



## Business Overview

### Power demand and supply in fiscal 2000

In fiscal 2000, power demand from large industrial power users rose 4.4% from the previous year. This increase was caused by higher steel production due to a rise in exports to the rest of Asia in the first half of the year. Increased production of electric machinery due to strong sales of IT products also contributed. Power for electric lights and other general power demand was up 2.5%, mostly due to increased air conditioner use during the heat wave of July and August. As a result, our total sales volume for the year was 75.25 million MWh, up 3% from the previous year.

Steady operation of our nuclear power facilities enabled stable power supply throughout the year.

We will continue efforts to maintain a precise understanding of demand trends in the year ahead. Whenever possible, we will reduce costs and streamline our assets by reviewing power facility development plans or closing facilities as needed.

Millions of MWh				
Demand (power sales volume)	FY 2000	FY 1999	Difference	Percentage change
Light	25.2	24.4	0.8	+3.1%
Power	33.3	32.6	0.7	+2.3%
Total of light and power (All demand excluding demand for specified volumes)	58.5	57.0	1.5	+2.6%
Demand for specified volumes	16.8	16.1	0.7	+4.3%
Total power sales	75.3	73.1	2.2	+3.0%
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(Same data)				
General demand	54.7	53.3	1.4	+2.5%
Demand from large industrial users	20.6	19.8	0.8	+4.4%

Millions of MWh				
Supply (volume of generated and received power)	FY 2000	FY 1999	Difference	Percentage change
Generated by Kyushu Electric Power				
Hydroelectric (Flow rate)	4.1 (91.9)	4.5 (99.6)	-0.4 (-7.7)	-9.7% (-7.7%)
Thermal	31.5	28.7	2.8	+9.7%
Nuclear (Facility utilization factor)	39.5 (85.8)	38.8 (84.0)	0.7 (1.8)	+1.9% (+2.1%)
Total	75.1	72.0	3.1	+4.3%
Power received from other companies	11.5	12.0	-0.5	-4.6%
Pooled power	-3.4	-2.8	-0.6	+19.5%
For pumping water	-0.3	-0.6	0.3	-46.3%
Total	82.9	80.6	2.3	+2.8%



## Power Generation Facilities

### Nuclear

The Genkai and Sendai nuclear power stations we operate have a total of six reactors with a combined maximum output of 5,258 MW. They provided about 46% of our total generated power in fiscal 2000. Our nuclear power stations provide a stable supply of power and greatly help reduce CO<sub>2</sub> emissions.

### Thermal

To diversify our fuel sources, Kyushu Electric Power is developing coal- and LNG-fired thermal power stations. We currently operate 12 thermal power stations with a combined maximum output of 10,744 MW. They provided 36% (excluding power received from other companies) of our total generated power in fiscal 2000. In July 2001, New Generator 1 of the Karita Power Station (360 MW) started operation. This power station is a coal-fired thermal power station incorporating fluidized pressurized bed combustion technology. Operation of two new large coal-fired thermal facilities is planned for the near future: Generator 2 (700 MW) of the Reihoku Power Station in 2003, and Generator 2 (1,000 MW) of the Matsuura Power Station in 2005.

### Hydroelectric

Our general hydroelectric power stations have a combined maximum output of 1,220 MW and our pumped storage hydroelectric power stations have a combined maximum output of 1,150 MW. Together they accounted for 5% (excluding power received from other companies) of our total generated power in fiscal 2000.

Currently we operate three pumped storage hydroelectric power stations: at Morozuka, Tenzan and Ohira. Pumped storage hydroelectric power stations are ideal for dealing with power consumption peaks or emergencies since they adapt well to sudden load fluctuations and can be started and shut down quickly. Omarugawa Power Station, another large pumped storage hydroelectric power station, is currently under construction. When completed in 2008, it will be one of the largest power stations of its kind in Japan with four 300 MW generators.

### Other power sources

Kyushu Electric Power is committed to the use of clean natural power sources such as geothermal, solar and wind energy. We own about 40% of the geothermal generation facilities in Japan. The five geothermal plants we operate include the largest geothermal plant in Japan, the Hatchobara Power Plant (110 MW). The combined output of our geothermal power facilities is 207.5 MW. Geothermal power accounted for 2% (excluding power received from other companies) of our total generated power in fiscal 2000. We have solar generation facilities at 21 of our offices with a combined output of 325 kW. We currently have six wind power generators at Nomamisaki and Koshikijima, with a combined output of 1,750 kW. We plan to add another five generators to Nomamisaki in 2002, bringing the total to 11.



## Power Transmission and Distribution Equipment

Our power transmission and distribution equipment covers the entire Kyushu region. At the end of fiscal 1999, our power transmission equipment had a total length of 9,485 km and our power distribution equipment had a total length of 129,462 km. To enable stable power transmission, Kyushu Electric Power is focusing on maintaining and upgrading this equipment.

### Lowering transmission/distribution losses, creating efficient facilities

To ensure a stable power supply and improve our power transmission efficiency, we are upgrading our 500-kV main lines, and the 220-kV lines that connect our major power stations to Kyushu's cities. Over the years, we have greatly reduced the transmission/distribution loss at our power transmission facilities. The loss factor was 5.4% in fiscal 2000, down from 21.4% in 1951.

As we develop new power facilities and meet rising demand, we are gradually upgrading our power transmission facilities to improve efficiency over the medium and long term.

## Research and Development

In fiscal 2001, Kyushu Electric Power is planning to spend ¥10 billion on technology development, focusing on the two areas described below.

We will also continue to work on areas related to our public obligations, such as environmental initiatives and research on methods of ensuring a stable power supply, while researching other areas of power technology development that could benefit power users.

### Lowering costs

Kyushu Electric Power is engaged in a variety of R&D projects aimed at lowering costs. We are developing more cost-effective equipment, searching for methods of using existing facilities more effectively, developing remaining life assessment technology (to determine the maximum durability of facilities), and seeking new energy-saving methods and other ways to cut facilities costs.

- More advanced methods of installing power distribution facilities
- Permanent-magnet generators and water wheels without guide vanes
- New types of lightning rods for distribution lines
- Preventing growth of marine life in chilled water channels in power stations

### Technology development to increase Groupwide profitability

Seeking to expand the business areas we excel in, we are using the research resources of the entire Group to jointly develop new products and technologies with high earnings and growth potential.

- High-performance ceramic coaters
- Feasibility evaluations of micro-gas-turbine generating facilities
- High-speed Internet connection service
- High-efficiency crime-preventing streetlights