

the country and throughout the world attempted to duplicate the Utah scientists' research results. Admiral Watkins ordered the Department's national laboratories to conduct intensified research efforts to more clearly understand the phenomenon. He also requested the Department's Energy Research and Advisory Board (ERAB) to establish a panel to conduct an independent review of the cold fusion claims. In May, the Los Alamos National Laboratory sponsored a scientific workshop on the subject and entered negotiations with the two scientists looking toward a collaborative effort to confirm cold fusion.¹⁶⁵

Following an initial rush of enthusiasm, most scientists reported that they could not duplicate the cold fusion results. In an interim finding issued in mid-July, the ERAB cold fusion panel recommended against the establishment of any new cold fusion program at the Department. The experiments reported to date, the panel noted, "do not present convincing evidence that useful sources of energy will result from the phenomena attributed to cold fusion. Indeed, evidence for the discovery of a new nuclear process termed cold fusion is not persuasive. Hence no special programs to establish cold fusion research centers or to support new efforts to find cold fusion are justified at the present time." The panel's final report issued in November confirmed this assessment but with the added disclaimer that the cold fusion phenomenon could not be ruled out completely.¹⁶⁶

While the cold fusion claims were reverberating throughout the scientific community, efforts were underway to redirect and restructure the Department's fusion program. In June 1989 Robert O. Hunter, director of the Department's Office of Energy Research, informed the Senate Energy and Natural Resources Committee of plans to transfer \$50 million from the magnetic confinement fusion program to create an inertial confinement fusion program.¹⁶⁷ He also placed the construction of the next generation magnetic fusion research machine, the Compact Ignition Tokamak (CIT) to be built at Princeton, on hold.

Resistance to Hunter's plan was immediate. Supporters of magnetic fusion complained that the program, which had been funded at a constant \$350 million for most of the past decade, was already under budget strains. Congress, seeing that the Department itself was advocating cutting back on magnetic fusion, trimmed the magnetic fusion budget without funding inertial confinement fusion. Watkins generally supported the proposal to set up a competition between the two fusion technologies, noting the need to inject some "excitement" into the research endeavor and to strengthen congressional support. Because of the controversy, the secretary in March 1990 established the Fusion Policy Advisory Committee to map out future goals for fusion research.¹⁶⁸

Despite warnings from Watkins that expectations should be pared in the face of prolonged budget difficulties, the advisory committee, in its report released in September, recommended doubling the Department's fusion budget over the next seven years. The committee called for the creation of a single office to oversee both magnetic and inertial confinement research. "Pursuing both options at this time," the committee stated, "reduces the technical risk."¹⁶⁹

Budget strictures, however, soon intervened. Only a month later, Congress unexpectedly slashed almost \$50 million from the magnetic fusion program. In December Watkins announced the closing of experimental reactor facilities at Oak Ridge and Los Alamos. In the face of these budget realities, the Department in fall 1991, upon the recommendation of the Fusion Policy Advisory Committee, canceled the CIT—since renamed the Burning Plasma Experiment. Strong support for the fusion program, nonetheless, continued within the Department. In October 1991 the Department established an inertial confinement fusion program to proceed in parallel with the magnetic fusion program until one proved to be technically superior. The Department's 1993 budget request for fusion totaled almost \$360 million—\$350 million for magnetic fusion and \$9 million for inertial confinement fusion.