

was better than Clinch River's "loop," all three of the companies mentioned above are tinkering with pot and loop designs.

One idea that would be politically quite popular, but which DOE is not ready to endorse, is a "once-through" breeder fuel system, obviating the need for reprocessing. The goal would be to

eliminate the commerce in plutonium, the breeder's by-product and fuel. It is also usable in atomic weapons and thus a major problem in the breeder concept.

Nelson says that he has yet to see any elaboration of this idea which obeys the laws of physics and economics. He is frankly more optimistic about schemes that would have the reprocessing done

on site, in small facilities within the reactor compound. DOE is not about to back any once-through breeder programs.

The indications are that the full impact of Congress's action has not yet registered at DOE, and that when it does, the entire breeder program will come in for a profound review.—**ELIOT MARSHALL**

Pork Barrel Funding Deemed Not Kosher

The recent spate of pork barrel politics involving university research and teaching facilities has prompted three separate academic organizations to decry the practice. The Association of American Universities (AAU) and the council of the National Academy of Sciences passed resolutions in late October urging universities and Congress not to bypass peer review in parceling out funds for research projects and facilities. And the American Physical Society (APS) chimed in with a letter from APS president Robert Marshak to every member of Congress asking "that this recent trend toward special interest funding of major scientific projects be reversed."

Although only the APS letter mentioned specific incidents of pork barrel funding that the society deemed troubling, officials in all three organizations say they were particularly upset by the way grants were secured for research facilities at Catholic and Columbia universities. Both institutions hired a Washington, D.C., consulting firm, Schlossberg-Cassidy and Associates, to push their proposals, and funds were obtained through an amendment first proposed on the floor of the House (*Science*, 3 June, p. 1024). What particularly rankled was that money for the two universities was taken out of the budgets of other projects that had gone through various levels of review. Several other universities have since been the beneficiaries of amendments offered on the floor of the House or Senate, but these moves have drawn less criticism because the funding has not so obviously been taken from somebody else's budget.

It is not just Congress that has been guilty of pushing projects through without peer review. There has been a lot of concern in the materials research community about the way that funding for the National Center for Advanced Materials (NCAM) at the Lawrence Berkeley Laboratory was inserted into the Department of Energy's (DOE's) budget, largely at the behest of George Keyworth, President Reagan's science adviser. The proposal was reviewed neither by DOE nor by other materials scientists, many of whom fired off letters to Congress earlier this year protesting their lack of input. (Congress subsequently virtually eliminated NCAM's budget and a DOE committee recently raised doubts about the synchrotron light source that was to be the center's core facility.)

These episodes prompted the AAU to discuss the whole problem of pork barrel politics at its annual meeting on 25 October. Those who attended were in a somewhat awkward position. For one thing, some of the AAU's own members had been the beneficiaries of special interest amendments, and for another, the AAU, which represents

50 of the nation's largest research universities, did not want to appear to be telling other, less well endowed institutions how to behave. In the end, the meeting adopted a carefully worded resolution that drew only a few opposing votes.

The resolution noted that the system of peer review has served U.S. science well, and urged "scientists, leaders of America's universities, and Members of Congress . . . to refrain from actions that would make scientific decisions a test of political influence rather than a judgment on the quality of work to be done." In addition, the resolution pointed out that federal funds for university facilities dried up at least a decade ago, and urged Congress and the Administration "to deal promptly with the decay of physical plant that houses much of the nation's basic research."

Five days later, the Academy council passed a resolution stating that "Informed peer judgments on the scientific merits of specific proposals, in open competition, should be a central element in the awarding of all federal funds for science." It urged the academic community and public officials to ensure that proper review be applied "not only for the support of scientific research proposals, but also for major scientific facilities and instrumentation." The council discussed whether to follow the AAU line and recommend renewed federal funding for university facilities, but according to one observer, the members decided that such a proposal might seem too self-serving.

The APS letter, which went out in the last week of October, mentioned the Columbia, Catholic, and NCAM proposals, and said "In our opinion, confidence in the system has been seriously shaken by these instances and will be restored only by rigorous adherence to the established procedures in all future scientific funding."

Kenneth Schlossberg, whose consulting firm shepherded the Catholic and Columbia proposals through Congress, argues that the AAU and the Academy "are taking the high ground without offering any reasonable alternative to institutions that have pressing needs." Proclaiming himself "a little mystified" by the reaction to his firm's successes, Schlossberg said "AAU members, when it is in their own interests, are the first to use congressional influence on behalf of their projects. They maintain large government relations staffs for that purpose. What we have got here is outrage among those who are least entitled to be outraged."

Until federal money is made available for university facilities, Schlossberg predicts that universities will continue to seek special interest amendments. He said that his firm has received several inquiries recently from universities seeking funds for facilities.—**COLIN NORMAN**