

Our national labs: uniquely valuable resource

Reassuring" is the adjective that best describes the report on the status of our national labs prepared by DOE's Energy Research Advisory Board (see page 59). Following concern on the part of the Administration that the labs may be going "somewhat afield of their original purposes," the ERAB study found the labs to be well-managed, efficiently functioning research machines, able and willing to take on any missions that policymakers decide are in the national interest. In fact the study's main suggestions for making better use of the labs centered on recommendations for unfettering the labs from the crippling restraints of poor budgetary planning and over-regulation on the part of the Administration.

In addressing the controversial question of the proper missions for the labs, the ERAB study has decided on what, in our view, are quite sensible recommendations. In essence, the study foresees two broad kinds of missions: It reaffirms the responsibility of the national labs for "national trust" fundamental research in the physical sciences (high-energy and nuclear physics, radiobiological sciences and so on); in addition, it would encourage the labs to "perform generic research and development where it is judged to be in the public interest or where for economical or technical reasons industry does not choose to support it."

Two more studies of the national labs—one by the General Accounting Office and another by a panel of the new White House science council—are underway and are expected to be completed this coming year. The conclusions of these three reports are most likely to differ, if they differ at all, in the area of what are the most important missions the national labs should undertake. But even if the two later reports were to adopt recommendations on missions identical to the DOE study, there would still be uncertainty. The determination of what is "in the public interest," as we have recently seen, depends too heavily on the political philosophy of the Administration in power and, in addition, is subject to the continually changing technological challenges that confront our country. Consider the implications for the national labs of just a sampling of the buzz words

from the present and the recent past—"nuclear freeze," "renewable energy resources," "science education," "radioactive waste," "environmental pollution," "technology transfer," "economic recovery" and so on.

The government evaluations of the national lab system could not be more timely. Just when we as a nation are struggling to mobilize all available means to get back on the road of economic growth, the studies remind us of what an enormously valuable resource we have in the national labs. With a total staff of 40 000, an annual budget of \$3 billion and facilities worth several times that in replacement cost, the labs represent the largest concentration of research capability in the US and quite likely the world.

To make the most of this resource, we need to develop improved methods of setting priorities in the face of the plethora of missions that the labs could be asked to undertake. We need also to agree on ways to minimize the abrupt changes in priorities that have been experienced in the past as a result of our political system or belated recognition of technological crises. The government studies are providing a valuable opportunity to obtain a consensus on how best to achieve these ends.

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