Segment Overview

Composition of Consolidated Operating Revenues for fiscal year ended March 31, 2007 (Fiscal 2006)

(Total ¥573.3 billion)

91.4% Electric Power Business ¥523.8 billion



8.6% Other Businesses ¥49.5 billion

	Op	erating (Sales to customers) Operating venues outside the Group					
Electric Power Business Segment operating revenues/							
Wholesale Electric Power Business	Thermal Power We specialize in coal-fired thermal power, and own a total of 7,812MW of coal-fired power	operating income (Billions of yen)					
We supply electricity to Japan's 10 major electric power companies (EPCOs) through our hydroelectric and thermal power plants.	generation facilities, the largest share in Japan. Our coal-fired facilities boast a high load factor, fulfilling base demand for electricity and superior economic efficiency, due to the lower cost per calorie of overseas coal compared with other fossil fuels.	527.0 523.8					
	Hydroelectric Power We have developed several large-scale hydro- electric power plants and now own hydroelectric power-generating facilities with a total capacity of 8,556MW. As these facilities are able to rapid- ly respond to changes in electricity demand, they are primarily used in the daytime, when demand is at its peak.						
Through our power trans- mission and transforming facilities, we also provide transmission services to nine EPCOs, excluding Okinawa Electric Power Co., Inc.	Power Transmission/Transforming We own major transmission lines, such as those connecting Honshu with Hokkaido, Shikoku and Kyushu respectively (with a total length of 2,408km). We also own a frequency converter station that links the different frequencies of Eastern and Western Japan.						

Other Electric Power Businesses

Our subsidiaries and affiliates are engaged in operating wind power plants, the wholesale supply of electricity to EPCOs by IPPs and the wholesale supply of electricity to PPSs.

87.1 61.4 2006/3 2007/3

Electric Power-Related Businesses

We operate businesses that complement and contribute to the smooth and efficient implementation of our Electric Power Business.

Design, construction and maintenance of facilities

Design, construction, and inspection, maintenance, and repair of electric power facilities such as power plants; port operations related to fuel and coal ash **Supply of fuel for power generation and materials** Coal mine development, coal imports and transportation **Services**

Management of welfare facilities; computing services and others



Other Businesses

Fully utilizing the group's management resources and know-how, we operate businesses that include overseas power generation, new power businesses in Japan, such as waste-fueled power generation and co-generation, environmental businesses, the telecommunications business, and domestic and overseas engineering and consulting.



Business Review in fiscal 2006 and Outlook

Thermal Power In the fiscal year ended March 31, 2007 (Fiscal 2006), steady capacity utilization in the second half of the fiscal year led to a load factor of 75%, which exceeded our initial forecast of 70%. However, compared to the previous fiscal year, in which a record-high load factor of 84% was reached owing to record-setting severe winter weather, electricity sales volume declined by 11% year on year to 48 billion kWh, and operating revenues declined by 11% year on year to ¥326.5 billion.

For fiscal 2007, we forecast a load factor at 75% and an electricity sales volume of 48.2 billion kWh.

To keep coal-fired power, which offers advantages of supply stability and economic efficiency, at the core of our business operations, we believe that it is important to enhance both cost competitiveness and facility reliability, while maintaining high-capacity utilization at our plants. In addition to enhancing the competitiveness of existing power plants through an innovative approach to coal procurement and continuing efforts to reduce operation costs, we will also conduct an optimal level of maintenance to prevent the decline of thermal efficiency from aging and deterioration. Moreover, we are pressing steadily ahead with construction of the Isogo New No.2 Thermal Power Plant (600MW and scheduled to commence operations in July 2009), which will become a new source of earnings.

Hydroelectric Power In fiscal 2006, as a result of high water flow, with the water supply rate increasing to 112% from the previous year's 90%, which was caused by low water flow, electricity sales volume increased by 24% year on year to 10.6 billion kWh. However, operating revenues declined by 3% year on year to ¥123.5 billion, primarily owing to the rate reductions that took effect from October 2005.

For fiscal 2007, we are expecting an electricity sales volume of 9.7 billion kWh based on an average water supply rate of 100%.

While aging of the existing power plants continues, it is important to maintain and improve profitability at existing plants. To this end, we are promoting measures to improve our capabilities to diagnose the remaining service lifespan of facilities as well as to improve the maintenance and repair processes. Through such efforts, we are pursuing cost reductions and a high level of Operations Management (O&M). At the same time we are also implementing value-enhancing investments to existing plants such as the comprehensive upgrade of major equipment, aiming to increase power generation volume by boosting generation efficiency and to improve facility reliability.

Transmission and Transforming

Operating revenues in fiscal 2006 declined by 5% year on year to ¥55.2 billion, primarily owing to the rate reductions that took effect from October 2005. Covering regional utilities' service areas, we play an important role in the overall management of Japan's electricity supply. We believe that the importance of our facilities will continue to grow prominently, given the progressive deregulation of the electricity industry, and this is expected to spur the revitalization of power distribution across wider areas.

In fiscal 2006, in spite of an increase in wind-power sales volume as a result of the commencement of operations at the Koriyama-Nunobiki Kogen Wind Farm and the full-year operations at the Setana Seaside Wind Farm, which came on line in the previous fiscal year, a decrease in capacity utilization at thermal plants in the IPP and electricity supply business for PPS consequently led to the decline in total electricity sales volume by 3% year on year to 1.7 billion kWh. However, operating revenue increased by 2% year on year to ¥16.9 billion.

For fiscal 2007, J-POWER is expecting full-year contributions from the Koriyama-Nunobiki Kogen Wind Farm to support a slight increase in electricity sales volume to 1.8 billion kWh.

In the electricity supply business for PPS, although sales volume by PPS in the domestic electricity retail market is still limited, we will explore the feasibility of new development, while carefully monitoring the need for new power sources and trading trends in the wholesale electricity market. In wind power generation, we are working toward the launch of new development plans that will entail the exploration of favorable sites and the reduction of construction costs.

Operating revenues increased by 4% year on year to ¥250.1 billion, and operating income rose by 16% to ¥15.6 billion, primarily owing to sales contributions from newly consolidated subsidiaries and Group-wide initiatives to reduce outsourcing and other costs.

The majority of business in this segment is accounted for by intra-Group transactions such as maintenance and coal transportation for our plants. Operating revenues from sales to customers outside the Group amounted to ¥27.0 billion, accounting for 11% of overall operating revenues in this segment.

In fiscal 2006, operating revenues jumped 69% year on year to ¥28.5 billion, and operating income increased by ¥0.8 billion to ¥1.2 billion, primarily owing to sales recorded by newly consolidated subsidiaries.

Going forward, J-POWER will strengthen its initiatives in areas outside of the Group, including the sales of coal (please see p. 20 for further details). As for the Overseas Power Generation Business, the majority of its profits are recorded as investment profits on an equity-method basis so far. We will look into promising projects, in which we are seeking to acquire a major stake (please see p.18 for further details).

Electric Power Business— Characteristics and Strengths

Wholesale Electric Power Business

Thermal Power

J-POWER's key strength in thermal power generation is our focus on coal-fired power generation, which has strong cost competitiveness and fulfills base demand for electricity with a high load factor. We have long maintained the number one share in coal-fired power generation capacity since becoming the first company in Japan to use overseas coal in a thermal power plant. We have also enjoyed substantial economies of scale by pioneering the building of large-scale coal-fired power plants. As a fuel, coal is a natural resource found in abundance throughout the world and is arguably the most economically stable fossil fuel available. This has become even more notice-

Share of Coal-Fired Power Generation Capacity (As of March 31, 2007)



Thermal Power Sales and Load Factor



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Takehara Thermal Power Plant (Hiroshima Prefecture)

able in light of the recent spate of spiraling oil price increases. These strengths contribute to the formation of attractive rates, and our longterm contracts with EPCOs, generate synergetic effects for forming a stable earnings foundation.

As of March 31, 2007, we operate seven coal-fired power plants with a total capacity of 7,812 MW, representing 21% of the coal-fired power generation facilities in Japan. For fuel, we procure coal from several countries, mainly from Australia, based on long-term or yearly contracts.

Large-Scale Coal-Fired Unit Capacity and First Year of Operation



Calorific Unit Price by Fossil Fuel (Imports)



Wholesale Electric Power Business

Hydroelectric Power and Power Transmission/Transforming

Hydroelectric Power

Hydroelectric power is an essential power source, particularly in Japan, for three main reasons. First, it is currently the only truly domestic energy source on a meaningful scale. Second, it is a clean energy source with virtually no fuel expenses, namely marginal costs, and offers many benefits in terms of environmental issues, especially because of no CO₂ emissions. Finally, it has high operational flexibility, which is suitable for intra-day and intra-seasonal demand and supply balancing.

Share of Hydroelectric Power Generation Capacity (As of March 31, 2007)



Hydroelectric Power Sales and Water Supply Rate





Nukabira Power Plant (Hokkaido)

J-POWER has the advantage of high technological expertise in developing hydroelectric power and possesses the most advanced technologies available in Japan, particularly for the construction of dams and large-scale underground structures. We have built and operated hydroelectric power plants for almost half a century, starting with the development of large-scale hydroelectric power plants represented by the Sakuma Power Plant, which started operations in 1956, and the development of pumped-storage power plants, which excel in adjusting output in response to demand peaks. As of March 31, 2007, we operate 59 hydroelectric power plants throughout Japan, with a total capacity of 8,556 MW, comprising 19% of the total hydroelectric power generation facilities in Japan.

Considering the limited availability of sites suited to the development of large-scale hydroelectric power plants in Japan, we believe our strong market share and economies of scale in hydroelectric power generation will endure for the foreseeable future.

Our hydroelectric power plants generate a steady stream of earnings based on long-term contracts with EPCOs. Roughly 80% of rate for conventional-type facilities and 100% of rate for pumped-storagetype facilities are fixed rates.

Transmission and Transforming Facilities

J-POWER's transmission and substation facilities not only distribute electricity from our power plants to demand centers, but also play a huge role in the total operation of Japan's power grid. In particular, we operate critical facilities that support the wide-area power interchange in Japan, such as extra-high-voltage transmission lines connecting Honshu with Hokkaido, Shikoku and Kyushu respectively, as well as the Sakuma Frequency Converter Station, which was the first in Japan to enable transmission of electricity between the different frequencies of Eastern Japan (50 Hz) and Western Japan (60 Hz).

J-POWER's Rate Structure for Wholesale Electric Power Business



- Hydroelectric Power and Transmission



With regard to hydroelectric power, transmission and substation facilities, capital costs, fixed-asset taxes, etc. comprise a high proportion of the total cost, and annual cost fluctuations are small. Therefore their contract rates are set at a lower level from the start of operations and are not subject to regular revision to ensure long-term rate stability. In the case of conventional hydroelectric power, the fixed portion of rate accounts for a higher proportion, minimizing the impact on sales caused by power output fluctuations. The contract rates of both pumped storage hydroelectric power and transmission are based entirely on the fixed rate. These rate structures enable J-POWER to generate stable cash flows.

Deregulation of the Electric Power Industry and J-POWER's Response

The deregulation of the electric power industry in Japan has created a new environment in which business enterprises other than electric power companies (EPCOs) can participate in electricity wholesaling and retailing businesses. Since April 2005, the deregulation of the retail electricity sector was expanded to approximately 60% of the market, and wholesale electricity transactions were commenced in the Japan Electric Power Exchange (JEPX).

Though the deregulation has had the effect of increasing competition and applying downward pressure on prices, J-POWER considers the deregulation to be a positive change toward expanding its business opportunities from a long-term perspective. We also recognize that it is essential for us to vigorously respond to these changes, and we are promoting the following sorts of initiatives to achieve stable growth. * We are developing new types of wholesale electricity businesses such as the IPP business and the electricity supply business for PPSs (See page 27, Other Electric Power Businesses).

* We have commenced sales of electricity to the wholesale markets such as JEPX by utilizing a part of existing generation capacity (See page 21, "Market Trading of Electricity" in the special features "Power Generation as the Core of a Diversified Business").

Further deregulation of the electric power industry has been under discussion since April 2007 in the Power Business Subcommittee of the Advisory Committee for Natural Resources and Energy. While monitoring carefully the trends toward deregulation and responding flexibly to changes in the business environment, we aim to expand business opportunities by making use of new options created by the deregulation.



Deregulation of Japan's Electric Power Industry

Other Electric Power Businesses

IPP, for PPS and Wind Power

Facilities of Other Electric Power Businesses





Setana Seaside Wind Power Farm Green Power Kuzumaki Wind Farm

Mihama Seaside Power (for PPS) Nagasaki-Shikamachi Wind Farm Note: Including facilities of subsidiaries and affiliates.

Flootsisity Complex

Aso-Nishihara Wind Farm (Kumamoto Prefecture)

In response to the deregulation in the electric power industry, J-POW-ER is focusing efforts on new types of wholesale electricity businesses. Through our subsidiaries and affiliates, we are engaging in the wholesale electricity supply to EPCOs by IPPs (Independent Power Producers), as well as the wholesale electricity supply for PPSs (Power producers and suppliers), which are new entrants into the electricity retailing business, and wind power generation.

As of March 31, 2007, we are now operating three power plants as IPPs with a total capacity of 522 MW, and three power plants for PPSs with a total capacity of 322 MW. Our wind power generation facilities comprise nine farms/plants currently in operation, with a total capacity of 211 MW, representing a top-ranked capacity in Japan. These businesses are areas where we are able to apply our core competencies in the power generation business.

Wind Power	Capacity (kW)	Ownership	Completion date
 Tomamae Winvilla 	30,600	100%	December 2000
 Nikaho kogen 	24,750	67%	December 2001
Tokyo Bayside	1,700	50%	March 2003
•Green Power Kuzumaki	21,000	100%	December 2003
 Nagasaki-Shikamachi 	15,000	70%	February 2005
•Aso-Nishihara	17,500	81%	February 2005
 Tahara Bayside 	22,000	66%	March 2005
•Setana Seaside	12,000	100%	December 2005
•Koriyama-Nunobiki Kogen	65,980	100%	February 2007
Subtotal	210,530		

Total of Other Electri	c Power Bus	inesses	1,054,9	950
Subtotal	322,420			
Mihama Seaside	104,770	Gas	50%	October 2005
•Bayside Energy	107,650	Gas	100%	April 2005
 Ichihara Power 	110,000	Gas	60%	October 2004
Wholesale Power for PPS				
Subtotal	522,000			
Tosa	150,000	Coal	45%	April 2005
●Itoigawa	134,000	Coal	80%	April 2003*
Genex Mizue	238,000	Gas Oil Residue	40%	June 2003
IPP				
Electricity Supply	Capacity (KW)	Fuel Type	Ownership	Completion date

· Denotes projects within the scope of consolidation

* Limited J-POWER participation

Electric Power Business Facilities

(As of March 31, 200



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Other Electric Power Businesses

Generation facilities (maximum capacity)				
Wind power	9	211MW		
IPPs	3	522MW		
For PPSs	3	322MW		
Total	15	1,055MW		
Note: Including facilities of subsidiaries and affili	iates (Does not take proportion of equi	tv holdings into accou		

8,556MW

7,825MW

16.380MW

2,407.6km

1,973.4km

267.2km 4,292MVA

300MW

2,000MW

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