Energy Development and Power Generation

Energy development, particularly power generation, is one of West JEC's specialties. Over the years, we have accumulated experience and developed know-how in every type of energy conversion system for generating electricity. Our expertise extends from conventional thermal power such as diesel, gas simple cycle, and gas combined-cycle to environmentally friendly systems, including non-conventional generation systems such as nuclear energy and fuel-cells and renewable energy such as geothermal, wind, and solar power generation.

△ Geothermal Power Generation



est JEC has accumulated expertise in geothermal power generation since 1949, when our engineers first collaborated with the Research Laboratory of Kyushu Electric Power Company. Over the years, West JEC engineers have acquired and developed geological, geochemical, geophysical and several other geoscientific technologies for the exploration and evaluation of heat sources, water supplies and reservoir structures. In addition, West JEC uses proprietary software and mathematical models for the evaluation of the geothermal potential and longevity of particular resources at differing levels of exploitation. West JEC's integrated services include evaluation of geothermal resources, engineering of geothermal power generation facilities, assessment of the environmental impact and the economics of resource exploitation, multi-utilization of resources, and personnel training for the operation and maintenance of geothermal reservoirs and power facilities.

* Wind Power, Solar Power, and Clean-Coal Power Generation



Cape Noma wind park, Japan

se of clean, natural energy resources is the future of electric power generation. West JEC has developed capabilities for harnessing wind, fuel cell, and solar (photovoltaic). In addition, West JEC is conducting research and development of combined cycle power generation using pressurized and fluidized bed coal-fired boilers. This system utilizes the energy of pressurized combustion of coal gas to drive a gas-turbine which generates electricity. Combustion of coal gas is a highly efficient energy system.