BERTRAM WOLFE
1927–2004
Elected in 1980

“Contributions to the development of advanced nuclear concepts and projects, particularly fast flux reactors.”

BY SALOMON LEVY

BERTRAM WOLFE, a significant contributor to nuclear power development and its success, died September 6, 2004, in Los Gatos, California, at age 77. He was an industry spokesman on nuclear power and energy needs and an excellent debater willing to take on all critics. He was a leader who strongly pushed fast reactors and their ability to save energy resources. It is unfortunate that he was not able to participate in the attention that reactors finally received.

He was born June 26, 1927, in the Bronx, New York. He received his BA in physics from Princeton University in 1950 and his PhD in nuclear physics from Cornell University in 1954. He joined General Electric Company in 1955, when its commercial nuclear energy business was initiated, and worked in almost all phases of nuclear energy, from reactor design to fuel supply, waste management, and development of new reactor concepts.

During the 1950s and 1960s he led the nuclear core design effort on several new test and research reactors, including the engineering test reactor, the GE test reactor, and the radiation effects reactor. He was responsible for the Southwest Experimental Fast Oxide Reactor (SEFOR) project, which demonstrated the inherent shutdown characteristics of a fast reactor under accident conditions.
In 1969 he briefly left GE to be associate director of Battelle Northwest Laboratories, with broad responsibilities including design and development efforts for the fast flux test reactor. In 1971 he returned to GE, where he led the successful decommissioning of the Shippingport (PA) reactor and the completion of the Morris (IL) reprocessing plant. The direction of this latter activity was changed when new government policies outlawed reprocessing in the United States. The Morris plant was efficiently converted to a spent-fuel storage facility that is still in operation.

Dr. Wolfe was also responsible for the continued development of the fast breeder reactor and led the effort that resulted in GE’s selection as the lead organization for the US Fast Breeder Development Program.

In the late 1970s, when the market for new reactors faded, he was given responsibility for the GE nuclear fuel supply and services business to support the operating nuclear plants. This responsibility included developing and meeting both technical and business objectives. He was also responsible for the GE advanced reactor program, which culminated in the start of construction of two advanced boiling water reactors at the Kashiwasaki site in Japan.

Beginning in 1987 he headed GE’s Nuclear Energy business as vice president and general manager. He played a key role in bringing it to a profitable position. He retired from GE in August 1992 at age 65.

A professional engineer in the state of California, Dr. Wolfe became an independent consultant in the fields of nuclear energy and energy services. He held several patents in the nuclear field and was the author of over 100 publications concerning nuclear technology, nuclear energy, and energy in general.

He was professionally engaged in a number of organizations. He was a director of Houston Lighting and Power and served on the Nuclear Advisory Board of Pennsylvania Power and Light, International Advisory Committee of Concord Industries, and several other advisory boards as well as the Energy Engineering Board (1987–93) of the National Research
Council. He was a member of the board of directors of the Nuclear Management and Resources Council, US Council for Energy Awareness, Nuclear Power Oversight Committee, and American Nuclear Energy Council. He was a fellow and past president of the American Nuclear Society, and a member of Sigma Xi, Phi Beta Kappa, and Phi Kappa Phi.

His contributions to the field were recognized by various honors. In addition to his election to the NAE, in 1990 he received the Walter H. Zinn Award for outstanding technical contributions to nuclear power, and in 1992 he was honored with one of the nuclear industry’s most prestigious honors, the Henry DeWolf Smyth Nuclear Statesman Award.

Bertram Wolfe is survived by his wife of 53 years, Leila (Lee) Ann; daughter Sarah Rothenberg and son-in-law William Rothenberg; sons Donald and William and daughter-in-law Victoria Contreras-Wolfe; and grandchildren Tyler, Bennett, Madeline, and Clark Rothenberg.