

# New Generation

## A History of Firsts



**F**rom the time of Bechtel's involvement with the first experimental breeder reactor in 1951, through today's new generation of reactor designs, the company has been at the leading edge of industry innovation. Bechtel has played an instrumental role in advanced reactor programs sponsored by the U.S. Department of Energy, The Electric Power Research Institute, and various utilities, helping to develop passive light-water reactors, high-temperature gas-cooled reactors, and advanced liquid-metal reactors. The company was also involved in the first commercial pressure-suppression containment plant and the first production-scale, high-level-waste vitrification unit. In fact, Bechtel has been a major participant at every turning point in the industry's history.

That tradition continues in Zhejiang, People's Republic of China, where Bechtel is performing the engineering, procurement, and construction contract for Qinshan, the largest commercial nuclear project to date in that country. Bechtel's participation in the 1,450-megawatt plant quickly led to design improvements that reduced construction costs without compromising a rigorous schedule. Our global experience has also helped coordinate work among the project's numerous international participants.

Training contractors and partners in proven work processes is one way that Bechtel maintains its high standards worldwide. But our reputation is based on something more fundamental: pride of ownership. We pioneered lump-sum, turnkey contracts in the nuclear industry, which not only create more value for customers but challenge us to continually improve quality and lower costs. Each project becomes part of Bechtel's portfolio — an opportunity to solve new problems and advance the industry.



*Hatch, Georgia, U.S.A.*



*Qinshan, People's Republic of China*



*Farley, Alabama, U.S.A.*

## SELECTED PROJECTS

- Westinghouse — 600 MW advanced pressurized water reactor
- General Electric
  - 1300 MW advanced boiling-water reactor
  - 650 MW simplified boiling-water reactor
  - 3 x 155 MW advanced liquid-metal reactors
- General Atomics — 4 x 214 gas-turbine/modular helium reactors
- Qinshan — 1450 MW CANDU reactor



*Palo Verde, Arizona, U.S.A.*



*San Onofre, California, U.S.A.*