

Dutch delay decision on nuclear expansion...

HOLLAND is unlikely to build any more nuclear power plants until 1990. Discussion of an expansion programme—and in particular problems of uranium enrichment and waste disposal—is now into its fifth year. According to a recent government decision, the debate is to continue over the next two years and it looks as though a decision on the future of nuclear energy in the country will not be made before 1982.

The limitations of Holland nuclear energy—the country has two plants, both small (477 MW and 56 MW)—were recognised by the previous government in 1974. Three more plants, each of 1,000 MW, were called for, but plans for them were shelved two years later.

The urgency of the energy problem was highlighted by Mr Van Aardenne, Minister for Economic Affairs, in a recent letter to Parliament. Almost all the country's 14,500 MW energy capacity would have to be renewed by the end of the 1980s. By then, natural gas, which at present fuels three quarters of the country's power stations, would have to be reserved for domestic use rather than generation of electricity. But shifting totally to coal-fired power plants would mean consuming 14 million tons of coal a year by 1995 (compared with only a million tons now), rising to 23 million tons a year by the end of the century. Consequently, a quick decision was needed on the possible contribution of nuclear energy, the Minister said.

Disposal of nuclear waste will figure prominently in the two years of public debate now ahead. It was this issue that caused postponement in 1976 of the earlier plans to build three more nuclear power stations. Moreover, a guarantee of acceptable means of waste disposal and storage before building new plants was also part of the election platform of the new government elected last year.

The government is to speed up its research on waste disposal. Five sites for storage salt domes have already been provisionally picked but research is being hampered by the refusal of the local authorities involved to co-operate. Even so, a team of government experts has said the first storage mine could not be ready until 1995. □

...but let safeguards slip on Brazil deal

THE Dutch government has agreed to start delivering enriched uranium to Brazil around 1981—without complete international safeguards. Initially, the Dutch had wanted an assurance that international control of plutonium after reprocessing would be in force at the time of the first delivery. Now, however, in a decision in parliament in June, they have agreed to start delivering the uranium if safeguards are likely to be in force by the time reprocessing starts, probably in 1986.

The Brazil saga started in October 1976 when the former government of Social Democrats, Christian Democrats and a few radicals decided to expand Urenco's ultra-centrifuge uranium enrichment plant at Almelo. Its capacity was to be increased from the present 200 tonnes to 1,200 tonnes per year. The expansion is only partly based on the Brazilian order for uranium; but this in turn is coupled with the 10 billion DM transaction for nuclear technology between West Germany and Brazil.

Brazil's order includes eight 1,200 MW nuclear power plants, a reprocessing plant, and enrichment technology based on the German 'nozzle process'. The nozzle process is not yet operating commercially, so Brazil has to begin by importing enriched uranium. German participation in Urenco meant that a delivery from Almelo seemed possible.

As with all international nuclear sales there had to be agreement on safeguards against weapons-building, and in February 1976 Germany, Brazil, and the IAEA reached a trilateral agreement.

But the agreement threw the Netherlands into a political storm. Brazil appeared to have given no safeguards

or guarantees for the import of enriched uranium in 1981, but only agreed to accept a plutonium storage regime under IAEA control in about 1986 when the first uranium will be reprocessed. And if Brazil would agree then, why could it not agree now?

The Dutch parliament repeatedly postponed a decision on what Holland should do. The radicals were threatening to break up the government coalition over the issue. A final decision on a plutonium storage regime and IAEA safeguards covering the whole nuclear cycle (so-called 'full-scope' safeguards) was expected in about March 1976, but was still pending at the end of last year. The former Dutch foreign minister, Mr Van der Stoel, declared later that the problem of IAEA inviolability and right of say on the movement and storage of plutonium was still in discussion with the Brazilians when the government changed in December 1977.

The new coalition of Christian Democrats and Conservatives presented Parliament with an agreement between the Urenco partners and Brazil, similar to the February 1976 agreement. But at the end of January 1978 parliament adopted a motion for a more definite agreement. It approved the expansion of the Almelo plant and also decided that no uranium from Almelo could be exported to non-NPT countries unless strict safeguards were agreed in advance. A motion, carried by an overwhelming majority in the Lower House, stated that an export licence for uranium could be granted only if a plutonium storage regime under the control of the International Atomic Energy Agency (IAEA) was in

force or an *ad hoc* agreement on the storage of plutonium was reached between Holland and Brazil. The government agreed that it would respect and carry out Parliament's decision.

The affair received a new impulse. Discussions and negotiations with Germany and Britain started up again; but these failed.

At the European summit conference in Copenhagen in the Spring, Chancellor Schmidt had no scheduled meeting with the Dutch prime minister Van Agt. The Dutch foreign minister, Van der Klaauw, was refused a meeting with his Brazilian colleague, who was in Bonn, and the Germans threatened to build their own enrichment plant across the Dutch-German border to deliver the uranium to Brazil when the tripartite treaty ends in 1981. The Dutch could then drop out if they still refused to export the uranium on the basis of the agreement made last January. The Germans were said to prefer to continue without the Dutch—who were said to weigh moral and political considerations more heavily than economic ones.

However, some German politicians realised it would be a political error if Germany were not to extend the Urenco agreement beyond 1981. The United States favoured the Netherlands remaining in Urenco, but thought that the safeguards should be 'full-scope', covering the whole nuclear cycle, rather than just covering the storage of plutonium.

Apart from the political implications there have also been doubts about the commercial future of Urenco. The original plan was to expand the Almelo and Capenhurst plants to a total joint