

ing, held from 16 to 19 November in Dallas. (He did, however, present papers at the meeting based on the four Emory abstracts.) And despite the new questions the AMPIM study had raised about the veracity of his work, he was still allowed to visit Braunwald's lab. In early December, Tosteson formed the blue-ribbon panel to look into the whole affair.

The attitude of Harvard officials during the unfolding of the affair had been based on the presumption of innocence. Darsee, a fellow with impeccable credentials and a bright future, had admitted to one act of fakery but denied any other improprieties. (Darsee, in a brief telephone interview, would neither confirm or deny this or any other point of the story.) The investigation, according to sources close to the lab, at first substantiated this faith. The first work they examined—that which had been carried out when Darsee first arrived in the lab and already had been published—looked perfect, raw data and all. It was only when Kloner and Braunwald began to go over more recent work that problems emerged with the raw data. "They began to find holes," according to one source, "and Darsee's defense was, well, you never told me to keep the data. And so they were left with a situation where it looked bad, but there was no definitive proof of systematic cheating." The period in which the volume of raw data starts to fall off is after Darsee had been at the lab for a little over a year—in other words, the point at which supervision relaxed.

Given the one admission of data fabrication, an observer might see the absence of supporting data for other research as shifting the burden of proof to Darsee. That is not what happened at Harvard. Tosteson attributes the delay to Braunwald's desire to "manage" the situation. "The record will show that Braunwald was extremely anxious to try and manage the situation in such a way as to fulfill the promise that he saw in Darsee," says Tosteson. "It has to do with the changing perceptions of the extent and nature of the falsification. It had to do with increasingly wide looks at what Darsee was doing." The question of innocence was rendered moot, however, when the AMPIM study compelled Harvard authorities to explain to NIH that they had a problem. Asked why the absence of raw data for the AMPIM study was not discovered earlier, sources close to the lab say that at that time of the NIH query—some 5 months after Darsee acknowledged the falsification—Kloner and Braunwald still had

Fear as a Form of Pollution

The Nuclear Regulatory Commission (NRC) ran into a legal surprise on 7 January when a federal court ruled that before allowing the power to be switched on at the Three Mile Island plant, the NRC must concern itself with popular fears about the reactor, regardless of whether or not the fears have a rational basis.

A group of citizens called People Against Nuclear Energy (PANE) won their petition that the NRC be required to consider the psychological stress it might inflict by permitting an undamaged reactor at Three Mile Island to resume operating. The reactor, known as TMI-1, is the twin of the one that went amok on 28 March 1979. As far as the NRC is concerned, the plant is ready to run, and no one has presented any rational case for delaying its operation.

Nevertheless, the U.S. Court of Appeals for the District of Columbia granted the citizens' petition and rejected the NRC's brief. PANE's petition was not based on anything to do with nuclear technology, nor on the substance of its own complaint that the public's health and well-being are at risk. Instead, PANE made its argument on strictly legal and procedural grounds. It said that federal environmental law requires the NRC to do something it has flatly refused to do: that is, to consider the social and psychological impacts of turning on the power.

The NRC has never recognized any responsibility to entertain this kind of public concern. When PANE tried to get the NRC to examine the problem of human stress last year, the NRC refused. NRC lawyers told the court that the agency's duty is to protect the public's physical health and safety, no more. The plant is safe on technical grounds, the NRC claimed. Public fears which are not based on technical considerations, the NRC argued, fall outside its purview. These fears should be handled by mental health professionals. The NRC insisted that neither the Atomic Energy Act (which deals with radiation hazards) nor the National Environmental Policy Act (which demands impact statements) requires the agency to deal with psychological problems.

The judges on the appeals court voted two-to-one to reject the NRC's logic. They told the NRC that it may not permit the utility to resume operation of TMI-1 until it has complied with the court's order. The NRC must first "prepare an environmental assessment regarding the effects of the proposed restart of the nuclear facility at Three Mile Island Unit One on the psychological health of neighboring residents and on the well-being of the surrounding communities." Then the NRC must decide whether the law requires the preparation of a complete environmental impact statement. After all that is done, the NRC may decide what to do about TMI-1.

It is not clear how far the court intended to go in requiring the NRC to take account of psychological factors in future cases. PANE framed its brief narrowly, saying that the stress found among the people near Three Mile Island was unique. In no other decision has the NRC had to consider the aftershocks of a bad nuclear accident, PANE argued. The court may seize upon the narrowness of this argument and apply the decision in like manner, focusing on the situation at Three Mile Island and saying as little as possible about the NRC's general procedures. But this seems unlikely, for the court order stipulates that the NRC must prepare a "statement of the reasons for its determination that psychological health is not cognizable under the Atomic Energy Act." The judges' opinion was not released at the time the ruling was given. It may not be out until late January.

The important question is whether other utilities which have not had an accident like the one at Three Mile Island will now have to come to grips with public fears of nuclear power when seeking a license. Although the NRC officially maintains that this will not be the case, it is already gearing up in private to develop an expertise in this area. The first workshop in how to evaluate psychological stress in large populations will meet under NRC auspices in Washington in the last week of January. This may mark the beginning of an entirely new field: psycho-environmental law.

—ELIOT MARSHALL