Japanese nuclear power

Lawsuit dismissed

Tokyo

A LAWSUIT aimed at forcing the Japanese Government to withdraw permission for the construction of a nuclear power reactor in Fukushima prefecture, some 250 km north of Tokyo, has been dismissed — nine and a half years after it was filed by a group of 400 local citizens.

The decision, the first in Japan since the Three-Mile Island incident in the United States in 1979, will come as a boost for the nuclear power industry which, in marked contrast to that of the United States, is still booming and self-confident. In the week that saw the end of the court hearing, power companies announced ambitious plans for construction of a complete nuclear fuel cycle facility — uranium enrichment, reprocessing, low-level waste storage and probably high-level waste vitrification — in Aomori prefecture, a government advisory council recommended doubling the number of nuclear power plants by 1993 and the government began talks in Beijing to finalize a bilateral agreement between Japan and China on nuclear power utilization.

The citizens' suit had centred on claims that permission for construction had been given "illegally" and "irrationally". But most of the court's time — some six years — was spent not on these issues but in deciding whether the citizens had any right to bring the matter to court at all. On this first point the plaintiffs were victorious: the defendants' argument that the nuclear reactor control law refers only to the "public interest in general" was dismissed and it was accepted that those exposed to the possibility of suffering from a nuclear power plant accident have a right to protection of their personal interests. A precedent has thus been set for other lawsuits, including four now in progress.

Afghan students

Budapest

AFGHAN students in Hungary are extremely concerned about their future. During the past month, the Afghan Embassy in Budapest has called in their passports, offering no explanation. The students fear that this may be a preliminary to their being called home for military service without completing their studies.

There are believed to be several hundred Afghan students in Eastern Europe, and even more in the Soviet Union, mainly studying scientific and technological subjects. There is no information so far as to whether the call-in of passports applies only to Hungary or whether it has also been taking place in the "harder-line" countries such as Czechoslovakia and East Germany.

Vera Rich

The court also took account of the plaintiffs' questioning of the legal powers of the government to authorize nuclear power construction. What was at issue was whether the government can use "discretionary powers" to authorize the construction of a plant which may threaten the lives of a large number of people. The court recognized the government's rights but at the same time ruled that the seriousness of a nuclear accident meant that the scope of that discretion is very small — the government must be able to prove that the judgement about the safety of a reactor had been properly made.

The plaintiffs were disappointed on what they saw as the real issue of obtaining a ruling on whether the reactor was safe: doubts had been raised about the safety of the fuel rods, the emergency core cooling system, the handling of nuclear waste, the impact of thermal effluent and the possibility that local residents would be continuously exposed to low-level radiation even during the normal operation of the reactor. But despite — or perhaps because of — the many tons of documents provided by the defendants, the court settled the matter on purely legal technicalities and failed to provide any broad judgement on nuclear reactor safety. The court was able to declare only that there had been no violation of the legal procedures in the process of safety screening and that the government's decision had not been made "irrationally". In so doing, the court accepted that the scope of the government inspection was restricted to the reactor itself — that is, to an examination of the basic design. All worries about the safety of waste and operation are thus left to post-construction regulations. Evidence from the Three-Mile Island incident was also considered inapplicable.

That judgement would eventually go the government's way has never really seemed in very much doubt — the reactor has after all already been built and is in operation. But the plaintiffs still feel that the basic question of who is going to assure the safety of the reactor has not been answered. For Fukushima residents it is not just this particular plant that is worrying: with eight nuclear reactors on two sites in the area, two more reactors and a prototype heavy-water plant under construction, they are surrounded by the world's highest concentration of nuclear plant.

The citizens' group is now to appeal to a higher court. Most commentators feel, however, that a court of law will never be able to give them the kind of assurance they seek. Instead there have been renewed calls for moves to strengthen the system of public hearings to help build public confidence in nuclear reactor safety.

Alun Anderson

Operation of power plants

Tokyo

JAPAN has 25 nuclear power stations in operation, which puts it in fourth place after the United States (82), France (36) and the Soviet Union (35). In contrast to the United States where no new contracts have been awarded in the past five years, Japan is continuing an ambitious programme of nuclear power plant construction.

Ten plants are being built and research is being hurried forward on advanced boiling-water reactors that use a concrete rather than a steel containment vessel (in cooperation with US builders), on heavy water reactors and, with so far unshaken optimism, on fast-breeder reactors.

Plants now in use — almost all boiling-water and pressurized-water reactors based on General Electric and Westinghouse designs — produce 17 per cent of the nation's power. With average operating efficiency close to 70 per cent, the plants approach perfect running: they must be shut down at least 25 per cent of the time for safety checks. Japan's nuclear safety record also appears remarkably good — no injury or loss of life has been caused by radiation leaks — and plant operators boast that the Three-Mile Island accident could not have happened in Japan where operator training standards are higher. Government documents show, however, that around 25 accidents and breakdowns are reported each year.

At least one of these accidents, which involved the drainage of dangerous material into the sea, was potentially serious and led to the disclosure of other mishaps that had been kept secret.

Since 1978, public hearings have become a part of the licensing system. In a first hearing, the power plant builder presents its plans and tries to win local support; after reports from the builder and the Ministry of International Trade and Industry (MITI), the Nuclear Safety Commission then provides experts to answer questions at a second hearing (albeit with some limitations on follow-up questions). The final decision on construction is then made by MITI council. As MITI is extremely active in promoting nuclear power development, it is difficult to see how it can act simultaneously as a completely neutral licensing body. Perhaps partly because there is a feeling that any ruling is a foregone conclusion, public hearings have so far attracted more demonstrators than participants — the latest one, held in June in Saga prefecture, required the presence of 1,800 riot police. But to the power plant builders, this tendency simply demonstrates the lack of any real rational grounds for opposition to nuclear development.

Alun Anderson