## Soviet nuclear power plant programme marks time

Moscow

THE sad accident at Chernobyl three years ago has cast a shadow on the nuclear power programme of the Soviet Union. Although the Minister of Nuclear Power Engineering, Mr Nikolai Lukonin, has only recently reaffirmed the government's commitment to nuclear generation as a means of meeting growing electricity needs, planned nuclear developments are now being resisted vigorously by the public and by local authorities in some republics.

The decision to close the two reactors of the Armenian nuclear plant near Yerevan, after a reassessment of the seismic hazards following last month's earthquake, is a further aggravation of the problems. One reactor will be closed on 25 February, the second on 18 March, after the expected peak of winter electricity consumption. Electricity supply in the Georgian republic will afterwards be tightly constrained.

Growth of nuclear generation capacity has been practically zero over the past year, with 45 reactors at 16 sites with a total generating capacity of 34.4 GW. Total generation last year, at 215 GWh, was 12.7 per cent of electricity consumption. But although new capacity is under construction at 15 sites, the building programme has been substantially pruned. A total capacity of 28 GW has thus been lost.

Nuclear construction projects have been stopped in Azerbaijan, Georgia, Armenia, Lithuania, Byelorussia, the Ukraine and in the south of the Russian Federation. And it can be confidently presumed that further nuclear power stations will be vetoed.

These developments create an awkward predicament for the Ministry of Nuclear Power Engineering, formed after the Chernobyl accident with responsibility for eradicating the consequences of the accident. The ministry is retraining personnel at all nuclear plants, revising construction and operating standards and improving safety arrangements. Lukonin now acknowledges a need for greater openness, and an open dialogue with the public. Trust is easily lost, but regained only with difficulty.

The Soviet government's decision to invite the international Operational Safety Review Team (OSART) to the Soviet Union for three weeks in December is part of the process of regaining trust. The team, including staff members of the International Atomic Energy Agency (IAEA) and independent experts from a dozen countries, made a detailed examination of the 1,000-MW pressurized water reactor at the Rovno power station in the

Ukraine.

The preliminary conclusions, given at a press conference in Moscow by Ferdinand Franzen and Morris Rosen, respectively head of the IAEA safety division and director of nuclear safety, are generally positive. The group acknowledged the competence of the operating staff, the priority given to safety (hardly surprising after Chernobyl) and that radiation shielding and ecological aspects of the plant's operation were up to international standards.

Among shortcomings at the Rovno plant, the group draws attention to the poor quality of some of the equipment arriving there (whose defects must be made good on site) and shortages of some modern instruments and automatic devices. The OSART team also plans to recommend in its final report that the station's senior executives should be given

more decision-making power.

Lukonin says that his ministry is taking steps to toughen requirements for site selection, the supervision of construction and the acceptance of equipment, while the ministry responsible for instruments says that it is making good the shortages which have been noted. The recommendation that station managers should have more authority, meant to secure greater flexibility over decisions, would presumably also encourage them to act more responsibly: Chernobyl showed that the over-meticulous tutelage of the higher authorities breeds complacency.

The immediate effect of the OSART mission on Soviet public opinion will be to demonstrate the government's readiness to follow the highest international standards in the operation of nuclear plants. There have already been similar inspections of 29 reactors in 16 countries, presumably with similar effects. The next inspection in the Soviet Union will be of the two 500-MW heat-supply reactors being built at Gorky. Yuri Kanin

Novosti

## More turmoil at German universities

Munich

DESPITE government approval in December of an emergency aid programme for the overcrowded West German universities (see *Nature* 336, 704; 22/29 December 1988), demonstrations and strikes continued after the Christmas vacation.

The situation in Berlin, where the president of the Free University had to call for police help to keep open laboratories in the medical faculty, seems to be the most serious. Students there who were not on strike had complained that they were being deprived of their right to study. Most medical students have since returned to classes, but students in other faculties remain on strike, demanding more say in governing the university and an improvement in the abysmal conditions caused by overcrowding.

There have been demonstrations and strikes at other universities in West Germany. In Munich, more than 30,000 students from both the Technical University and the Ludwig-Maximilian-University marched peacefully through the middle of the town demanding more low-cost student housing, more professors, more student grants and loans and the construction of a long-discussed subway line to the campus at Garching.

All parties in the Bundestag (parliament) called on 18 January for "relief" of the overcrowding, but without being specific. West German Education Minister Jürgen Möllemann (Free Democrat) said he would try to persuade the cabinet to add DM400 million to the DM2,100 million emergency programme voted in December.

Steven Dickman

## Stock Exchange tries to stop research leaks

London

LEAKING to the financial markets of information in medical journals before their publication is causing concern in the London Stock Exchange. Results in the *British Medical Journal* (BMJ) of a report favourable to Glaxo's Zantac were leaked the day before publication, causing the company's share price to increase unexpectedly and more than 3 million shares to be traded that day. An investigation of the incident was initiated by the Stock Exchange's surveillance unit; no evidence of insider dealing was found.

Since then, the Stock Exchange has been considering how such incidents might be avoided. One proposal is that drug companies be asked to inform the Stock Exchange if information about to be published is price-sensitive; notice of this would then be released on the Stock Exchange's news service before publication.

At present, pre-publication copies are issued to journalists; this information is often leaked to analysts when journalists ask for comment on new results. The BMJ this month warned journalists receiving advance copies that it will not continue to supply copies to journalists found to have disclosed any information before publication. Analysts would prefer to receive information at the same time as journalists, but that will not put an end to leaking. It is the analysts' job, said one, to find out what is not in the public domain and to use that information.

**Christine McGourty**