

Contribution by Hitachi Nuclear Business to Global Market



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The history of nuclear power in Japan began more than five decades ago and over that time has achieved research and operational results in areas covering research reactors, commercial reactors, experimental fusion equipment, accelerators, fuel cycle facilities, and fast breeder reactors. The construction of nuclear power plants was on the wane in many countries after the accidents at the Three Mile Island Nuclear Power Plant in the USA in 1979 and at the Chernobyl Nuclear Power Plant in the former Soviet Union in 1986. During this period, however, Japan has continued to construct nuclear power plants, and as a result nuclear power generation has become an important energy source that accounts for approximately a third of the power generated in the nation. As a manufacturer, Hitachi, Ltd. has supported the history of nuclear power in Japan from the beginning.

As the demand for energy increases, the world is faced with problems such as the rising cost of fossil resources and emissions of carbon dioxide, a global warming gas. Nuclear power generation is valued for its low emissions of global warming gases and because it has provided a safe and stable energy source. According to the World Nuclear Association, construction of more than 35 reactors is planned over the next decade and plans for more than 200 further reactors are expected in the world.

To respond to this global market, Hitachi integrated its nuclear business with that of General Electric Company (GE), a pioneer in the nuclear

industry. This integration of the businesses in 2007 followed on from 40 years of cooperation between the two companies in nuclear-related technologies and resulted in the establishment of GE-Hitachi Nuclear Energy Holdings LLC in the USA and Hitachi-GE Nuclear Energy, Ltd. in Japan. This alliance on nuclear business is intended as a response to the nuclear renaissance and to meet the world's energy demands through the design and construction of new power plants and the provision of plant services and fuel to existing plants. The expectations placed on Hitachi-GE Nuclear Energy, Ltd. by the global market focus on the following three points in particular.

Firstly, Hitachi has maintained technologies and human resources thanks to our continued involvement in nuclear plant construction in Japan.

Secondly, Hitachi is well regarded for our know-how in the area of shortening construction times, which we have gained through our construction experience in Japan, and in particular for our track record of completing projects on schedule.

Thirdly, Hitachi has had a continuous involvement in the manufacture of key items of plant and is capable of supplying high-quality and highly reliable equipment.

By taking advantage of its synergies with Hitachi, Ltd. and GE, Hitachi-GE Nuclear Energy, Ltd. will continue its development to meet foreseeable global market requirements and provide optimum solutions to future markets.