

Science in the News

How Safe Is Safe? AEC Ready To Fight Challenge to Its Reactor Licensing Procedures

Two weeks ago a three-man federal court of appeals voted 2 to 1 to back the contention of three major AFL-CIO unions that a construction permit should not have been granted to build a nuclear power station at Lagoon Beach, 15 miles south of Detroit. The unions said that the AEC was wrong both on procedural grounds and on its finding that the reactor would not present an unreasonable hazard to the heavily populated areas near the station. This week the AEC was moving to appeal the decision to both the full nine-man Court of Appeals and to the Supreme Court.

The unions are not involved as representatives of men who will work in the plant, but of men who live and work and own property within a 20- or 30-mile radius of the plant site. What they are concerned about is the possibility of a major disaster that could contaminate a large area with radioactive debris. Such a disaster is conceivable just as, for example, it is conceivable that a gigantic meteorite will destroy New York tomorrow. The issue is how much assurance the AEC must be able to give interested parties, such as the unions in this case, that such a disaster will not take place.

New Evidence Has Developed

AEC officials appear to be confident that the Michigan project will be carried through no matter how the courts finally decide the case. They say that in the two years since the hearing on which the appeals are based new evidence has developed which should remove any lingering doubts about the safety of the project. The important issue, it seems, is whether the case will force a general tightening of the AEC's present licensing procedures.

At present the commission licenses reactors in two steps: it first issues a

construction permit based on a preliminary finding that the reactor will be safe to operate; then, perhaps 5 years later, when the plant has actually been built, it issues an operating license after an extensive series of tests showing how the plant will run. The unions contend that the preliminary findings in this case were not firm enough to offer real assurance that the plant will not be a hazard to surrounding areas. They say that the fact that an actual operating permit has not been granted, only a construction permit, is not reassuring: that once the AEC has given a corporation the go-ahead to spend, in this case, \$60 million it is going to find itself under strong pressure to grant the operating license whether the plant is as safe as it should be or not.

AEC's Dilemma

What the unions appear to be arguing is that there should be no license or permit of any sort until a project has been proved safe. The problem is, how do you define "safe"? "The possibility of [a major accident]," says the AEC brief, "cannot be categorically excluded. If the statute and the regulations are to be interpreted, as the [unions] imply, so that the Commission must be *certain* that an accident will never occur, then no developmental reactor would ever be built."

The strategy of the unions at the hearings was not to call any witnesses of its own to contradict the testimony that the reactor would be safe but merely to cross-examine the scientific witnesses testifying in favor of the reactor and get them to admit that they could not be absolutely sure that their calculations were correct, nor certain that unforeseen difficulties might not come up that would invalidate the calculations and the assumptions on which they were based.

The unions stressed the opinion of the AEC's Advisory Committee on Reactor Safeguards that "even though there are no facts or calculations avail-

able to the Committee that the proposed reactor is not safe for this site, the Committee believes that at this time there is insufficient evidence that the PRDC reactor can be operated at this site without public hazard." But, says the AEC, these same witnesses believed that the necessary further assurances could be expected to be developed during the process of designing and constructing the reactor.

Present Plants Inefficient

This, then, is the AEC's dilemma: At this time there is little point in building a power reactor unless it can be expected to be an improvement over the comparatively inefficient plants now built. This, says the AEC, makes it necessary to issue construction permits on less firm assurances of safety than will be required for the actual operating license. For how do you develop more efficient nuclear power plants if the only ones you are allowed to build are types which have already been built, since any significant new features may raise uncertainties about the hazards involved when the plant is put into operation?

The AEC is convinced that even the preliminary assurances of safety required before a construction permit is issued make an accident so unlikely that the present system of licensing presents, by any reasonable standard, no hazard to the public. The AEC and, it appears, the scientists who work on these projects, are convinced that this is true. Their problem now is to convince the courts.

Senate Group Recommends Big Increase in HEW Funds

The Senate Appropriations Committee has recommended increases of nearly half a billion dollars over the Administration's Health, Education, and Welfare fiscal 1961 budget estimates. The bulk of the increase will go to medical research. The committee had appointed a Committee of Consultants on Medical Research last year, chaired by Boisfeuillet Jones, of Emory University in Georgia. Last month the consultants recommended \$664 million for the National Institutes of Health, an increase of \$264 million over the Administration figure.

The Senate Committee praised the group for a "dedicated, inspired, and imaginative performance," and accepted their recommendations in full. The com-