



Ghostly garb for anti-nuclear demonstrators in Hanover

Minister-President Albrecht disagreed with the critics on this. The federal government kept strictly to the terms of the non-proliferation treaty. In any case, the treaty ought not to lead to discrimination against countries with no nuclear weapons by denying them access to a closed nuclear fuel cycle—that is, to reprocessing and production of plutonium fuel. From the designers' side, it was added that the plant would not have any extra capacity. That would be to assume that—after clearing up the stocks of atomic waste—there would eventually be 50 nuclear power stations in West Germany. At present there are only 12 (excluding experimental plants) and resistance is growing with every licence that is granted.

Serious misgivings were also raised during the hearings about the safety of the planned entry storage facility, which has been conceived as a "wet store" (water pools in massive concrete structures). A number of scientists warned of the catastrophic consequences of a breakdown in the coolant supply. To this, astonishingly, the designers conceded that the draft, commissioned in 1977, was in fact out of date. They were now thinking of dry storage in metal containers in which the fuel elements would lose heat naturally to the surrounding air (similarly to when they are transported).

Another controversy was about the best way of treating highly active wastes (more than 1,000 cubic metres of concentrated highly active solutions per year), and final storage in the salt domes of Gorleben or in other places with a similar geological formation. Three variants of highly active waste vitrification have been developed in Germany. It is now a question of putting one of them into practice.

For the final storage of radioactive wastes, the *Land* government of Lower Saxony chose the salt dome at Gorleben, near the East German border. But, geologists at Hanover said the geological conditions there were by no means the best. There were sure to be carnallite deposits there and probably anhydrite layers. In storing highly active wastes, special problems would have to be anticipated because of their heat radiation. Building a disposal centre on top of the salt dome would add to the hazard.

Immediately after the six-day hearing, which evoked great public response, particularly in light of the events at Harrisburg, it was clear that there was no basis, either scientifically or politically, for a comprehensive decision in principle.

DWK is now trying to exclude from discussion, for the time being, the most explosive part of the draft—the reprocessing plant. They argue that there is no pressure of time about the reprocessing; that it is not expected before the beginning of the 1990s, and breeder reactors are indeed a matter for the

21st century. There is no hurry either, they say, for the final storage facility, which is scheduled for 1995. Only the further steps for licensing the entry storage facility need to be hurried. Even this, though, should not be too pressing because the major intermediate storage facility at Ahaus should be ready before then.

Meanwhile, there is speculation that Minister-President Albrecht will reduce the decision to one small first step—further investigations into the entry storage facility—and for the rest avoid any commitment on future action. Not only would this gain time to test the feasibility of the plans, but alternatives could be more fully investigated. This applies principally to the option of long-term underground storage with the possibility of retrieval, which has been gaining more and more supporters. In theory at least, this has two advantages: it solves the problem for today and keeps the options open for the future. Its disadvantage is that there has been hardly any experience with it.

Minister-President Albrecht could find himself in a political dilemma in making his decision. He is a member of the executive committee of a political party (the CDU) which is still in favour of nuclear energy. At the same time, Gorleben is anything but popular, and Albrecht governs Lower Saxony with only a bare majority. His opposite number, the former Federal Minister of Building, Ravens (SPD), is only waiting for one wrong move. So Albrecht has now sought an interview with federal Chancellor Schmidt. Without powerful backing from Bonn (where federal Research Minister Hauff has already mounted a big information operation to take the disposal plan to the people), he will be reluctant to give the go-ahead. Since Harrisburg, though, Bonn is even more divided over the nuclear energy question than before. □

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## 'Splash-over' caused Windscale leak

FIGURES on the Windscale leak discovered by borehole sampling (29 March) have finally been released by British Nuclear Fuels. A spokesman said preliminary estimates of the total activity in the leak are from 10,000 to 100,000 curies, the total volume of escaped radioactive liquid is 200 gallons, and the dosage in the borehole is 300 rems per hour. (The International Commission on Radiological Protection calls a dosage of 400 rems lethal.

The leak has been located in an out-

of-use storage site for waste analysis where active liquid from the processing chain was diverted into unused piping to the storage shed due to a "splash-over at a junction point". The maximum activity is 15 to 20 feet under ground and is separated from ground water by a layer of clay. The route of the leak from the storage shed to the borehole is unknown.

BNFL has told police, fire, health service and county council official that there is no hazard to the community or the workforce. □