

Mental stress given environmental status

Court delays start at Three Mile Island

Washington

In a precedent-setting decision, the US Court of Appeals in Washington has decided not to allow the Metropolitan Edison Company of Pennsylvania to switch on the undamaged power plant at Three Mile Island, near Harrisburg, until it can demonstrate that such a move would not adversely affect the mental health of people living in the area.

The immediate impact of the decision, which reverses a ruling by the Nuclear Regulatory Commission (NRC) that psychological factors do not necessarily have to be taken into account in deciding whether to allow nuclear plants to start operating, will be to delay for several more months the start up of "Unit One" at Three Mile Island. The reactor was undamaged in the accident which occurred to its twin, Unit Two, in March 1979, and since then has been considerably modified to improve safety.

The ruling, however, which was made by two of the three members of the appeals court, could have a significantly wider impact. For the first time it means that although the powerful Natural Environmental Policy Act of 1970 does not require psychological factors to be taken into account when the social impact of a federal decision is being assessed, the act can be interpreted as allowing such factors to be included.

The Three Mile Island accident resulted in a small amount of radioactivity being discharged into the environment but no significant extra radiation exposure to individuals, so nobody suffered physical health damage as a result. The principal focus of interest, therefore, has been on the psychological implications of the accident.

Arguments about the psychological impact of the accident have been continuous since it occurred. Civic leaders warned NRC that thousands of people might be driven from their homes by fear of radiation if krypton gas was allowed to be vented from the crippled plant. Some claimed that "riots" might result as a possible manifestation of the population's nervousness.

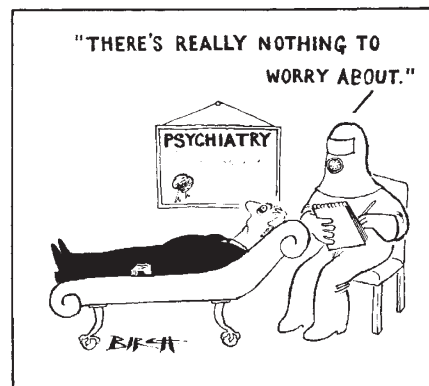
Such arguments have, until now, fitted uneasily into the institutional mechanisms set up to cope with the social consequences of major technological actions. Thus when Metropolitan Edison applied to NRC to be allowed to start up the undamaged plant, the commission rejected claims from a local citizens' group, the People Against

Nuclear Energy (PANE) of Middletown, Pennsylvania, that such a move would have sufficient psychological effects to make it necessary to take these into account.

The request from PANE had been supported by the members of NRC's own Atomic Safety and Licensing Board — partly on the grounds that taking such factors into account while the licensing decision was being reached could head off later conflict — but was rejected by NRC.

The Appeals Court has now told NRC that it was wrong, and has directed the commissioners to conduct a broad assessment of the effects that starting up Three Mile Island's Unit One will have on "the psychological health of neighbouring residents and on the well-being of surrounding communities". After that, the commission will have to decide whether the National Environmental Policy Act requires a more detailed analysis of the social and environmental impact — possibly including a public hearing — before the decision to restart the undamaged reactor could be taken.

The court's decision was not unanimous. In a strongly-worded dissent, Judge Malcolm Wilkey argued that by establishing psychological stress as a factor which had to be taken into account by NRC, the court was defining "an 'impact' which has never before been considered as covered by the National Environmental



Policy Act", a move which, he said, had "enormous consequences".

The decision was greeted with gloom at Metropolitan Edison, which had been hoping to start up Unit One within the next few days, and which was depending on revenues the reactor would produce from the sale of electricity to help cover some of the costs of the clean-up at Unit Two which are already threatening to force the utility into bankruptcy.

Predictably, the appeal court's decision was welcomed by members of PANE. The group had argued that the inclusion of psychological factors should be part of the responsibility of licensing institutions to protect the public health and safety, as defined in the Atomic Energy Act of 1954.

David Dickson

European nuclear safety policy attacked

Brussels

Has the Euratom treaty, which binds the European Community's nuclear energy policies together, been properly interpreted and applied? A lengthy report by the leading Belgian socialist member of the European Parliament, Anne-Marie Lizin, suggests not and attacks the lack of progress towards achieving the aim of a European zone of unified nuclear safety standards.

Lizin's report was the subject of heated debate in the European Parliament's Committee on Research and Energy, where 91 amendments were proposed. Having looked in detail at EEC's activities in the fields of radiation protection, reactor safety, decommissioning, safety of the fuel cycle and the national nuclear inspection services, Lizin concluded that the Euratom treaty is outdated and vague and that the European Commission has made too little use of its powers under the treaty.

Lizin alleges that when the treaty was first drawn up, more than 20 years ago, too little consideration was given in the nuclear energy development plans to reactor safety and worker protection. Since then, the member states have proved reluctant to provide the European Commission with effective consultation procedures for all

decisions concerning the location and operation of nuclear power stations. In Lizin's native country, Belgium, the licence to build a nuclear power station is granted independently of the initial safety analysis, and given the fact that too many nuclear power stations are built close to frontiers or use shared river systems, the report complains that there is too little consultation on measures to protect workers and local populations.

The report goes on to say that although the Community has been efficient at listing methodologies, standards and safety criteria, work on listing similarities and differences among the member states has been too slow and the Community has yet to go on to the third stage of putting forward its own regulations. This work has largely been left to other international bodies such as the Organization for Economic Cooperation and Development and the International Atomic Energy Agency. Lizin attributes particular importance to the Super-Sara project but calls for more studies into the safety of gas-cooled and heavy water reactors. The problems of waste management and recycling are given particular attention because the report considers that this field requires intense supervision by an independent public