

LONGENECKER and ASSOCIATES

Keith A. Klein

EXPERIENCE SUMMARY:

Mr. Klein is an experienced senior manager who has successfully dealt with some of the United State's most difficult energy issues involving complex management, technical, regulatory, political, financial and legal matters. Mr. Klein has thirty-five years of federal government experience dealing with all aspects of the nuclear fuel cycle: light water, heavy water, gas, and breeder reactors; fuel development and reprocessing; transportation; safety, quality assurance and environment; waste management and disposal. Mr. Klein has excellent familiarity with the energy industry and familiarity with broad range of energy technologies and issues.

DETAILED EXPERIENCE:

United States Atomic Energy Commission to Department of Energy (DOE)

1999-2007 Manager, Richland Operations Office

Mr. Klein created and implemented a vision for cleaning up a 50 year legacy of plutonium production at the 586 square mile Hanford Site, the nation's most contaminated nuclear waste site. He significantly accelerated cleanup, reduced risks and costs, and established technical and management structure for continued success. Mr. Klein was responsible for \$1 billion per year budget and several thousand site employees. Scope included 9 plutonium production reactors, 5 reprocessing canyons, 2000 tons of spent fuel, 18 tons of plutonium bearing materials, 1500 waste sites, 1700 contaminated facilities and groundwater plumes. Mr. Klein was also responsible for activities of the Pacific Northwest National Laboratory for several years. Received President's Distinguished Executive rank award for "...sustained extraordinary accomplishment in management of programs of the United States Government and for leadership exemplifying the highest standards of service...", Secretary's Gold Medal, and a number of personal recognitions from DOE staff, the Governor, Congressional delegates, regulators, Tribes and community.

1998-1999 Acting Manager, Carlsbad Area Office Mr. Klein successfully carried out an assignment to "get the Waste Isolation Pilot Plant (WIPP) open and recruit a permanent Manager." WIPP is this nation's first and only deep geologic repository for isolating transuranic wastes. Legal, management and regulatory issues had prevented its opening for several years.

1994-1998 Deputy Manager, Rocky Flats Field Office

Mr. Klein was a key contributor in transitioning the site to a highly effective cleanup mode following the FBI raid and several years of floundering. The Rocky Flats cleanup was widely acclaimed and became a model for later projects. ABC News called one building "the most dangerous building in America."

1992-1994 Executive Officer (Chief of Staff), Environmental Management, Headquarters

Mr. Klein was responsible to the Assistant Secretary for ensuring policies and guidance were executed in a timely and responsible manner. The Assistant Secretary was responsible for a \$6 billion/per year budget and 40,000 people dealing with a wide range of nuclear waste and material management and environmental restoration programs/projects at 53 cleanup sites in 31 states.

1985-1994 Senior Executive Service Assignments, Headquarters

- Associate Deputy Assistant Secretary for Oversight and Self-Assessment, Environmental Management -- Directed activities of four reporting offices overseeing safety, environmental, and health compliance and performance.
- Director, Office of Safety and Quality, New Production Reactors -- Managed three Divisions responsible for overseeing and evaluating candidate designs for a new reactor to produce tritium, a key component in current nuclear warheads. Developed detailed nuclear safety and safeguards and security requirements and safety review capabilities comparable to those used to regulate commercial nuclear power. Presented a detailed evaluation to the Secretary comparing heavy water, gas, and light water reactor designs.
- Deputy Associate Director for Systems Integration and Regulation, Office of Civilian Radioactive Waste Management -- Shared responsibility for design and siting a Monitored Retrievable Storage Facility, at-reactor storage, and nuclear fuels transportation. Dealt extensively with Nuclear Regulatory Commission, State and local governing bodies, industry, and public interest groups. Also served as U. S. representative to the International Atomic Energy Agency for spent fuel management/reprocessing.

1973-1994 Supervisory and Staff positions

- Director, Division of LWR Fuel Cycle Projects, Office of Nuclear Energy -- Responsible for activities leading to a federal capability to store fuel on an emergency or temporary basis and initiatives to reduce technical, regulatory, and institutional barriers to commercial fuel reprocessing.
- Staff to Under Secretary of Energy — Responsible for a wide array of management and technical support activities
- Project Engineer, Geologic Exploration Branch, Nuclear Waste Management — Responsible for various aspects of siting a high level waste nuclear repository, including lead for DOE's Cross Statement of Position in the NRC's Waste Confidence Rulemaking and liaison with National academy of Science's panel on geologic repository siting criteria.
- Reactor Engineer, Liquid Metal Fast Breeder Reactor Programs — Cognizant engineer responsibilities, including design and testing of reactor fuel and control rod assemblies, shipping casks and steam generators. As AEC Intern, field engineering assignment was working for Westinghouse Hanford then Bechtel Power on various parts of the Fast Flux Test Facility construction.

EDUCATION:

1975-1976 MS, Nuclear Engineering, Massachusetts Institute of Technology

1969-1973 BS, Electrical Engineering, Cornell University

COMMUNITY SERVICE:

Board Memberships: United Way, Junior Achievement, Mid-Columbia Reading Foundation, Hanford Reach Interpretive Center, Tri-City Economic Development Council

OTHER ACTIVITIES:

Native of Morgantown, West Virginia. Married to Linda P. Klein with two children, Jessica (18) and Michael (14). Awarded Distinguished Eagle Scout rank in 2006. Led Richland School Bond drive.