Switzerland increases control of nuclear power

THE referendum on the law governing atomic power in Switzerland last weekend—at which voters approved the government's revision by more than two to one-was hardly the centre of a historic debate. In comparison to the heated debate before the 18 February vote on the nuclear issue—which by a narrow margin upheld the old law rather than one which would have prevented further development of nuclear power-the political temperature has reached an all-time low. All the major parties and organisations either recommended voting for the revision, or refused to take up positions. There has been no propaganda clash. The newspapers are practically void of announcements, and the usual stream of press conferences and meetings is absent.

The main reason for this lack of interest is that the revised law represents a compromise which satisfies noone. The nuclear lobby is unenthusiastic about the restrictions but reckons "it could have been worse". The only positive aspect it discerns is the clarification of the waste disposal problem (5 April). The anti-nuclear group's general attitude is "better than nothing", although one section voted no, on the grounds that if the revision was rejected, a new revision could only be even more restrictive.

The proposals embodied in the revised law contain enough seeds of discontent to ensure that the peace will probably be only a lull in the storm.

• The granting of skeleton permits for new nuclear power stations, and of construction permits for those already planned—both to be done now by parliament, rather than the cabinet alone—will depend on:

- the demonstration of electricity demand: and
- safe nuclear waste management.

That the law leaves much latitude in the interpretation of these points became clear at a series of hearings in Bern organised by the Swiss Energy Foundation, the main "soft energy" group and leader of the environmentalist opposition to nuclear development. Officials of the various government de-

partments which will be required to put the revised law into practice were interrogated by representatives of both the pro and anti-nuclear groups on their interpretation of the demand and waste management paragraphs, as well as on the proposed procedure for nuclear power stations which already have site but not construction permits.

The transcripts of the hearings' indicate that the "demonstration of demand" will become a hard-fought issue in future. How can demand be demonstrated when Switzerland is literally "throwing away" one-third of all the energy it produces because of inefficient systems, poor insulation, lack of incentives for energy saving, etc.? Is not the level of demand really a political question? What reserve capacity is needed to meet short-term abnormal demands or break-downs in functioning units? To decide these questions it is proposed to set up an Energy Commission, but the problem is how to make sure that it is unbiased and uninfluenced by the powerful lobbies.

The "demonstration of safe nuclear waste management" also leaves many questions open. Will it be possible, even with the revised law, to test drill for underground repositories against the will of the local population, without excessive delays? What does safe mean, and how can safety be demonstrated in future waste management when so much of the process takes place outside the country—is what is safe for them, safe for us? Is the question of disposal, particularly of high-level waste, so controversial among scientists that it can hardly be assessed by the present Waste Management Working Group, largely made up of civil servants? How can a waste disposal project be worked out within the next five years (when the first power station falling under the new regulations will be finished) when other countries ahead of Switzerland in R & D envisage 10 more years Geoff Milnes at least?

¹"Atomgesetzrevision durchleuchtet. Ein Hearing" SES-Report No. 7, Schweiz. Energie-Stiftung, 8001 Zürich.

Gorleben nuclear waste facility scrapped

In West Germany last week the premier of Lower Saxony, Herr Ernst Albrecht, announced that he will not grant approval for the building of a nuclear waste reprocessing and disposal facility at Gorleben. Speaking on television he said the decision was not a technical one—he believed that the plant would be safe—but he had to take account of the weight of public opinion. However, test drilling in salt domes at Gorleben (see below) will continue.

For a detailed review of the decision, see page 283.



EEC Commissioner opens European nuclear fusion centre

DR GUIDO Brunner, member of the European Commission for Energy, Research, Science and Education, laid the foundation stone for JET, the Joint European Torus, at the Culham Laboratory, UK, last week. During the ceremony, Dr Brunner described JET as a "leading project in the world" in the field of fusion research.

JET's world lead, however, has been

eroded by the delays to the start of the project caused by the two year negotiations in 1975-77 between EEC member states over where it should be sited. The delay has given its nearest rival, the Tokamak Fusion Test Reactor, at Princeton University, US, an eighteen month lead.

The total cost of building JET is estimated at about 200 million Euro-

pean Units of Account (at January 1979 prices). The date for completion is set at the end of 1982 and subsequent annual operating costs are expected to be about £20 million at today's prices. The JET team, which will be drawn from fusion laboratories all over Europe, is expected to be about 320 strong including 120 scientists and engineers. At present