

the origins of the universe. Such breathtaking science would require space on earth to build a ten-foot-diameter racetrack-shaped tunnel, fifty-two miles in circumference, inside of which 10,000 superconducting magnets would guide two beams of highly energized protons in opposite directions. Racing around the track at nearly the speed of light, the proton beams would collide head-on with an energy of 40 trillion electron volts. Scientists believed that the resulting temperatures and pressures would simulate the “big bang” at the creation of the universe. Recently detected subatomic particles would surely help to answer remaining questions about the ultimate building blocks of matter and the basic forces that govern the transformations of matter and energy.¹²⁷

President Reagan approved construction of the super collider on January 30, 1987. Describing the President’s decision as “a momentous leap forward for American science and technology,” Herrington noted that in the field of high energy physics, building the super collider was equivalent to “putting a man on the moon.” He estimated that the total project would cost \$4.4 billion and authorized the Department to develop a site selection procedure based primarily on scientific and technical criteria.¹²⁸

The Department issued an invitation for site proposals in April 1987. The states responded with alacrity in the competition for the lucrative prize of hosting the super collider. By the deadline of September 2, 1987, the Department received forty-three site proposals from twenty-five states. After screening by the Department against the previously established qualification criteria, thirty-six proposals were forwarded to an expert committee of the National Academy of Sciences and the National Academy of Engineering for an independent review. The committee’s report recommended a final list of seven best qualified sites in Arizona, Colorado, Illinois, Michigan, North Carolina, Tennessee, and Texas. On November 10, 1988, Herrington announced that the Texas site, located twenty-five miles south of Dallas, was the Department’s preferred site. The Department hoped to build the superconducting super collider by 1996.¹²⁹

SECURING AMERICA’S ENERGY FUTURE

Dark clouds gathered on the Nation’s energy horizon as the Department of Energy entered its second decade. Prolonged warfare in the Persian Gulf between Iraq and Iran, continued depression in the domestic oil industry, and increased dependence on imports of foreign oil raised concerns about America’s energy future among government officials and private energy analysts. Secretary of Interior Hodel warned that “the United States and the rest of the world [were] being set up for a major oil price shock,” while Theodore R. Eck, chief economist at Amoco Corporation, observed that “everyone” agreed there would be serious energy problems in the next ten years. At issue, *Science* reported, was not only national security but also inflation, economic growth, and the Nation’s trade deficit.¹³⁰

The Department of Energy, at President Reagan’s direction, initiated a review of United States energy security. The review examined all aspects of energy supply and demand and their implications for national security. The Department reported to the President that increasing dependence on imported oil could have potentially serious implications for national security for the rest of the century. The precipitous decline in oil prices in 1986 was good news for all energy consumers; but as prices fell and demand slackened, American oil producers were devastated by the collapse of the domestic oil market. The United States appeared less vulnerable to an energy crisis in 1987 than it had been in 1977. Yet rising oil demand, coupled with a fall in production from a crippled American oil industry, could potentially make the United States and its allies dependent upon suppliers from the Persian Gulf, which had two-thirds of the world’s known reserves. “Even with continued conservation and efficiency and substantial contributions from other energy resources, like coal, nuclear energy, and renewables,” Secretary Herrington observed, “our economic and energy security is inextricably tied to the fate and fortunes of our domestic petroleum industry through this century.”¹³¹