NRC Relents on Salem, Clears Plant for Restart

Several weeks ago the Nuclear Regulatory Commission (NRC) delayed the restart of the Salem-1 nuclear reactor in order to devise an appropriate penalty for the sloppy management found there. On 26 April, the NRC relented. It ruled 4 to 1 that the owner—Public Service Electric and Gas of New Jersey—could turn the plant on again as soon as the NRC staff gives its approval. Commissioner Victor Gilinsky was the sole dissenter, voicing doubts about the adequacy of changes that have been made since a safety system failed in February (*Science*, 29 April, p. 484).

The vote brought relief to the company, which has been losing over $330,000 a day during the shutdown. The commissioners said earlier that they wanted to be certain that managerial problems had been corrected before the reactor went back into service. That controversial decision has now been tossed to the staff, which is expected to clear the plant for start-up in the first week of May. No fine has yet been imposed.—**ELIOT MARSHALL**

Astronomers Ponder a Catch-22

Ground-based astronomers, although blessed this year with a 26 percent increase in the National Science Foundation's (NSF's) budget request, are still struggling to keep a major component of their science from being lost in a uniquely Washingtonian Catch-22. Moreover, they are trying to do it without undermining their own credibility. The quandary was illustrated in late April at a meeting of the NSF's Astronomy Advisory Committee.

Astronomers have won praise from the Administration for sorting out their own priorities, in particular through the publication last year of the "Field Committee" report from the National Academy of Sciences (*Science*, 16 April 1982, p. 282). "The report outlined a program [for the 1980's] that is affordable, coherent, and strongly supported by the entire community," says NSF director Edward Knapp. "The report can be linked directly to the good treatment that astronomy has received in fiscal 1984. I wish everybody would do this."

Unfortunately, the Field report has a gap: astronomy at millimeter wavelengths, a portion of the spectrum that is crucial to the study of cold, dense interstellar gas in the galaxy's star-forming regions (*Science*, 5 February 1982, p. 647). In making their recommendations, the Field committee members explicitly assumed that the NSF would soon be filling that gap with its oft-proposed and oft-delayed 25-meter, millimeter-wave telescope. They were wrong.

Last spring, after more than half a decade of postponements for budgetary reasons, the 25-meter instrument was dropped from consideration for the last time. Technology was passing it by, the Europeans and Japanese had already built rival instruments, and it seemed senseless to spend tens of millions of dollars on an obsolete facility. Yet it meant that U.S. astronomers would be shut out of a field they had pioneered.

Last week, then, the NSF's astronomy advisory committee put forth its answer: the United States should leapfrog the competition by building an advanced, millimeter-wave interferometer, a coordinated array of radio dishes capable of much higher resolution than any single dish. The proposal was passed on to the NSF as a formal recommendation.

The problem, of course, lies in selling the array to Congress and the Administration without undermining the Field report. That document was supposed to represent the astronomical community's consensus on priorities. Yet, one year later, here they come with something new.

Alan H. Barrett of the Massachusetts Institute of Technology, who chaired the NSF's subcommittee on millimeter and submillimeter astronomy, sees little problem: "The Field committee was very clear about its assumptions [on the 25-meter telescope]," he says.

Nonetheless, the NSF committee was careful to emphasize the need for conceptual *studies* of the new array, not immediate construction. "They realize that this will have to get in line," says Peter B. Boyce, executive director of the American Astronomical Society. Ahead of it at the NSF are such Field Committee priorities as the Very Long Baseline Array, a continent-spanning network of conventional radio telescopes; the millimeter-wave array may not be built until 1990.

Inescapably this new array will siphon money away from other projects. "Yes, this will make it very hard to build all the things that the Field Committee recommended," sighs Boyce. "But that was going to be hard anyway."—**M. MITCHELL WALDROP**

The Breeder: Selling the Unsalable?

Supporters of the Clinch River Breeder Reactor lost a test vote on 26 April when the House Science and Technology Committee decided 24 to 16 to eliminate federal support for the project in the 1984 budget. This decision stays in force until Congress approves a new financing plan. It came as an amendment to the Department of Energy budget sponsored by Representatives Claudine Schneider (R–R.I.) and George Brown (D–Calif.), the latter a one-time fan of the breeder.

The vote has no immediate impact, because it applies to spending that will take place after September. Authority to spend the funds may be granted later, by any of a variety of legislative actions. However, it signals that Congress will not accept the existing breeder funding scheme (*Science*, 1 April, p. 38) and may insist on a larger contribution from private industry.

In another setback for the breeder, the Tennessee Valley Authority (TVA) declared that it has no interest in buying the plant or its electrical output. The TVA made this clear in a hearing on 20 April sponsored by a conservative opponent of the breeder, Senator Gordon Humphrey (R–N.H.). The breeder's supporters have argued that the plant will begin to pay for itself with the sale of electricity 5 years after construction is complete, and this claim is a crucial part of the plan to attract more private funds into the project. Humphrey wanted to know who is likely to buy the electricity, and he called on TVA because it has an exclusive option to buy the plant.