there is in fact very little conflicting testimony from psychiatrists, and when there is, it is because they are untrained in forensic issues or have been asked to testify in areas outside their expertise. But AMA lawyer William Tabor maintains that as long as "non-responsibility" is recognized as a defense, disagreements among psychiatrists are inevitable.

The most pressing problem, all agree, is the matter of disposition of the defendants after the trial. The sort of episode the public worries about—the maniac who is released from the hospital only to go home and kill his wife—is exceedingly rare. Nor is the opposite problem—the schizophrenic shoplifter who is committed for life to a mental hospital—any longer a common occurrence. But few places have orderly procedures for committing a prisoner to treatment, determining when release is appropriate, or arranging for outpatient care. In federal jurisdictions, the state has to step in to arrange for treatment. In some states, such as Alabama, patients can be released from the hospital on the decision of a single psychiatrist.

There is considerable support for the establishment of state psychiatric security review boards, like the one in Oregon, containing psychiatrists, lawyers, parole officers and community members who would determine whether an offender should be hospitalized, oversee release, and ensure follow-up treatment in the community. The NMHA favors a dispositional statute, perhaps along these lines, for violent offenders. Two bills have been introduced in Congress that would set up a dispositional statute for federal jurisdictions. They would also modify the insanity defense along the lines approved by both the ABA and the Administration.

The insanity defense has been subjected to a wide variety of severe criticisms; yet there is no evidence either that it is unnecessary or that it has been widely abused. Rather, claims the commission, it has been used as a scapegoat for the failures of the entire criminal justice system.—**CONSTANCE HOLDEN**

Lukewarm Yes for LBL Light Source

On 14 November, a committee of scientists, established by the Department of Energy (DOE) to look at the synchrotron-radiation facilities researchers want during the next decade, turned in its list of priorities. The news is not good for the Lawrence Berkeley Laboratory, which has proposed to build an $84-million-dollar Advanced Light Source (ALS). The ALS came in last on the list.

The recommendations came in a letter from committee cochairmen Peter Eisenberger of the Exxon Research and Engineering Company and Michael Knotek of Sandia National Laboratories to Alvin Trivelpiece, DOE's director of energy research. The letter represents an interim report, needed if the committee's findings are to have any effect on the preparation of DOE's fiscal year (FY85) budget. A complete report is due in February.

Although the purpose of the study was to be the preparation of a 10-year plan for synchrotron light sources, the ALS proposal figured prominently both in the establishment of the review committee and in its proceedings (*Science*, 18 November, p. 826). Berkeley originally embedded the ALS in a larger initiative, the National Center for Advanced Materials. But Congress balked at fully funding the center, and a DOE ad hoc committee recommended that the materials center and the ALS become separate proposals (*Science*, 21 October, p. 308). One DOE hope was that the Eisenberger-Knotek committee would give a strong yes or no to the ALS.

What it got was slightly more Delphic. Four priorities were listed in the letter to Trivelpiece. The top two concern existing synchrotron light facilities. First, "the committee recommends as its top priority that steps be taken to assure the timely completion of commissioning of NSLS [the National Synchrotron Light Source at Brookhaven National Laboratory] and SRC [the Synchrotron Radiation Center at the University of Wisconsin] as well as providing adequate operations budgets to assure the effective utilization of all existing facilities." The idea, Eisenberger told *Science*, is to "take care of what we have. A little additional operating money for SSRL [Stanford Synchrotron Radiation Laboratory] could double its productivity."

Second, "to realize the full potential of existing facilities, the committee recommends expeditious completion of current projects to construct insertion device beamlines at SRC, NSLS, and SSRL." Insertion devices are special magnet structures (wigglers and undulators) that dramatically enhance the output of synchrotron light as compared to the dipole magnets that bend the high-energy electron beam in an electron storage ring into a roughly circular trajectory and thereby cause the emission of light. Future facilities will be dominated by insertion devices.

The third and fourth recommendations dealt with future light sources. Committee members agreed that for technical reasons the optimum energy for an electron storage ring that generates x-rays is higher than that for an ultraviolet source and therefore one ring would not allow both groups of users to capture all of the scientific opportunities presented by separate sources. Although they judged the scientific value of each type of source to be equal, forced to choose between the two the committee members rated the x-ray source over an ultraviolet machine like the ALS. Thus, the third priority was "the construction of a 6-GeV [billion electron volt] storage ring beginning in 1987 as a dedicated national facility. To achieve this objective appropriate R & D funds must be allocated in FY85 and FY86."

With the admonition that "no action on a lower priority recommendation interfere with the timely pursuit of the higher priority items," the 1.3-GeV ALS received the fourth priority. "The committee recommends proceeding with the ALS in FY85 as a dedicated national facility."

What effect these recommendations will have on the future of the ALS is not yet known. Whether or not it appears in the FY85 budget, there is sure to be considerable politicking. Nevertheless, the DOE committee's work represents a drawing together of the highly diverse synchrotron radiation community. All the committee's recommendations were the result of unanimous votes. "It's amazing that Knotek and Eisenberger could pull this off," said a DOE official."—**ARTHUR L. ROBINSON**