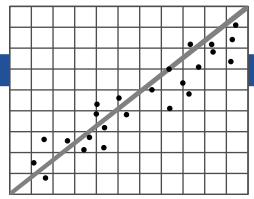

NERAC

Advisory group comments on NE goals, school reactors

According to NERAC, it is important that the United States maintain a vibrant nuclear energy research and development program.

The Department of Energy's Nuclear Energy Research Advisory Committee (NERAC) in April announced two actions resulting from DOE activities. The first action was approval of a goals statement for the DOE's nuclear energy programs. The second was the acceptance of a report from a NERAC University Research Reactor task force describing strategies for ensuring the continued operation of university research reactors.

The goals statement asserted the importance of maintaining a vibrant nuclear energy research and development program in the United States. This is necessary, NERAC observed, to assure a sustainable, reliable, and diverse power supply by developing economical nuclear energy systems that meet stringent safety, environmental, and nonproliferation standards.

The current dilemma, as explained by NERAC, is that federal support of nuclear energy—including support of facilities and research in universities, national laboratories, and industry—"declined precipitously" in the 1990s. In 1992, for example, the DOE's nuclear research and development budget was $192 million. In 2001, it is $92 million, nearly a 50 percent decrease, not counting the effects of inflation, "which makes the decrease even more striking," NERAC noted. Further, current funding levels "are inadequate to maintain the necessary program," NERAC said.

Without restoration of adequate federal support of nuclear energy research and education, the U.S. is in jeopardy of losing the nuclear option, NERAC warned.

To rectify this situation, the industry must attract "bright young people" seeking "new frontiers," NERAC said. It advised that the federal government, through the DOE's nuclear energy program, must strengthen its commitment to position nuclear energy as a viable and acceptable element to meet energy needs in the 21st century. The government must establish and maintain a strong research and development program supporting nuclear power generation that is focused on improved safety, reliability, cost, proliferation-resistance, and waste disposal, and must develop a healthy infrastructure, including research and teaching facilities at universities, that must be sustained. The government also must support, through the appropriate federal agencies, universities, and industry, the broader application of nuclear science to medicine, biology, and space exploration.

Finally, NERAC recommended that the DOE's nuclear energy budget be expanded, and that the DOE continue to provide information to other government agencies and industry for applications of nuclear science.

With regard to the second NERAC action, the committee accepted a report from its Nuclear Research Reactor Task Force that described strategies for ensuring the continued operation of university reactors. The near-term strategy recommended providing immediate financial support to prevent the potential decommissioning of key reactors. For the longer term, NERAC recommended that the DOE provide operating support to a limited number of university research reactors so that they can act as national centers for nuclear engineering education, research, and training.

Based on information collected on visits to three universities that were considering near-term closing of their research reactors, the task force recommended that DOE immediately allocate $250 000 each (total $750 000) for the current year, FY 2001, to ensure continued operation of these reactors, located at Cornell University, the Massachusetts Institute of Technology, and the University of Michigan (see following article regarding closure of Cornell University's reactor).

Looking longer term, the NERAC task force advised that the DOE "act now" on recommendations already made by other bodies regarding keeping university research reactors in operation. These past recommendations came from the NERAC Blue Ribbon Panel on the Future of University Nuclear Engineering Programs and University Research & Training Reactors, National Organization of Test, Research and Training Reactors, and Nuclear Engineering Department Heads Organization.

Other recommendations made by the task force are that:

- The DOE adjust its budget request beginning in FY 2002 to include additional funding for university research reactor (URR) support.
- The DOE provide funding beginning in FY 2002 to initiate establishment of five national URR centers for use by industry and researchers.
- The DOE provide funding beginning in FY 2002 to initiate establishment of as many as four regional university training and education reactor centers.
- The concepts of national centers described in the preceding two recommendations be subject to peer review by the university reactors operations and user communities.

Further information on the NERAC actions is available on the Web at <www.ne.doe.gov/page.html>.