucial minority of nine seats. The Free Democrats (FDP), whose decision to withdraw from national coalition with the SPD may cause the collapse of Schmidt's government, have lost their seats. SPD, under Ministerpresident Holger Börner, continue as a minority administration, but the likelihood of Green/SPD administrative and legislative cooperation are slimmer in Hesse than in Hamburg.

The Greens' success rests mainly on local environmental issues, of which Hesse has more than its fair share: the new runway addition to what is already Europe's largest airport at Frankfurt, plans for a reprocessing plant for nuclear waste, plans for a third 1,350-MW nuclear power plant at Biblis where a 2,600-MW capacity plant already exists, US military poison gas depots, pollution of all kinds and so on.

The Hesse result has much to do with contrast between Helmut Schmidt's cool statesmanship and the less dignified politicking and fiscal sabre-rattling among FDP, CDP and CSU since the SPD/FDP coalition broke up nine days earlier; nevertheless, the Greens, now represented in six regional parliaments, are indisputably the third national party. The establishment is beginning to take them seriously — after the election result was announced, Willy Brandt talked about a left-wing alliance between the Greens, the trade unions and the SPD left. The Greens themselves, however, are unwilling to compromise on what they consider to be the key issues, such as nuclear power, armaments and industrial development, and are wary of being absorbed and corrupted by the corridors of power and by the blandishments of SPD in particular.

There are clear national implications: CDU/CSU and SPD have no electoral mandate for even a temporary administration, national elections must take place soon and there will be Green seats in the tense Deutschen Bundestag. The date for the federal election may be determined on 1 October and an outcome like that in Hesse and Hamburg is a real possibility, with the balance of power lying with the environmentalists.

Sarah Toozie