

The Atomic Energy Commission, meanwhile, had established a modest program for developing breeder reactors. In November 1965, the Commission centered its breeder program on the Liquid Metal Fast Breeder Reactor (LMFBR) concept. The LMFBR received the highest priority among the Commission's reactor development programs. The Commission placed tight management controls over the LMFBR program, closely controlling and managing research and development and limiting participation by private industry.³²

REGULATORY, SAFETY, AND ENVIRONMENTAL CONCERNS

The 1960s witnessed phenomenal growth and development in the nuclear power industry. As promoters of nuclear power, the Atomic Energy Commission was criticized, however, for an inherent conflict of interest when the Commission acted on environmental and reactor safety issues. By 1967 utilities were ordering power reactors in sizes up to 1100 megawatts. Meanwhile, the largest operating plant was only 255 megawatts. Designs for most commercial nuclear power plants being built were therefore based on assumptions and extrapolations about safety rather than operating experience. In 1971 the Commission began open hearings on power reactor emergency cooling systems designed to prevent a major reactor accident. Following loss of cooling experiments, the Commission had learned that emergency core cooling systems might not work as designed. The hearings dramatically focused public attention on the safety of nuclear power.

The growing environmental movement also began focusing scrutiny on the Commission and its activities. Commission regulations held the Commission responsible only for potential radiological hazards to public health and safety. Critics charged that this was inconsistent with the National Environmental Policy Act of 1969 and that the Commission should also consider thermal pollution and other environmental issues in the licensing process. In the *Calvert Cliffs* decision of July 23, 1971, the courts ruled that the Commission was

required to assess environmental hazards beyond radiation effects. The Commission, trying to mold a new public image, decided not to appeal the landmark ruling. Rather, the Commission made substantive changes in its environmental review and reactor licensing procedures. The *Calvert Cliffs* decision helped both to create a large licensing backlog and to increase the costs of licensing a nuclear power plant.

The Commission, simultaneously, faced a growing problem concerning the disposal of high-level radioactive wastes from nuclear power plants. The only commercial reprocessing plant, located in West Valley, New York, shut down in 1972. Technical problems and opposition from local citizens and officials forced the Commission to abandon plans to dispose of high-level wastes by storing them in underground salt mines in Kansas.³³ The absence of a waste program in the early 1970s, coupled with reactor safety and environmental concerns, cast a pall over the future of nuclear power just when sporadic energy shortages began signaling the need for expanded energy resources.