

Electric Power Business

- Wholesale electric power business (thermal power, hydroelectric power, power transmission/transformation)
- Other electric power business (IPPs, wholesale power for PPSs, and wind power)



Electric Power-Related Business

- Planning, construction, inspection, maintenance and repair of power generation facilities
- Harbor transport of fuel and coal ash, development of coal mines, import and transport of coal, etc.



The J-POWER Group has four business segments. Besides the electric power business segment—centered on wholesale power businesses, including mainstay thermal and hydroelectric power operations, as well as power transmission/transformation operations, and growing operations involving wind power, IPPs, and other new types of business—we are engaged in electric power-related business segment operations that support the smooth execution of electric power business, overseas business segment operations that we plan to build into our second major area of business, and other business segment operations that further leverage our resources and know-how.



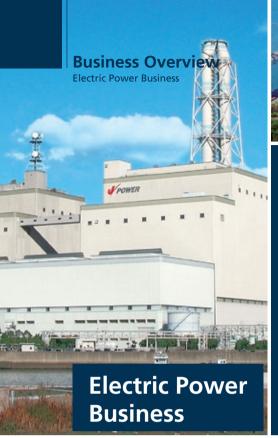
Overseas Business

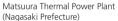
- Overseas power generation investment and related businesses
- Overseas engineering consulting business, etc.



Other Business

lelecommunications business, coal sales business, environment-related business, etc.









The Chuaoku

Electric Power

Company

20.9%

20.2%

Company

Tokyo Electric Power



- *1 In fiscal years through the year ended March 31, 2009 (fiscal 2008), segment income is stated in terms of operating income. From the fiscal year ended March 31, 2010 (fiscal 2009), segment income is stated in terms of ordinary income.
- *2 Since the ratios of sales by type of customer have been rounded to two significant digits, they do not add to 100%.

Wholesale Electric Power Business (Thermal Power)

Performance Highlights

In the fiscal year ended March 31, 2012, the electricity sales volume remained roughly the same as the previous year at 53.7 billion kWh. Likewise, the load factor was 77% compared with the previous year's 78%. Although operating rates at electric power plants were on the whole satisfactory, this result was due to the suspension of operations at the Isogo Thermal Power Plant for two months following an on-site fire* in November 2011. Operating revenues from thermal power rose 4.4% year on year, to ¥424.4 billion, primarily owing to an increase in the sales unit price in thermal power due to a rise in fuel prices.

* On-site fire at the Isogo Thermal Power Plant Operations at the Isogo Thermal Power Plant were suspended due to an on-site fire that broke out on November 24, 2011. Operations were resumed at the plant's No. 2 Unit on January 19 and at the No. 1 Unit on January 23, 2012.

Share of Coal-Fired Power Generation Capacity in Japan

18.4%

The Kansai **Electric Power** Company

(As of March 31, 2012) J-POWER **Electric Power** Companies and Others

Source: Prepared by J-POWER based on reports issued by the Agency for Natural Resources and Energy

Overview of Operations and Salient Features

J-POWER specializes in coal-fired thermal power generation. Currently, J-POWER operates seven coal-fired thermal power plants in Japan with a total capacity of 8,412 MW, representing 21% (the top share) of the coal-fired power generation facilities in Japan. The strength of coal-fired power is the high load factor of its facilities that, due to their high cost-competitiveness, represent a power source that fulfills the base demand for electricity.

J-POWER's first coal-fired thermal power plant commenced operations in 1963, in a form that was in keeping with Japan's then policy of using domestically produced coal. Following the oil shocks of the 1970s, the Company responded to government plans for more diversification in the mix of power sources that had previously been centered on oil-fired power generation. In 1981, J-POWER began operating the Matsushima Thermal Power Plant, the first in Japan fueled primarily with imported coal. In addition to subsequently developing a series of large-scale power plants—such as those at Matsuura and Tachibanawan—that run on imported coal and increasing the output of its facilities, the Company worked to improve power generation efficiency by enhancing steam conditions and increasing the size of plants in its efforts to improve competitiveness and decrease environmental impact. Unfailingly carrying out proper maintenance of its power generation

Business Overview

Electric Power Business

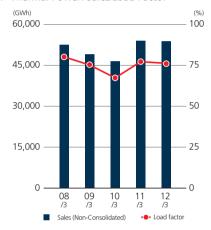
facilities, J-POWER is minimizing decreases in efficiency and technical failures due to facility aging while working to maintain and improve facility and equipment reliability.

J-POWER is maintaining its efforts in geothermal power and is currently continuing with its Onikobe Geothermal Power Plant that is in operation in Miyagi Prefecture and examining a new location in Yuzawa, Akita Prefecture, with a view to its commercialization. Mostly derived from revenues from the sale of electricity supplied to 10 EPCOs, the earnings of J-POWER's thermal power business are based on electricity supply contracts with individual sites on a cost basis. In undertaking the supply of electric power, J-POWER adopts a cost basis calculated on a fair assumed cost plus fair return on capital, secures the income needed for business operations, and recovers investment capital. (For more details, please refer to Rate Structure for Domestic Wholesale Electric Power Business on page 27.)

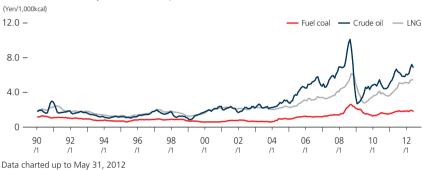


Onikobe Geothermal Power Plant (Miyagi Prefecture)

▶ Thermal Power: Sales/Load Factor



Calorific Unit Price by Fossil Fuel (Imports)



Source: The Institute of Energy Economics, Japan

▶ J-POWER's Coal-Fired Power Plants in Japan

(As of March 31, 2012)

Power Plants		Beginning of Operation	Location	Maximum Capacity (kW)
Isogo	New No. 1 New No. 2	2002 2009	Kanagawa Prefecture	600,000 600,000
Takasago	No. 1 No. 2	1968 1969	Hyogo Prefecture	250,000 250,000
Takehara	No. 1* ¹ No. 2* ¹ No. 3	1967 1974* ² 1983	Hiroshima Prefecture	250,000 350,000 700,000
Tachibanawan	No. 1 No. 2	2000 2000	Tokushima Prefecture	1,050,000 1,050,000
Matsushima	No. 1 No. 2	1981 1981	Nagasaki Prefecture	500,000 500,000
Matsuura	No. 1 No. 2	1990 1997	Nagasaki Prefecture	1,000,000 1,000,000
Ishikawa Coal	No. 1 No. 2	1986 1987	Okinawa Prefecture	156,000 156,000
Total				8,412,000

^{*1} The plan calls for the two existing units to have been replaced by a single coal-fired thermal power facility with the same large-scale 600 MW capacity by around 2020.

J-POWER's Geothermal Power Plant in Japan

(As of March 31, 2012)

Power Plant	Beginning of Operation	Location	Maximum Capacity (kW)
Onikobe	1975	Miyagi Prefecture	15,000

^{*2} Converted from heavy oil-fueled boiler to coal-fueled fluidized boiler in 1995

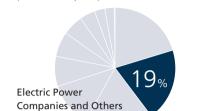
Wholesale Electric Power Business (Hydroelectric Power)

Performance Highlights

Although the water supply rate rose from 106% in the previous fiscal year to 115% in the fiscal year under review, the operations of some hydroelectric power plants were suspended as a result of the impact of heavy rains*1 and typhoons.*2 Thus, the electricity sales volume and operating revenues from hydroelectric power plants showed little growth on the previous fiscal year, at 10.3 billion kWh and ¥103.4 billion, respectively.

- *1 The heavy rains that fell in Niigata and Fukushima, July 29-30, 2011
- *2 Typhoon No. 12 that passed close to western Japan, September 1-4, 2011

Share of Hydroelectric Power Generation Capacity in Japan (As of March 31, 2012)



Source: Reports issued by the Agency for Natural Resources and Energy

J-POWER

Overview of Operations and Salient Features

Currently, J-POWER owns and operates 59 hydroelectric power plants throughout Japan. Their total capacity of 8,570 MW represents 19% of Japan's total hydroelectric power capacity, making J-POWER Japan's second-ranked company. J-POWER boasts a track record in the building and operation of hydroelectric power plants that extends back more than half a century.

The Sakuma Power Plant that began operating in 1956 in a bid to solve postwar power shortages was the first of the many large-scale, conventional hydroelectric power plants that J-POWER has developed. Subsequently, from the 1970s onward, the Company developed large-scale hydroelectric power plants, such as that at Shintoyone, as a measure to even out the pronounced summer peak in domestic electricity demand. The Company efficiently

maintains and manages the power stations that it has built and will be stably operating them for a long time to come.

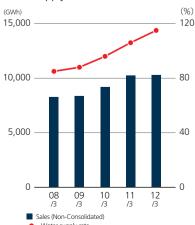
A salient feature of J-POWER's hydroelectric power plants is their high capacity per power station. As its mainstays are large-scale, conventional hydroelectric power plants—built at water systems endowed with an abundant volume of water capacity—and pumped-storage hydroelectric power plants, the Company is contributing to the power supply around the country. These facilities are utilized as an energy source with superior output adjustment functions that have the peak demand capacity to meet the intra-day and intra-seasonal supply-demand balancing requirements of Japan's power grid.

Most of J-POWER's rates for conventionaltype facilities and 100% of the rates for facilities of the pumped-storage type are fixed rates. J-POWER sells hydroelectric power to EPCOs under the terms of supply contracts based on costs calculated by water system or plant location, for each type of plant, securing the income needed for business operations and recovering investment capital. (For more details, please refer to Rate Structure for Domestic Wholesale Electric Power Business on page 27.)

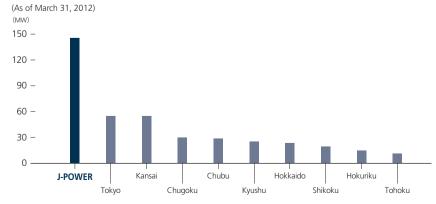


Okukiyotsu Power Plant (Niigata Prefecture)

Hydroelectric: Power Sales/ Water Supply Rate



▶ Average Generation Capacity per Hydroelectric Power Plant of J-POWER and EPCOs



Source: Reports issued by the Agency for Natural Resources and Energy

Electric Power Business

Comprehensive Renewal of Hydroelectric Power Plant

J-POWER is undertaking the comprehensive renewal of its main power generating facilities in hydroelectric power plants that have been in operation for some time. This move is designed to not only extend the operating lives of power plants and improve their reliability, but also to improve their power-generating efficiency by optimal design utilizing the latest technologies as the Company does its utmost to maintain a stable power supply.

At the Tagokura Power Plant in Fukushima Prefecture, the Company proceeded with a plan that saw successive upgrades made to the main electrical equipment in each of the facility's four units in the eight-year period between 2004 and 2012. Having completed the work in May 2012, the power plant's total output has been increased from 380 MW to 400 MW. Besides the Tagokura Power Plant, the Nukabira Power Station in Hokkaido has also undergone a comprehensive upgrade.



General view of the comprehensive upgrade work under way at Tagokura Power Plant (Fukushima Prefecture)

J-POWER's Major Hydroelectric Power Plants in Japan

(As of March 31, 2012)

Power Plants	Beginning of Operation	Location	Maximum Capacity (kW)	Туре
Shimogo	1988	Fukushima Prefecture	1,000,000	Dam conduit type, genuine pumped storage
Okutadami	1960	Fukushima Prefecture	560,000	Dam conduit type
Otori	1963	Fukushima Prefecture	182,000	Dam type
Tagokura	1959	Fukushima Prefecture	395,000*	Dam type
Tadami	1989	Fukushima Prefecture	65,000	Dam type
Taki	1961	Fukushima Prefecture	92,000	Dam type
Kuromatagawa No. 1	1958	Niigata Prefecture	61,500	Dam conduit type
Okukiyotsu	1978	Niigata Prefecture	1,000,000	Dam conduit type, genuine pumped storage
Okukiyotsu No. 2	1996	Niigata Prefecture	600,000	Dam conduit type, genuine pumped storage
Numappara	1973	Tochigi Prefecture	675,000	Dam conduit type, genuine pumped storage
Misakubo	1969	Shizuoka Prefecture	50,000	Dam conduit type
Shintoyone	1972	Aichi Prefecture	1,125,000	Dam conduit type, genuine pumped storage
Sakuma	1956	Shizuoka Prefecture	350,000	Dam conduit type
Miboro	1961	Gifu Prefecture	215,000	Dam conduit type
Miboro No. 2	1963	Gifu Prefecture	59,200	Dam conduit type
Nagano	1968	Fukui Prefecture	220,000	Dam type, mixed pumped storage
Yugami	1968	Fukui Prefecture	54,000	Dam conduit type
Tedorigawa No. 1	1979	Ishikawa Prefecture	250,000	Dam conduit type
Totsugawa No. 1	1960	Nara Prefecture	75,000	Dam conduit type
Totsugawa No. 2	1962	Wakayama Prefecture	58,000	Dam conduit type
Ikehara	1964	Nara Prefecture	350,000	Dam type, mixed pumped storage
Nanairo	1965	Wakayama Prefecture	82,000	Dam conduit type
Futamata	1963	Kochi Prefecture	72,100	Dam conduit type
Sendaigawa No. 1	1965	Kagoshima Prefecture	120,000	Dam type

Note: Includes power plants with maximum output of 50,000 kW or more $\,$

 $^{^{\}star}$ Output increased from 395,000 kW to 400,000 kW, May 2012

Wholesale Electric Power Business (Power Transmission/Transformation)

Performance Highlights

In fiscal 2011, operating revenues from power transmission/transformation business decreased 2.4% year on year, to ¥53.0 billion.

Overview of Operations and Salient Features

As a wholesale supplier of electric power operating a wide array of power supplies, J-POWER owns and operates approximately 2,400 kilometers of power transmission lines and eight substations and converter stations throughout Japan. In addition to transmitting electric power generated by its own power stations to demand areas, J-POWER supports part of the grid of Japan's power companies and coordinates between the different regional power companies, fulfilling a major role in the overall regionally based operation of Japan's entire power system.

In particular, we operate critical facilities that support the wide-area power interchange in Japan, such as interconnecting lines (Kitahon HVDC Link, Honshi Interconnecting Line, Anan-Kihoku HVDC Link, and Kanmon Interconnecting Line) connecting Honshu with Hokkaido, Shikoku, and Kyushu as well as the Sakuma Frequency Converter Station, which enables the transmission of electricity between the different frequencies of eastern Japan (50 Hz) and western Japan (60 Hz).

J-POWER's power transmission/transformation facilities contributed to alleviating the tight regional electricity supply-demand balances that followed the Great East Japan Earthquake. The Company will maintain facility reliability and focus efforts on ensuring stable operations.

Also maintaining a power communications network throughout Japan, J-POWER provides facility protection, monitoring, and control as well as operational management to contribute to the stable operation of the power plants and the power grid.

▶ Major Transmission Lines

(As of March 31, 2012)

Transmission Lines	Beginning of Operation	Location	Total Lines	Voltage
Tokachi Trunk Line	1956	Hokkaido Prefecture	214.4km	187(kV)
Kitahon HVDC Link	1979	Hokkaido Prefecture – Aomori Prefecture	167.4km	DC±250(kV)
Tadami Trunk Line	1959	Fukushima Prefecture – Tokyo Metropolitan Area	216.2km	275kV-500(kV)
Sakuma East Trunk Line	1956	Shizuoka Prefecture – Tokyo Metropolitan Area	197.2km	275(kV)
Sakuma West Trunk Line	1956	Shizuoka Prefecture – Aichi Prefecture	107.7km	275(kV)
Miboro Trunk Line	1960	Gifu Prefecture – Aichi Prefecture	108.6km	275(kV)
Nahari Trunk Line	1960	Kochi Prefecture – Ehime Prefecture	119.9km	187(kV)
Honshi Interconnecting Line	1994	Kagawa Prefecture – Okayama Prefecture	127.0km	500(kV)
Anan-Kihoku HVDC Link	2000	Tokushima Prefecture – Wakayama Prefecture	99.8km	DC±250(kV)
Kanmon Interconnecting Line	1980	Fukuoka Prefecture – Yamaguchi Prefecture	64.2km	500(kV)

Substations (As of March 31, 2012)

Substations	Beginning of Operation	Location	Output
Minami Kawagoe	1959	Saitama Prefecture	1,542,000(kVA)
Nishi Tokyo	1956	Tokyo Metropolitan Area	1,350,000(kVA)
Nagoya	1956	Aichi Prefecture	1,400,000(kVA)

▶ Frequency Converter Station

(As of March 31, 2012)

Frequency Converter Station	Beginning of Operation	Location	Output
Sakuma	1965	Shizuoka Prefecture	300,000(kW)

▶ AC/DC Converter Stations

(As of March 31, 2012)

AC/DC Converter Stations	Beginning of Operation	Location	Output
Hakodate	1979	Hokkaido Prefecture	600,000(kW)
Kamikita	1979	Aomori Prefecture	600,000(kW)
Kihoku	2000	Wakayama Prefecture	1,400,000(kW)
Anan	2000	Tokushima Prefecture	1,400,000(kW)

Rate Structure for Domestic Wholesale Electric Power Business

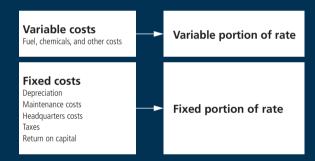
J-POWER calculates contract rates for the wholesale electric power business and its electric power transmission services on a fair assumed cost plus fair return on capital basis.

Individual rates are contracted with power companies and producers based on costs calculated by the plant or water system, for each type of plant. Our rate includes both a fixed and a variable portion.

Thermal Power Generation

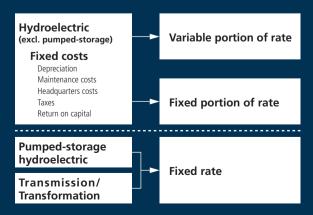
Regarding contract rates for thermal power facilities, fuel costs, and other variable costs comprise a high weighting of total costs, and maintenance and operating costs fluctuate greatly from year to year. We therefore adjust rates every two years (every year for the portion corresponding to coal costs if there are substantial price fluctuations). Variable costs such as fuel costs are incorporated into the variable portion of the rate, reflecting the amount of electricity supplied. Rates are also adjusted every quarter to offset the effects of actual fluctuations in fuel costs associated with exchange rates used in fuel procurement and with changes in heavy/light oil prices. The fixed portion of the rate consists of the fixed portion of expenses other than variable expenses. The fixed portion of the rate includes depreciation, return on capital, repair costs and

other maintenance and operating costs. Unless otherwise impacted by an increase in maintenance and operating costs or major investment in plant facilities, the fixed portion of the rate generally has been decreasing due to the progressive depreciation of facilities and reductions in expenses, such as interest expense in recent years.



Hydroelectric Power Generation and Power Transmission/Transformation

With regard to rates for hydroelectric power and transmission, substation facilities, depreciation, return on capital, and other fixed costs comprise a large weighting of total costs, so contract rates are not subject to regular revision, which ensures long-term rate stability. Revisions may be conducted based on negotiations with electric power companies if substantial changes take place in economic conditions (interest rates, prices, etc.) or business conditions (deregulation, etc.). Contract rates for hydroelectric power facilities, excluding pumped storage, are comprised of a fixed portion of the rate, which accounts for approximately 80% of the contract rate and a variable portion of the rate reflecting the amount of electricity supplied, which accounts for the remaining approximately 20%. The 20% portion increases and decreases depending on water supply rates, but this does not have a substantial impact. Contract rates for pumped storage hydroelectric power and transmission are based entirely on the fixed portion of the rate.



Other Electric Power Business (IPPs, Wholesale Power for PPSs, and Wind Power)

Performance Highlights

In fiscal 2011, total electricity sales volume increased 37.5% year on year, to 2.0 billion kWh. Operating revenues increased 63.0% year on year, to ¥22.3 billion.

Overview of Operations and Salient Features

Through subsidiaries and affiliates, J-POWER is engaged in wind power operations, operates independent power producers (IPPs) that provide wholesale electricity supplies to EPCOs, and provides wholesale electricity supplies to power producers and suppliers (PPSs).

Share of Wind Power Generation Capacity in Japan

(As of March 31, 2012)



Source: Compiled from Japan Wind Power Association Report

Electricity Sales Volume: IPPs, Wholesale Power for PPSs, and Wind Power



- Sales of IPPs and Wholesale power for PPSs (left)
- Sales of wind power (left)Operating revenues (right)

Wind Power Generation

The J-POWER Group owns 18 wind farms (208 units) throughout Japan with a total capacity of 353 MW. This accounts for approximately 13% of Japan's total wind power capacity, making J-POWER the second-ranked company in Japan.

Drawing on its long history of accumulating expertise and technologies in the building, operation, and maintenance of power stations and transmission lines, the J-POWER Group created a system that covers the full gamut of the wind farm business, from surveys of wind conditions to wind farm design, construction, and operation and maintenance (O&M). Having merged with its wholly owned wind power business company, J-POWER is strengthening its business structure by such measures as making its O&M systems more efficient while moving ahead with the development of new locations with a view to expanding business opportunities.



Green Power Kuzumaki Wind Farm (Iwate Prefecture)



Koriyama-Nunobiki Kogen Wind Farm (Fukushima Prefecture)

With regard to offshore wind power, which is said to be less susceptible to wind disruption in comparison with land-based generation and enables the construction of larger-scale facilities, J-POWER is also advancing research into power generation system technologies and working toward their practical use.

IPPs, Wholesale Power for PPSs

Wholesale electricity supplies to EPCOs through IPPs are a system introduced under the 1995 revision to the Electricity Utilities Industries Law. J-POWER owns and operates three IPP facilities, with a total capacity of 522 MW. Wholesale electricity supplies to PPSs were recognized under the 2000 revision to the Electricity Utilities Industries Law. The Company currently owns and operates three facilities in the Tokyo Bay area, with a total capacity of 322 MW.



Bayside Energy Ichihara (Chiba Prefecture)

▶ Wind Power Project List

(As of March 31, 2012)

Wind Power Farms/Plants	Operating Companies	Location	Ownership	Capacity	(kW)*1	Completion Date*2
Sarakitomanai Wind Farm	Sarakitomanai Wind Power Co., Ltd.	Hokkaido Prefecture	49%	14,850	(9)	2001 (2009)
Tomamae Winvilla Wind Farm	J-Wind Co., Ltd.	Hokkaido Prefecture	100%	30,600	(19)	2000
Shimamaki Wind Farm	J-Wind Co., Ltd.	Hokkaido Prefecture	100%	4,500	(6)	2000 (2009)
Setana Seaside Wind Power Farm	J-Wind Co., Ltd.	Hokkaido Prefecture	100%	12,000	(6)	2005
Green Power Kuzumaki Wind Farm	J-Wind Co., Ltd.	Iwate Prefecture	100%	21,000	(12)	2003
Nikaho Kogen Wind Farm	Nikaho-Kogen Wind Power Co., Ltd.	Akita Prefecture	67%	24,750	(15)	2001
Koriyama-Nunobiki Kogen Wind Farm	J-Wind Co., Ltd.	Fukushima Prefecture	100%	65,980	(33)	2007
Hiyama Kogen Wind Farm	J-Wind Co., Ltd.	Fukushima Prefecture	100%	28,000	(14)	2011
Tokyo Bayside Wind Power Plant	J-Wind Co., Ltd.	Tokyo Metropolitan Area	100%	1,700	(2)	2003
Irouzaki Wind Farm	J-Wind Co., Ltd.	Shizuoka Prefecture	100%	34,000	(17)	2010
Tahara Bayside Wind Farm	J-Wind Co., Ltd.	Aichi Prefecture	100%	22,000	(11)	2005
Tahara Wind Farm	J-Wind Co., Ltd.	Aichi Prefecture	100%	1,980	(1)	2004
Awara-Kitagata Wind Farm	J-Wind Co., Ltd.	Fukui Prefecture	100%	20,000	(10)	2011
Yokihi no Sato Wind Park	J-Wind Co., Ltd.	Yamaguchi Prefecture	100%	4,500	(3)	2003 (2009)
Nagasaki-Shikamachi Wind Farm	Nagasaki-Shikamachi Wind Power Co., Ltd.	Nagasaki Prefecture	70%	15,000	(15)	2005
Aso-Nishihara Wind Farm	Green Power Aso Co., Ltd.	Kumamoto Prefecture	88%	17,500	(10)	2005
Aso-Oguni Wind Farm	Green Power Aso Co., Ltd.	Kumamoto Prefecture	88%	8,500	(5)	2007 (2009)
Minami Oosumi Wind Farm	Minami Kyushu Wind Power Co., Ltd.	Kagoshima Prefecture	80%	26,000	(20)	2003 (Nejim (2009)
						2004 (Sata) (2009)
Total				352,860	(208)	
Zajaczkowo Wind Farm	Zajaczkowo Windfarm Sp. zo.o.	Poland	47%	48,000	(24)	2008
Total including overseas				400,860	(232)	

▶ IPPs, Wholesale Power for PPSs List

(As of March 31, 2012)

Plant Name	Operating Companies	Location	Capacity (kW)	Fuel Type	Ownership* ³	Completion Date*4
IPPs						
Genex Mizue	GENEX Co., Ltd.*5	Kanagawa Prefecture	238,000	Gas Oil Residue	40% TOA Oil Co., Ltd.	2003
Itoigawa	ITOIGAWA POWER Inc.	Niigata Prefecture	134,000	Coal	80% TAIHEIYO CEMENT CORPORATION	2001 (2003)
Tosa	TOSA POWER Inc.*5	Kochi Prefecture	150,000	Coal	45% Shikoku Electric Power Co., Inc. 35% TAIHEIYO CEMENT CORPORATION 20%	
Subtotal			522,000			
Wholesale Power for PPSs						
Ichihara Power	Ichihara Power Co., Ltd.	Chiba Prefecture	110,000	Gas* ⁶	60% Mitsui Engineering & Shipbuilding Co., Ltd. 40%	
Bayside Energy Ichihara	Bay Side Energy Co., Ltd.	Chiba Prefecture	107,650	Gas*6	100%	2005
Mihama Seaside Power Shinminato	Mihama Seaside Power Co., Ltd.*5	Chiba Prefecture	104,770	Gas* ⁶	50% Diamond Power Corporation 50%	2005
Subtotal			322,420	•		