

# Annual Report 2013

### Profile

J-POWER (Electric Power Development Co., Ltd.) is the only wholesale power company with a presence throughout Japan. Since its establishment by the government in 1952 to overcome the power shortages in postwar Japan, J-POWER has developed its business in the wholesale supply of hydroelectric and thermal power, conducted a power transmission business through its trunk transmission lines that connect every domestic region, and contributed to the stable supply of electric power in Japan.

Listed on the Tokyo Stock Exchange's First Section and thus becoming fully privatized in 2004, J-POWER is developing both the electric power generation business in foreign countries where growth is expected and such renewable energy sources as wind and geothermal power generation, while working to create new businesses.

By making the most of its expertise regarding leading-edge technologies developed throughout the world and its proven record of trustworthy performance, J-POWER is attaining its steady and farsighted progress on the basis of its "coexistence of energy and the environment" concept.

### J-POWER's History



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### **Corporate Philosophy**

Our Mission We will meet people's needs for energy without fail, and play our part for the sustainable development of Japan and the rest of the world.

Our Credo We value integrity and pride, which drive everything we do.

We pursue harmony with the environment, and thrive in the trust of communities where we live and work. We regard profits as the source of our growth, and share the fruits with the society. We refine our knowledge constantly, to be the pioneering leader in technologies and wisdom.

We unite diverse personalities and passions as one, and dare create a better tomorrow.



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#### Forward-Looking Statements

Statements in this annual report, other than those of historical fact, are forward-looking statements about the future performance of J-POWER that are based on management's assumptions and beliefs in light of information currently available, and involve both known and unknown risks and other uncertainties. Actual events and results may differ materially from those anticipated in these statements.

#### Presentation of Monetary Amounts and Other Figures

For monetary amounts and electric power sales, figures less than the indicated unit are rounded down. For other amounts, figures less than the indicated unit are rounded to the nearest unit unless otherwise mentioned.

### The J-POWER Group's Electric Power Businesses —Supporting Stable Supplies of Electric Power in Japan

J-POWER's core business is wholesale electric power business operating power plants throughout Japan to supply electricity to the electric power companies (EPCOs) in each region of Japan on a long-term basis. We also employ our power transmission and transforming facilities to provide transmission services. In addition, we are engaged in the operation of wind power plants, the wholesale supply of electricity to EPCOs as independent power producers (IPPs), the wholesale supply of electricity to power producers and suppliers (PPSs), and other kinds of business.

Consolidated Power Generation Capacity in Operation (Owned-capacity basis) (As of March 31, 2013)

Note: Includes facilities of subsidiaries and affiliates accounted for by the equity method. Capacity for all facilities is multiplied by J-POWER's investment ratio (equity ratio).



### Wholesale Electric Power Business

#### Thermal Power

Mainstay Operations Focused on Coal-Fired Facilities

J-POWER owns seven coal-fired power generation facilities with a total capacity of 8,412 MW, making it Japan's top company in terms of coal-fired power generation capacity. The special feature of coal-fired thermal power generation is the lower cost per calorie of imported coal compared with crude oil, LNG, and other fossil fuels. Reflecting the use of our coal-fired facilities principally to meet base demand, our facilities have high capacity load factors and can be said to be outstanding sources of power in terms of economy.

### Hydroelectric Power Essential Capabilities

for Meeting Peak Demand

J-POWER owns 58 hydroelectric power plants with a total capacity of 8,556 MW, making it Japan's second-ranked company in terms of hydropower generation capacity. Since the Company's establishment, it has created numerous large-scale hydroelectric power plants. Hydropower is a renewal energy that does not entail CO<sub>2</sub> emissions. Moreover, because hydroelectric power plants are able to rapidly respond to changes in electricity demand, they are used mainly in the daytime, when demand reaches its peak levels.

### Share of Coal-Fired Power Generation Capacity in Japan (As of March 31, 2013)



Sources: Reports issued by the Federation of Electric Power Companies of Japan and the Agency for Natural Resources and Energy

Share of Hydroelectric Power Generation Capacity in Japan (As of March 31, 2013)



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

### Power Transmission/Transformation

Core Elements of Japan's Electric Power Infrastructure

J-POWER has major transmission lines with a total length of approximately 2,400 km, including trunk lines that connect Honshu with Hokkaido, Shikoku, and Kyushu. We also own a frequency converter station that links the different frequencies of eastern and western Japan. These facilities are key infrastructure elements that play extremely important roles in the comprehensive management of Japan's nationwide power grid.

### **Other Electric Power Business**

## Responding to Deregulation Opportunities and Low-Carbon Society Needs

J-POWER provides wholesale power supplies to EPCOs using three IPP facilities throughout Japan with a total capacity of 522 MW (owned capacity: 270 MW) and provides wholesale power supplies for PPSs using three facilities throughout Japan with a total capacity of 322 MW (owned capacity: 226 MW). Owning 18 wind farms throughout Japan with a total capacity of 353 MW (owned capacity: 332 MW), we are Japan's second-ranked company in terms of wind power generation capacity. All these operations are undertaken via subsidiaries and affiliates.

The Japanese electric power industry comprises the traditional, vertically integrated general electric utilities (EPCOs); wholesale electric utilities, including J-POWER, and wholesale suppliers (IPPs) that supply electricity to EPCOs; and power producers and suppliers (PPSs) that have entered the new retail sector.

Amid the trend to the increasing liberalization of electric power industry regulations, the revision of the Electricity Business Act created systems from 1995 that enabled the creation of IPPs and PPSs and allowed companies other than electric power companies to engage in the wholesale supply of power to electric power companies and the retail distribution of power. Since 2005, electric power transactions have been carried out at the Japan Electric Power Exchange (JEPX). In April 2013, the Cabinet decided to approve its "Policy on Electricity System Reform," and the Japanese electric power supply system is entering a period of major change.



Note: Since the Great East Japan Earthquake in 2011, progress has been made with expert studies into the ideal form of an electricity system. These studies have included those by the Ministry of Economy, Trade and Industry's Coordination Subcommittee of the Advisory Committee for Natural Resources and Energy. In April 2013, the Japanese Cabinet decided to approve its "Policy on Electricity System Reform."

#### Composition of Total Generating Output by Fuel Type

While hydroelectric power previously accounted for the bulk of electric power generating capacity in Japan, there was a shift to the use of abundant and inexpensive oil to fuel thermal power plants. Since the oil shocks, coal-fired and natural gas-fired thermal power generation as well as nuclear power have been advocated and plans made to diversify power generation methods. Since the accident at the Fukushima Daiichi Nuclear Plant, the operation of other nuclear power plants has been suspended for a long time. Instead of nuclear power, thermal power plants, such as coal-fired and gas-fired, mainly supply electricity in Japan.

Note: Figures for oil, etc., include figures for other kinds of gas and bituminous substances (including power received). Figures for total power generation volume are for the 10 EPCOs (including power received).

Source: Agency for Natural Resources and Energy



### J-POWER Group Business Development throughout Japan

Through its ownership and operation of power plants with a total capacity of 17,811 MW\*, transmission lines extending approximately 2,400 km, and substations, the J-POWER Group plays a vital role in maintaining a stable supply of electricity throughout Japan.

\* Capacity for all facilities is multiplied by J-POWER's investment ratio (equity ratio).







Note: Wind power and solar power generation are included in hydroelectric power generation, and geothermal power generation is included in thermal power generation.

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

#### Domestic Electric Power Business Facilities (As of March 31, 2013)

Multiple and the fill of the fill

wholesale Electric Power Business		
Power generation facilities		
Hydroelectric power plants	58	8,556 MW
Thermal power plants (including 1 geother-		
mal plant)	8	8,427 MW
Total	66	16,983 MW
Transmission lines (total lines)		2,407.7 km
AC power transmission lines		2,140.5 km
DC power transmission lines		267.2 km
Substations	4	4,301 MVA
Frequency converter station	1	300 MW
AC/DC converter stations	4	2,000 MW
Other Electric Power Business*		
Power generation facilities		
Wind power	18	353 MW
IPPs, wholesale power for PPSs	6	844 MW
Total	24	1,197 MW

\* Including facilities of subsidiaries and affiliates (without taking proportion of equity holdings into account)



Ohma



J-POWER is leveraging its almost 50 years of overseas achievements and know-how as it engages in its overseas power generation business and overseas consulting business. With a view to bringing a low-carbon society to fruition, J-POWER is contributing to the world's sustainable development.

#### **Overseas Business**

#### Overseas Power Generation Business

From the late 1990s, J-POWER has been working on its overseas power generation business, which invests the Company's funds and technology and participates in electric power generation projects. As of March 2013, the J-POWER Group owns power generation facilities that are in operation in seven countries and regions, including Thailand, the United States, and China. These facilities have a total capacity of 4,253 MW (owned capacity basis),\*<sup>1</sup> which accounts for approximately 20% of the J-POWER Group's consolidated capacity.

The Company is advancing new large-scale power generation projects in Thailand and Indonesia. In Thailand, seven SPP projects\*<sup>2</sup> (total output of 790 MW) are to commence operations one after another in 2013. In addition, it is planned that two IPP\*<sup>3</sup> projects (total output of 3,200 MW) currently under construction will commence operation in 2014 and 2015. Making progress in Indonesia with the construction of its first overseas high-efficiency, coal-fired thermal power plant project (total output of 2,000 MW), the Company is establishing its position as the leading power producer in the Asian market.

We will leverage the technologies and expertise such as in coal-fired thermal power generation we have accumulated in Japan with a view to further business expansion centered on the burgeoning Asian region. This will make the overseas power generation business J-POWER's second major area of business, alongside domestic wholesale electric power business, and strengthen the Company's efforts.

\*1 The output capacity of each project was calculated by multiplying the Company's ownership percentage by the total capacity of the project.
\*2 SPP (Small Power Producer) projects: Projects under the SPP program that are a system

\*2 SPP (Small Power Producer) projects: Projects under the SPP program that are a system to promote highly energy-efficient facilities, such as those using cogeneration, under a buyback program with small-scale power producers

\*3 IPP: Independent Power Producer

#### Overseas Consulting Business

J-POWER has conducted its overseas consulting business, which involves technical cooperation related to electric power development and environmental preservation, since the 1960s. As of March 2013, the Company has executed a cumulative total of 333 projects in 63 countries and regions.

#### Overseas power generation business

(As of March 31, 2013)

<ul> <li>In operation</li> </ul>	7 countries/regions	31 projects	Owned Capacity 4,253 MW
<ul> <li>Under construction/ planned</li> </ul>	2 countries	7 projects	Owned Capacity 3,947 MW

#### Overseas consulting service projects

63 countries/regions 333 projects (cumulative)



### **Consolidated Financial Highlights**

(As of the years ended March 31)

	2009/3	2010/з	2011/з	2012/3	<b>2013</b> /3	
Power Sales					(GWh)	
Wholesale Electric Power						
Business (Non-Consolidated)	57,532	55,760	64,353	64,074	63,366	
Hydroelectric	8,384	9,214	10,267	10,318	9,032	
Water Supply Rate	88%	96%	106%	115%	<b>102%</b>	
Thermal	49,147	46,546	54,086	53,756	54,333	
Load Factor	76%	68%	78%	77%	78%	
Other Electric Power Business	1,616	1,477	1,462	2,010	2,239	
Total	59,148	57,238	65,815	66,084	65,605	
Statements of Income Items					(Millions of ven)	(Thousands of U.S. dollars*⁵)
Operating Revenues	¥ 704 936	¥ 584 484	¥ 635 975	¥ 654 600	¥ 656.056	\$ 6.975.614
	57 108	48 939	70 588	49 800	54,566	580,184
Ordinary Income	39 599	41 694	56 322	36 619	44.825	476.613
Net Income	19 457	29 149	19 583	16 113	29.808	316.942
	,,					(Thousands of
Balance Sheet Items					(Millions of yen)	U.S. dollars*5)
Total Assets	¥2,005,469	¥2,024,080	¥2,012,386	¥2,016,394	¥2,169,909	\$23,071,872
Construction in Progress	321,889	309,740	301,676	380,425	464,674	4,940,717
Total Shareholders' Equity*1	380,128	412,677	415,762	407,384	453,905	4,826,210
Interest-Bearing Debt	1,470,748	1,452,515	1,429,037	1,435,736	1,523,059	16,194,148
Cash Flow Items					(Millions of yen)	(Thousands of U.S. dollars* <sup>5</sup> )
Cash Flows from						
Operating Activities	¥ 158,628	¥ 169,148	¥ 151,236	¥ 125,891	¥ 119,786	\$ 1,273,645
Cash Flows from						
Investing Activities	(132,350)	(129,504)	(124,675)	(136,852)	(170,369)	(1,811,474)
Free Cash Flow	26,278	39,643	26,560	(10,960)	(50,582)	(537,829)
Non-Consolidated Depreciation	109,741	115,585	106,080	100,423	89,485	951,466
Non-Consolidated Capital Expenditures* <sup>2</sup>	2 (150,228)	(97,908)	(73,796)	(68,493)	(66,262)	(70,453)
Principal Financial Indicators					(%)	
Return on Assets (ROA)* <sup>3</sup>	2.0%	2.1%	2.8%	1.8%	2.1%	
Return on Equity (ROE)* <sup>4</sup>	4.6%	7.4%	4.7%	3.9%	6.9%	
					(Yen)	(U.S. dollars*5)
Net Income per Share (EPS)	¥ 121.65	¥ 194.26	¥ 130.51	¥ 107.39	¥ 198.65	\$ 2.11
Net Assets per Share (BPS)	2,533.28	2,750.20	2,770.77	2,714.94	3,024.98	32.16
Equity Ratio	19.0%	20.4%	20.7%	20.2%	20.9%	
Debt-Equity Ratio	3.9	3.5	3.4	3.5	3.4	
Shareholder Returns					(Yen)	(U.S. dollars* <sup>5</sup> )
Cash Dividends per Share	¥70	¥70	¥70	¥70	¥70	\$0.74
Dividend Payout Ratio	57.5%	36.0%	53.6%	65.2%	35.2%	_
					(Thousands)	
Number of Common Shares						
Issued at the End of the Period	l					
(excluding treasury stock)	150,054	150,053	150,053	150,053	150,052	

\*1 Total Shareholders' Equity: Total net assets - minority interests
 \*2 Non-Consolidated Capital Expenditures: The amount of the increase in tangible noncurrent assets and intangible noncurrent assets
 \*3 ROA: Ordinary income / Average total assets
 \*4 ROE: Net income / Average total shareholders' equity
 \*5 The translation of the Japanese yen amounts into U.S. dollars uses the telegraphic transfer middle rate of exchange prevailing on the Tokyo Foreign Exchange Market on March 29, 2013, which was ¥94.05 = US\$1.00.

### J-POWER is targeting sustainable growth in its corporate value by contributing to the stable supply of electricity in Japan and carrying out business development on a global scale.

With the suspension of nuclear power plants becoming a long-term prospect since the Great East Japan Earthquake disaster of March 2011, electric power supply and demand remain unclear, while energy costs continue to rise. Amid this situation, electricity businesses in Japan are facing a harsh operating environment.

Furthermore, enhanced nuclear safety regulations, the Cabinet decision on the policy on electricity system reform, and the reformulation of the basic energy plan (which includes a review of measures against global warming) all mark a major transition period for government energy policy.

Under these circumstances, the J-POWER Group has identified three major challenges: the economical and stable power supply, responses to global environmental issues, and enhanced competitiveness and facility maintenance measures.

To overcome these challenges, the J-POWER Group will ensure sustainable growth of its corporate value through a growth strategy that focuses on medium- to long-term enhancement of supply capability in Japan and abroad, alongside the strengthening of our business platform to stay a step ahead of changes in the business environment.

To "meet people's needs for energy without fail"—as stated in our corporate philosophy—the J-POWER Group's responsibility as a supplier of electricity is to contribute to the stable supply of electric power. To ensure Japan's medium-term electric power supply capabilities, we are pursuing the possibility of new construction and refurbishment of coal-fired thermal power, as seen in the replacement at the Takehara Thermal Power Plant.

With regard to the Ohma Nuclear Power Plant, where construction work resumed in October 2012, we are doing our utmost to ensure that this power plant meets the new regulatory standards and that it is completed and operates as a safe power plant that is trusted by the community.

We will promote our overseas power generation business with a view to global growth through our highly efficient coalfired technologies and other fields of expertise in connection with the needs of developing countries. We will also steadily make ongoing progress in tackling the innovative technological developments necessary for transition to a low-carbon society over the long term.

The J-POWER Group will play its part in the sustainable development of Japan and the rest of the world by fulfilling its mission of stably supplying electricity in the same highly reliable manner as before. As part of our efforts toward further enhancing our business foundation, which will cover the full range of resources from technological and human to financial, we will target sustainable growth in corporate value with the full intention of contributing to a sustainable society.

The J-POWER Group is dedicated to the achievement of its mission, which reflects its corporate philosophy, and will continue to meet this challenge in 2013.

It is with sincere gratitude that we look forward to the continued understanding and unwavering support of our shareholders and investors.

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Masayoshi Kitamura President & CEO July 2013

### An Interview with President Masayoshi Kitamura

### Growth Strategy



Please tell us about J-POWER's growth strategy.

We are aiming to focus on the enhancement of supply capability in Japan and overseas over the medium-to-long term.

In Japan, J-POWER is pursuing the possibilities of new construction and refurbishment of coal-fired thermal power plants, including the replacement at the Takehara Thermal Power Plant, that has progressed with environmental impact assessment. In addition, with consideration for the environment while developing coal-fired thermal power, we will be undertaking technical developments with the aim of increased thermal efficiency and low carbonization.

With regard to the Ohma Nuclear Power Plant, we are doing our utmost to ensure that this power plant meets the new regulatory standards and that it is completed and operates as a safe power plant that is trusted by the community.

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Global growth is the aim for our overseas power generation business. In Thailand, we are aiming to start operations at the large-scale gas combined cycle IPP project, which is currently under construction. In Indonesia, we are preparing to begin construction of the large-scale high-efficiency, coal-fired IPP project.

### Coal-Fired Thermal Power



Please tell us about what J-POWER will be doing to ensure the supply capability enhancement of coal-fired thermal power.

For mid- to long-term stable supply in Japan, we will implement the worldbest standard of high-efficiency, coalfired thermal power while keeping an

eye on the environment.

The J-POWER Group currently operates seven coal-fired thermal power plants in Japan with a total capacity of 8,412 MW.\* In the development of Japan's first coal-fired thermal power plant run on imported coal and in highefficiency power generation by the introduction of the latest technologies, J-POWER has been the leader in coal-fired power generation in Japan.

Amid the uncertain prospects for a restart of or new developments in nuclear power operations, there is an increasing need for coal-fired thermal power as an economical and stable base energy source. In comparison with oilor gas-fired power generation, coal-fired power generation uses inexpensive coal as fuel. What is more, since it is present in and spread among a number of countries, coal is excellent from the standpoint of both economic efficiency and stability of supply.

The J-POWER Group will implement the world-best standard of high-efficiency, coal-fired thermal power while keeping an eye on the environment. As part of these efforts, we are planning to replace the No. 1 and No. 2 units at the Takehara Thermal Power Plant. Replacing these two units, which have currently been in service for nearly 40 years, with the state-of-the-art New No. 1 unit, will reduce environmental impact and improve energy utilization. The New No. 1 at the Takehara Thermal Power Plant has progressed with the environmental impact assessment with plans to start construction in 2014 and to commence operation in 2020.

For mid- to long-term stable supply in Japan, we will pursue the possibility of building new and/or adding on or upgrading to high-efficiency, coal-fired thermal power following on from the New No. 1 at the Takehara Thermal Power Plant.

\* As of March 31, 2013

### Ohma Nuclear Power Plant



Please tell us the situation regarding the construction of the Ohma Nuclear Power Plant.

With appropriate incorporation of new regulation standards and steadily implementing safety measure construction works, we are striving to construct the

Ohma Nuclear Power Plant that will be trusted by the community.

J-POWER's Ohma Nuclear Power Project is situated in Ohma-machi, Shimokita-gun in Aomori Prefecture. Having

**Overview of the Ohma Nuclear Power Project** 



Construction status of the Ohma Nuclear Power Project (photographed in June 2013)

Location: Ohma-machi, Shimokita-gun, Aomori Prefecture Capacity: 1,383 MW Type of nuclear reactor: Advanced Boiling Water Reactor (ABWR) gained permission to install the reactor in April 2008, we started construction after receiving first-phase construction planning in March 2008. All construction work was suspended following the Great East Japan Earthquake disaster of March 2011 but was resumed in October 2012.

J-POWER is committed to making an effort in the steady implementation of safety enhancement measures that take into account the latest developments in the field and the New Safety Standard for Nuclear Power Stations set forth by the Nuclear Regulation Authority. We fully acknowledge the gravity of the accident that occurred at the Fukushima Daiichi Nuclear Plant, and the J-POWER Group is committed to building a safe power plant that is trusted by the community.

#### **Ohma Nuclear Power Plant Location Map**





**Fuel:** Enriched uranium and uranium-plutonium mixed oxide (MOX) **Start of commercial operation:** Undecided

### Overseas Power Generation Business



Please inform us about the prospects for your overseas power generation business.

By steadily executing the large-scale projects currently under development, we will have expanded J-POWER's owned capacity to around 8,000 MW,

close to half the output of our domestic business, as we aim to make overseas power generation into a major business area.

The owned capacity of power plants in operation in J-POWER's overseas power generation business comes to total 4,253 MW,\* and the aim is to expand this as the Group's growth driver. Once the large-scale projects under development in Thailand and Indonesia commence commercial operations, our owned capacity will expand to around 8,000 MW, close to half the output of our domestic business.

In Thailand, where J-POWER for the first time provided the majority of the investment for a large-scale project, we are making progress with gas-fired development projects involving seven facilities each of 100 MW class capacity under the Thai government's Small Power Producer (SPP) program alongside IPP projects for two large-scale, gas-fired facilities, each of 1,600 MW capacity.

Construction of the seven SPP projects is currently proceeding smoothly, and five of them started commercial operations by May 2013. We are aiming for the two IPP projects, at Nong Saeng and U-Thai, to commence operations in 2014 and 2015, respectively, and are making progress with the construction work there, too. These projects are tied into 25-year long-term power purchase agreements (PPAs) with the Electricity Generating Authority of Thailand (EGAT) and can be expected to generate stable income after the start of commercial operations.

\* As of March 31, 2013



KP1 Power generating plant (Thailand)

The Central Java Coal-Fired Thermal Power Project in Indonesia is the J-POWER Group's first overseas large-scale, coal-fired greenfield project. Located in the province of central Java, the project incorporates ultra-supercritical (USC) technology and will develop an output of 2,000 MW of coal-fired power, using Indonesian coal. Preparations are currently being made toward the start of construction.

By firm commitment to large-scale projects currently under development, we are aiming to make overseas projects our major business on a par with our domestic business.

### Efforts Related to Global Environmental Issues



Could you please tell us about J-POWER's efforts related to global environmental issues?

In addition to promoting renewable energy sources such as wind power, J-POWER is engaged in high-efficiency, coal-fired thermal power and is deploy-

ing those technologies overseas. We are thus contributing to a global low carbon society and to reductions in energy consumption.

Up until now, the J-POWER Group's active engagement in the introduction of renewable energy has resulted in the ownership of 18 wind farms (208 units) throughout Japan with a total capacity of 353 MW.\* Besides continuing to search for favorable wind sites and steadily advancing new





Engineer's drawing of the completed Ohsaki Cool-Gen Project (Hiroshima Prefecture)

discoveries, we will leverage our accumulated know-how and steadily promote new developments.

To move toward the introduction of the combined combustion of biomass, we are engaged on an ongoing basis in the expansion of a sewage sludge fuel project. In parallel, we are continuing with the Yuzawa Geothermal Project (capacity of 42 MW class), which has reached the stage of procedures for an environmental assessment with a view to the commencement of operations in 2020, while moving ahead with reviews of new locations for geothermal projects.

In addition to these efforts, the J-POWER Group is aiming to decrease  $CO_2$  emissions by greater efficiency in coal-fired thermal power. In March 2013, we commenced construction of a large-scale demonstration plant for oxygen-blown integrated coal gasification combined cycle (IGCC) technologies at Osakikamijima, Hiroshima Prefecture, which is planned to start demonstration tests from 2016. If this technology proves to have practical applications, it will be possible to reduce  $CO_2$  emissions by further 13%–25% compared with the current, state-of-the-art USC technologies.

Besides its efforts at home, J-POWER is spreading the state-of-the-art clean coal technologies it possesses in Japan to the Central Java Coal-Fired Thermal Power Project in Indonesia I mentioned previously, which is serving as a model case. We are contributing to a global low-carbon society and to reductions in energy consumption by transferring technology to developing countries primarily in Asia.

\* As of March 31, 2013

### For Our Shareholders and Investors



Last, on the subject of your financial strategies and dividend policy, do you have any messages for your shareholders and investors?

A

While striving to continually strengthen our financial position, we will not change our existing policy of aiming to maintain stable shareholder returns

### over the long term.

For us to implement the growth strategy centered on enhancement of supply capability in Japan and overseas over the medium-to-long term, as previously explained, the steady strengthening of our financial position will still remain as an important management issue. To maintain stable fund-raising capabilities, we will endeavor to make ongoing improvements to our shareholders' equity ratio by working to steadily ensure stable business earnings and enhance internal reserves.

With regard to providing returns to shareholders, we have no plans for changing our existing policy. In consideration of the Company's business model characteristic of securing investments through long-term operation by investing in infrastructure such as power plants, we place the utmost importance on a sustainable dividend policy. While advancing sustainable corporate value improvement engagement, we will endeavor to increase returns to shareholders through business results generated over the long term.

The energy industry in Japan stands at the center of a major shift in paradigms, occasioned by the Great East Japan Earthquake disaster. As a company at the center of these changes, the J-POWER Group is dedicated to the achievement of its mission, which reflects its corporate philosophy "We will meet people's needs for energy without fail, and play our part for the sustainable development of Japan and the rest of the world.", and will continue to meet this challenge in 2013.

I would like to express my heartfelt thanks to our investors and shareholders for their continued support.

### Measures for Reinforcing Safety at the Ohma Nuclear Power Plant

For the Ohma Nuclear Power Plant, in addition to previous safety enhancement mea (effective July 8, 2013), and implementing further safety enhancement measures to fur We are reviewing the active implementation of superior safety technologies and will

### I Tsunami Assessment and Emergency Power Supply

### (1) Tsunami Assessment

Based on historical records and hypothetical tsunami generating mechanisms, it is estimated that the maximum height of a potential tsunami is T.P.+4.4 meters (obtained permission to install nuclear reaction in 2008), and the facilities necessary for cooling the nuclear reactor are to be installed in major structures (reactor building, turbine building, etc.) built on a compound site with an elevation of T.P.+12 meters.

### (2) Emergency Power Supply

Three emergency diesel engine generators will be installed inside the reactor building at a site with an elevation of T.P.+12 meters. In addition, there are two 500kV lines and a 66kV line capable of supplying electric power to emergency facilities.

### II Measures to Reinforce Safety

In addition to the above plan I, the following measures will be implemented during construction.

### Design Basis

To protect the Ohma Nuclear Power Plant's safety equipment functions from external events—including tornadoes, volcanoes, and fires as well as tsunamis and earthquakes—and to thereby bring about improved reliability, J-POWER is putting into effect the following measures:

- ① Facility protection in the case of a tsunami (installation of a seawall, waterproofing modification of doors in exterior walls, height extension of oil fences, and improvement in the watertightness of important rooms for safety purposes)
- ② Implementation of impact assessments of tornadoes and other natural phenomena on the nuclear power plant
- ③ Enhanced fire protection measures (use of fire retardant cables, installation of firewalls, and other measures)
- ④ Installation of power panels on the upper floor for locational dispersion
- (5) Enhanced reliability of passive components (such as ventilation filters) that are crucial to safety
- (i) Implementation of impact assessments of internal flooding on the safety system



# sures, we are complying with the New Safety Standard for Nuclear Power Stations ther improve safety of the power plant.

appropriately incorporate necessary measures towards building a safe power plant.

### Severe Accident and Terrorism Countermeasures

The following measures will be implemented for responding rapidly and managing situations even in the event of a severe accident.

- ⑦ Deployment of portable power pumps and fire engines for cooling the reactor, containment vessel and spent fuel storage pool
- (a) Reinforcement of alternative water injection equipment for cooling the reactor, containment vessel and spent fuel storage pool
- Installation of filtered containment venting system to prevent overpressurization on the containment vessel
- (10) Installation of hydrogen detection units and hydrogen discharge venting units to prevent hydrogen explosion at the reactor building
- ① Deployment of water spraying facilities to spray water on the reactor building and other facilities
- ② Secure inventory of spares of seawater pump electric motors, etc., and deployment of alternative seawater pumps and other equipment to ensure heat removal functionality for the reactor and the containment vessel
- Deployment of power supply vehicles, installation of emergency power generators (fuel tanks and power cables), increased capacity of storage batteries, and enhancement of a permanent DC power source to secure power supply

- () Installation of water storage tanks and reinforcement of water tanks to secure water source
- (b) Installation of a seismic isolation building that houses the emergency response office to respond as necessary in an emergency
- Reinforcement of communications systems for making contact with-in and outside of the power plant in the event of an emergency
- Installation of materials and equipment warehouse, provision of high-level radiation protection suits and other materials and equipment, and deployment of heavy equipment for debris removal
- (B) Installation of specified severe accident response facility to respond to intentional crash of aircraft and other such events

Aside from the above measures, we will be reinforcing links and collaboration between businesses operating in Aomori Prefecture\* to further ensure disaster prevention.

\* Tohoku Electric Power Company, Tokyo Electric Power Company, J-POWER, Japan Nuclear Fuel Limited, and Recyclable-Fuel Storage Company



# Special Feature 1 The Future of Coal-Fired Thermal Power Generation—Pursuing Clean

# Aiming to raise the generating efficiency of coal-fir J-POWER is developing clean coal technologies that thermal power generation facilities.

### Coal Is a Major Energy Source for Electric Power Generation

Compared to oil and natural gas reserves, coal deposits are abundant and dispersed broadly in many countries throughout the world. In terms of supply, it is the stablest and mosteconomical of all fossil fuels. Many countries around the world rely on coal as a primary power generation fuel source. On a worldwide basis, coal is the most-prevalent source of energy, accounting for roughly 40% of all electric power generated, including countries with high energy consumption. In countries that consume large amounts of energy, such as China and India, coal-fired thermal power represents the largest source of energy supply.

Going forward, the number of coal-fired thermal power plants is projected to grow further. It is believed that coal-fired thermal power generation will continue to be a crucially important energy source for meeting ever-increasing worldwide demand.

At the same time, the combustion of coal and other fossil fuels generates  $CO_2$ , a greenhouse gas, and  $CO_2$  from coal-fired thermal power plants accounts for roughly 30% of the world's energy-derived  $CO_2$  emissions. Because rising demand for energy in such emerging countries as China and India is projected to increase those countries' coal use by a substantial margin, reducing  $CO_2$  emissions from coal-fired thermal power generation has become an international issue.

### Advantages and Disadvantages of Using Coal



#### Geographical Distribution of Resource Reserve









Source: Compiled from IEA World Energy Outlook 2012, except for Germany, which is based on IEA Electricity Information 2012.

### Estimated Global Power Generation Output by Power Source



IEA World Energy Outlook 2012 \* A scenario that takes into account measures officially adopted as at mid-2012

#### Estimated Global Energy-Derived CO<sub>2</sub> Emissions Volume by Emissions Source



IEA World Energy Outlook 2012

# ed thermal power and achieve low-carbon emissions, are the keys to creating next-generation, coal-fired



### Spreading J-POWER's Cutting-Edge Technologies throughout the World

One effective way to reduce CO<sub>2</sub> emissions from coal-fired thermal power plants is by increasing generation efficiency. Were power generation made more efficient, this alone would bring down fuel costs and curb CO<sub>2</sub> emissions. Japanese coal-fired thermal power plants utilize the ultra-supercritical (USC) method, which raises steam turbine pressure and temperatures to extremely high levels, enabling them to realize a level of generating efficiency higher than at plants in Europe, the United States, and elsewhere in Asia. Active in developing these cutting-edge technologies under its own initiative and having championed their application, J-POWER is achieving the highest levels of efficient energy use.

J-POWER leverages Japan's accumulated expertise and technologies, while the widespread conversion to highly efficient, coal-fired thermal power stations throughout the world holds major significance for the reduction of worldwide CO<sub>2</sub> emissions and the conservation of energy resources.

#### When You Calculate the CO, Emission Reduction Effect!

Had Japan's best-performing coal-fired thermal power generation technologies been applied to all the coal-fired thermal power plants in China, India, and the United States, it has been estimated that the  $CO_2$ -reducing effect would now be reaching 1.47 billion tons a year. This figure far exceeds Japan's annual  $CO_2$  emission volume (1.24 billion tons of  $CO_2$  in fiscal 2011).

Power demand is steadily increasing particularly elsewhere in Asia. Both the amount of electricity generated at and the facility capacity of Asian coal-fired thermal power plants are projected to have doubled the current levels by 2030. As the coal-fired thermal power plants in other Asian countries are also of the conventional, comparatively less efficient subcritical type, a full-fledged switch to high-efficiency plants is under way. J-POWER is thus targeting contributions toward the simultaneous achievement of Asian growth and reduced environmental impact by means of Japanese clean coal technologies.

### Generation Efficiency of J-POWER Coal-Fired Thermal Power Plants

### Estimated Asian Power Plant Capacity by Power Source



#### Trends in Average Thermal Efficiency of the World's Coal-Fired Thermal Power Plants Gross efficiency (LHV)







Isogo Thermal Power Plant (after replacement work)

Case

Takehara Thermal Power Plant (before replacement work)

Takehara Thermal Power Plant (after replacement work)

### Replacing Older Thermal Power Plants with Cutting-Edge Facilities

### **Replacing the Isogo Thermal Power Plant**

In 1996, a project was launched to replace the two original 265 MW units at the Isogo Thermal Power Plant with state-ofthe-art, coal-fired thermal facilities. The project was a means of complying with a City of Yokohama environmental improvement plan, improving the stability and reliability of power supply, and addressing problems associated with aging facilities. The New No. 1 (600 MW) went online in April 2002, followed by the New No. 2 (600 MW) in July 2009. As the Isogo Thermal Power Plant is located in a major city, a pollution prevention agreement—the first of its kind in Japan—was signed with the City of Yokohama; focus was placed on environmental measures from early on, measures that included installing flue-gas desulfurizers. By introducing the USC method during replacement, the Company is working to significantly improve thermal efficiency. The New No. 2 has set the highest standard for coal-fired thermal power with a main steam turbine pressure of 25 MPa, a steam temperature of 600°C, and a reheat steam temperature of 620°C. The Isogo Thermal Power Plant reduces sulfur oxide (SOx) and nitrogen oxide (NOx) emissions per unit of electricity generated to extremely small values compared with thermal power plants in other major industrial countries thanks to the installation of the latest environmental equipment. Isogo represents the highest standard of clean, coal-fired thermal power plant from the standpoints of both generation efficiency and environmental impact.

### International Comparison of SOx and NOx Emissions per Unit of Thermal Power Generation



Figures for Isogo and J-POWER derived from results for 2012

### Takehara Thermal Power Plant New No. 1 (Facility Replacement) Project

J-POWER is also moving ahead with replacement plans at the Takehara Thermal Power Plant in Hiroshima Prefecture. In operation at the Takehara Thermal Power Plant at the present time are unit Nos. 1–3, facilities that have a total output of 1,300 MW. Of these, the plan is to replace No. 1 (250 MW, commenced commercial operations in July 1967), which has thus now been in service for around 40 years, and No. 2 (350 MW, June 1974) with New No. 1 (600 MW). From the perspective of responding proactively to the issue of global warming, introducing the new state-of-the-art facility will reduce the environmental impact of SOx and NOx, significantly improve energy utilization, and be a step closer to a low-carbon society. The Company is completing environmental assessment procedures; the plans call for the New No. 1 to come online in 2020.

#### Aiming to Realize Zero Emissions

Aiming to dramatically increase coal-fired power generation efficiency and to substantially reduce  $CO_2$  emissions toward low-carbon performance, J-POWER is engaged in the development of next-generation technologies, including integrated gasification combined cycle (IGCC)\*<sup>1</sup> and integrated gasification fuel cell (IGFC)\*<sup>2</sup> technologies. In addition to making advances in the combined combustion utilization of biomass fuels, the Company is moving ahead with the development of the advanced ultrasupercritical (A-USC)\*<sup>4</sup> technologies that further enhance the already high efficiency of cutting-edge ultrasupercritical (USC)\*<sup>3</sup> technology. Ultimately, we will strive to realize innovative, zero-emission, coal-fired thermal power by combining these technologies with  $CO_2$  capture and storage (CCS) technologies that separate, recover, and store deep in the ground the  $CO_2$  emitted during power generation.

### New Technology Development Schedule for Coal-Fired Thermal Power Generation at J-POWER



#### Coal-Fired Power Technology for the Next Generation

Gasifier				Gross efficiency (HHV):	CO <sub>2</sub> reduction: (compared with latest coal-fired)
	Latest coal-fired	USC) >		41%	
(USC)	A-USC/700°C-c	lass Boiler	ST	46%	Approx. 11%
Integrated coal gasification combined cycle (1,500°C-class)	Gasifier	GT	ST	46~48%	Approx. 11%~15%
Integrated coal gasification fuel cell combined cycle	Gasifier FC	GT	ST	55% or more	Approx. 25% or more

\*1 Integrated Coal Gasification Combined Cycle (IGCC)

An integrated power generation system with a twin-turbine configuration; the gas produced from burning coal is used as fuel to drive a gas turbine, the exhaust gases from which are used in a steam turbine

\*2 Integrated Coal Gasification Fuel Cell Combined Cycle (IGFC)

A coal-fired power generation highly efficient system combining fuel cells with gas and steam turbines in a triply integrated power generation configuration \*3 Ultra-Supercritical (USC)

Current cutting-edge technology for raising the efficiency of pulverized coal-fired thermal power. Utilizes a steam pressure of 22.1 MPa or greater with a steam temperature of over 566°C

\*4 Advanced Ultra-Supercritical (A-USC) Raises thermal efficiency achievable with USC technology by utilizing a steam temperature of 700°C or higher

\*5 EAGLE

An oxygen-blown coal gasification project being conducted at the Wakamatsu Research Institute. The acronym is taken from Coal Energy Application for Gas, Liquid, & Electricity.



Eagle Pilot Test Facility (Fukuoka Prefecture)

Planned layout of Osaki CoolGen test facility (Hiroshima Prefecture)

Callide A Power Plant (Australia)

### Developing the Next Generation of Coal-Fired Thermal Power Technologies

### Large-Scale Demonstration Test of Oxygen-Blown IGCC Technology

### **EAGLE Project**

Case

Since fiscal 2002, J-POWER has been conducting research into the development of an oxygen-blown gasifier to realize the oxygen-blown IGCC system in collaboration with the New Energy and Industrial Technology Development Organization (NEDO) at the Wakamatsu Research Institute in Fukuoka Prefecture. The Company has also been advancing the EAGLE project pilot programs with a view to establishing the technology to separate and capture  $CO_2$  from the gases generated during the coal gasification process.

Through the EAGLE project, J-POWER has achieved the world's highest coal gas efficiency, verified coal gasifiers that enable the highly efficient gasification of a wide range of coal types—from low-grade coal (sub-bituminous coal) to high-grade coal (bituminous coal) used in the production of thermal power from pulverized coal—and established oxygen-blown coal gasification technologies.

#### Osaki CoolGen Project

Leveraging the expertise and accomplishments obtained with the EAGLE project, J-POWER and the Chugoku Electric Power Co., Inc. established a joint venture, Osaki CoolGen Corporation, in 2009 to carry out large-scale Osaki CoolGen demonstration tests designed to bring about the commercialization of IGCC and CO<sub>2</sub> separation and capture technologies. Construction of a 166 MW oxygen-blown IGCC demonstration plant (with a coal processing capacity of 1,180 tons per day) commenced in March 2013. Plans call for the plant's reliability, economic efficiency, and ease of operation as a system to be verified through demonstration tests from fiscal 2016. We then plan to commence tests and verify the applicability of the most recent  $CO_2$  separation and capture technology from 2020. Based on these tests, we will set out to further increase efficiency with the IGFC system, which combines fuel cells with the oxygen-blown IGCC system. The aim of these technological developments is to bring to fruition the CoolGen Project\* proposed in the report of a national commission.

### **Development of CO<sub>2</sub> Separation and Capture Technology**

Several countries are making progress with technological surveys and trials of the CCS process, which involves the separation and capture of the CO<sub>2</sub> given off by large-scale emission sources and storing it underground. Of the three distinct elements comprising CCS—CO<sub>2</sub> separation and capture, transport, and storage—J-POWER has from a user's perspective focused primarily on the former because those technologies must be designed for use at power plants and because CO<sub>2</sub> separation and capture is the most cost-intensive component of the entire CCS process. J-POWER completed demonstrations of the chemical absorption method, a technology for separating and capturing the  $CO_2$  emitted during oxygen-blown gasification, during one of the EAGLE pilot programs. The Company is now conducting tests of the physical absorption method in a project that is scheduled to end in fiscal 2013.

J-POWER is also actively working to develop  $CO_2$  separation and capture technologies for combustion exhaust from pulverized coal-fired thermal power, currently the most-common method of power generation from coal. In collaboration with Mitsubishi Heavy Industries, Ltd., we conducted pilot trials using the chemical

absorption method from 2007 to 2008 at our Matsushima Thermal Power Plant in Nagasaki Prefecture. Additionally, we are a participant in the Callide Oxyfuel Project using the oxyfuel method, which is being carried out at the Callide A Power Plant in Queensland, Australia. This public-private Japanese-Australian demonstration project is the first in the world to verify an integrated system for storing underground CO<sub>2</sub> captured by the oxyfuel method at an existing power plant. Having begun demonstration testing including CO<sub>2</sub> capture in 2012, the plan is to conduct tests for a period of around two years.

<sup>\*</sup> Advocated at the Ministry of Economy, Trade and Industry's Advisory Committee for Natural Resources and Energy in June 2009, the national CoolGen Project is a plan for experimental research aimed at realizing "zero-emission, coal-fired thermal power generation" through a combination of IGCC, IGFC, and CCS technologies.

# Special Feature 2 Global Business Development—Overseas Business

J-POWER engages in its overseas consulting business, which involves technical cooperation related to electric power development and environmental conservation, and in overseas power generation business, which includes investment of the Company's funds and technology and participates in electric power generation projects.

### Introduction of Overseas Business

#### **Overseas Consulting Business**

By taking the Revised Electric Power Development Promotion Law of 1960 as an opportunity, J-POWER became involved in overseas technical cooperation in the business field. Based on technologies acquired and trust gained in its domestic business, J-POWER was able to develop consulting business overseas. As of March 2013, this had resulted in J-POWER executing a cumulative total of 333 projects in 63 countries and regions—primarily in Indonesia, Vietnam, and China in Asia, as well as in Peru and other countries in Central America and South America.

For the overseas consulting business, J-POWER transfers the experience and expertise the Company obtained through its projects, while conducting surveys of the socio-economic situation, energy expenditures, and demand trends in partner countries. The business covers assessing the environmental impact of electric power facilities, transferring desulfurization and denitrification technologies in coal-fired power stations, and the planning, design, and



Fact-finding and confirmation survey on energy conservation in public buildings (Turkey)

works supervision at hydroelectric power stations. Through our overseas consulting business, we believe that we are contributing to the stable supply of energy over the future in the partner countries, with reduced environmental impact.

#### **Overseas Power Generation Business**

Amid the ongoing privatization and liberalization of the electricity industry globally, J-POWER started its overseas power generation business from the late 1990s primarily in Asia, where burgeoning growth in power demand was expected. Leveraging the experience accumulated, trust gained, and networks built up in its consulting business over many years, J-POWER is proactively engaged in discovering and developing projects.

In the beginning, J-POWER was partially involved in building and operations of power plants with comparatively small amounts of investment, but steady experience and a track record of results were built up amid intense competition. Later, business participation was expanded increasingly in major capital investment and greenfield projects.

· Overseas Business Milestones	
Revised Electric Power Development Promotion Law, Overseas Technology Cooperation Dept. established	Start of overseas consulting business
Peru/Tacna Hydropower Project, Foreign Activities Dept. established	First hydropower consulting project
Peru/Lima-Chimbote Transmission Line Project	Participation in a large-scale transmission line project
Philippines/Thermal power generation project survey	First thermal power consulting project
Malaysia/Port Kelang Phase II Thermal Power Generation Project	Participation in large-scale coal-fired power project
Austria/NOx reduction technology licensing project	Environmental measure project in Europe
Thailand/Lam Ta Khong Pumped Storage Power Project	Start of overseas power generation business, Participation in pumped storage power project
IPP Business Dept. established in International Business Division	Start of investment in small-scale projects in Thailand and China
Holding company established in the Netherlands; Taiwan/Equity participation in Chiahui Power Corp.	
Local subsidiary established in the United States; Philippines/Share of CBK Hydropower Project acquired	Start of overseas power generation business in the United States
United States/Equity acquired in Tenaska Frontier Power Plant; Local subsidiary established in Thailand	
Thailand/Kaeng Khoi 2 Power Plant No. 1 begins operations (No. 2 begins operations in 2008)	J-POWER's first greenfield project in Thailand
Thailand/Wins two IPP projects following international competitive bidding process. Wins seven SPP projects	J-POWER's first major investment project
Local subsidiary established in China	
China/Equity participation in Gemeng International Energy Co., Ltd.	
United States/Orange Grove Power Station begins operations	J-POWER's first greenfield project in the United States
Indonesia/Wins coal-fired thermal IPP project following international competitive bidding process	J-POWER's first greenfield project for a coal- fired thermal power plant
	Overseas Business Milestones         Revised Electric Power Development Promotion Law, Overseas Technology Cooperation Dept. established         Peru/Tacna Hydropower Project, Foreign Activities Dept. established         Peru/Lima-Chimbote Transmission Line Project         Philippines/Thermal power generation project survey         Malaysia/Port Kelang Phase II Thermal Power Generation Project         Austria/NOx reduction technology licensing project         Thailand/Lam Ta Khong Pumped Storage Power Project         IPP Business Dept. established in International Business Division         Holding company established in the Netherlands; Taiwan/Equity participation in Chiahui Power Corp.         Local subsidiary established in the United States; Philippines/Share of CBK Hydropower Project acquired         United States/Equity acquired in Tenaska Frontier Power Plant; Local subsidiary established in Thailand         Thailand/Kaeng Khoi 2 Power Plant No. 1 begins operations (No. 2 begins operations in 2008)         Thailand/Wins two IPP projects following international Energy Co., Ltd.         United States/Orange Grove Power Station begins operations         Indonesia/Wins coal-fired thermal IPP project following international competitive bidding process

2012 China/Hezhou Power Plant begins operations

### **2** Overseas Power Generation Business

As of March 2013, the J-POWER Group owns power generation facilities that are in operation in seven countries and regions, including Thailand and the United States. These facilities have a total capacity of 4,253 MW (owned capacity basis), which accounts for approximately 20% of J-POWER's consolidated capacity. As of the same date, the equity income of affiliates from the J-POWER Group's overseas power generation business had reached ¥11.0 billion.

Currently working on new development projects in Thailand and Indonesia. The J-POWER Group strengthens its efforts to make overseas projects its major business on par with its domestic business. After all its power generation facilities commence operation, J-POWER's owned capacity is expected to be doubled to around 8,000 MW.



### Owned Capacity (Operating) and Equity Income/Loss of Overseas Power Generation Business

Note: Owned capacity [left]: Output is calculated by the total project capacity multiplied by J-POWER's equity ratio, and this is the amount recorded for the fiscal year-end.

### Owned capacity by country/region (as of March 2013)

### Characteristics of J-POWER's Overseas Power Generation Business The foundation underpinning the progress of J-POWER's overseas power generation busi-

ness has made in following elements: the experience and advanced environmental technology that J-POWER gained in 60 years of running its domestic wholesale electric power business, the know-how and its country networks accumulated through its overseas consulting business, and its personnel, who have a wealth of business experience at home and abroad. The Company will continue working to make appropriate investment decisions rooted in this business experience and to bring business operations to fruition.

In order to bring its overseas projects to fruition, J-POWER addresses, in collaboration with reliable local partners, the matters related to highly creditworthy purchasers, or off-takers, and long-term power purchase agreements (PPAs) as well as possible project financing based on long-term PPAs. Investment decisions are based on such criteria as the likelihood of meeting a required yield on investment. A project's risk is thus ascertained, and a plan devised to appropriately spread such risk. Once undertaken, the Company also undertakes regular monitoring and works to rapidly respond to any problems that are detected.

For more information on the decision-making process and management systems covering overseas and other business aspects, please see page 42.



#### **Business Development in Principal Countries**

#### Thailand

Thailand has allowed private capitalization in the power generating sector since 1992 and made progress in diversifying its electric power business structure. Since 2000, J-POWER has been working with independent power producers (IPPs) in Thailand to keep up with the power demand in that country, which continues to grow both in the industrial and private sectors. J-POWER has taken part in numerous IPP and SPP\* projects.

After commencement of operations in 2008, the Khaeng Khoi 2 (1,468 MW output capacity, combined cycle gas turbine) thermal power plant, in particular, has been helping to provide a continuous stable supply of electric power as one of the most-important electricity providers in the country.

\* SPP (Small Power Producer) program: A system to promote highly energy-efficient facilities, such as those using cogeneration, under a buyback program with small-scale power producers



Khaeng Khoi 2 Power Plant

### **United States**

With a power generation capacity four times greater than that of Japan, the United States offers features different from the Asian market. These features include the relatively advanced state of its electricity business system, the universality of its currency, and the maturity of its generating assets sales markets. Having business in the United States as part of our portfolio is significant also for our business pursuits in Asia.

In 2005, J-POWER established a local U.S. subsidiary and commenced full-scale business development. Upon acquisition of interests in the Tenaska Frontier (830 MW, output capacity, combined cycle gas turbine) power plant in 2006 and in the Birchwood (242 MW, coal-fired) Power Plant in 2008, as of March 2013, J-POWER was operating 10 facilities with a total owned capacity of 1,438 MW. More recently, we constructed the Orange Grove (96 MW output capacity, simple cycle gas turbine) Power Plant in California, where environmental protection measures are rigorously enforced. Orange Grove was J-POWER's first greenfield project in the United States and commenced operation in 2010.



Orange Grove Power Plant

#### China

In keeping with its rapid economic development, a lot of new power plants have commenced operations in China. As of 2012, approximately 70% of its power generation facilities were coal-fired thermal power plants. Most of the conventional thermal power stations, however, have been of very small scale (100 MW or less), making them inefficient and unsatisfactory for protecting the environment. To improve the situation, the Chinese government has adopted a policy of building larger power stations and reducing the number of small ones to increase generating efficiency and mitigate environmental burdens.

Under these circumstances, J-POWER has been developing business in China centered on coal-fired thermal power generation. In 2012, the Hezhou Power Plant (2,090 MW output, coal-fired) in the Guangxi Zhuang Autonomous Region started operation, and for the first time ultra-supercritical (USC) coal-fired thermal power technologies have been introduced to that region in China. The Hezhou Power Plant will contribute to the stable supply of electric power as well as to improvements in energy saving and to the environment in southern China.

In addition to the three countries mentioned above, J-POWER is developing its overseas power generation business in other Asian countries, including the Philippines, Taiwan, and Vietnam, and in Europe such as Poland.



Hezhou Power Plant

### **3** New Development Projects in Thailand and Indonesia

J-POWER's large and new greenfield projects are under way in Thailand and Indonesia. All of these projects are planned to be operational, and J-POWER's owned capacity is expected to double to around 8,000 MW. This is of a scale equivalent to more than 40% of the current output of J-POWER's power generation facilities in Japan.

### Thailand: Nine Projects, Large-Scale Greenfield Projects with Total Capacity of 3,990 MW

In Thailand, J-POWER is advancing two IPP projects won by international competitive tender in 2007. Each of 1,600 MW output, the facilities at Nong Saeng and U-Thai are planned to commence operations in 2014 and 2015, respectively. Also under way are seven SPP projects with a total output of 790 MW. As of June 2013, five of the seven SPPs commenced operations, and all seven SPPs are expected to be operational by 2013. In 2015, when all nine projects have commenced operations, the output of the power generation facilities in which J-POWER has been involved is expected to account for approximately 10% of all the facilities in Thailand.

Operating companies, of which J-POWER is the major investor through its local Thai subsidiary, set up project finance, and conduct construction, operation, and maintenance. They are also tied into long-term power purchase agreements (PPAs) with the Electricity Generating Authority of Thailand (EGAT), under which they will supply generated electricity for 25 years.



NLL Power Plant (Thailand)

### Overviews of New Projects in Thailand (As of June 30, 2013)

Project Name	Overview		Schedul	e
7 SPPs Output: Total 790 MW	<ul> <li>Project based on Thai government's SPP program</li> <li>Construction of 100 MW-class gas-fired cogeneration proj-</li> </ul>	Nov. 2009 Pc Oct. 2010 Fi	ower purchase agi inancing agreeme	reements (PPAs) signed ent signed
(110 MW×5) (120 MW×2)	ects at seven locations • Sale of generated power to EGAT and nearby customers	Status	Project Name (Output)	Operation Commencement
Type: Gas-fired (gasification combined cycle)	(also supply of steam and cold water to nearby customers)	In	KP1 (110 MW)	Jan. 2013
	• J-POWER owns 90% stake in six projects, 67.5% in NLL	operation	KP2 (110 MW)	Feb. 2013
		[	TLC (110 MW)	Mar. 2013
			NNK (110 MW)	Apr. 2013
			NLL (120 MW)	May 2013
		Under con-	CRN (110 MW)	July 2013 (planned)
		struction	NK2 (120 MW)	Oct. 2013 (planned)
Nong Saeng IPP	Project won by tender based on Thailand's 2007 Electric	Dec. 2007 W	Von by tender fol	lowing international
Output: 1,600 MW	Power Development Plan	CC	ompetitive biddin	g process
(800 MW×2)	<ul> <li>Sale of electricity to EGAL for 25 years from the com- monocompany of operations</li> </ul>	Oct. 2008 PF	PA signed	nt signed
lype: Gas-fired (gasification combined cycle)	Scheme Diagram	June 2014 N	lo. 1 planned ope	ration commencement
	J-POWER Local Partner	Dec. 2014 N	lo. 2 planned ope	ration commencement
U-Thai IPP	90% [Gulf JP Co., Ltd.] 10%	Dec. 2007 W	Von by tender fol	lowing international
Output: 1,600 MW (800 MW×2) Type: Gas-fired (gasification combined cycle)	EPC Contracts EPC contractors Gas Supply Contracts Financing Agreements Bank syndicates PPAs	Coct. 2008 PF Nov. 2012 Fin June 2015 Nov	ompetitive biddin PA signed inancing agreeme Io. 1 planned ope	g process ent signed ration commencement
	PTT*1 EGAT*2	Dec. 2015 N	lo. 2 planned ope	ration commencement

#### Indonesia: J-POWER's First Coal-Fired IPP Project in Indonesia

In Indonesia, J-POWER won a new coal-fired thermal power IPP project in 2011, following an international competitive tender process in cooperation with partner companies (ownership: 34%). The project involves the construction of a high-efficiency, coal-fired thermal power plant in central Java with total capacity of 2,000 MW. As of June 2013, we are working to begin construction as early as possible.

For this project, J-POWER signed a long-term PPA with PT PLN (PLN), Indonesia's stateowned power utility, and will sell electricity to PLN for 25 years from the start of operations. \*1 Thai state-owned oil and gas company \*2 Electricity Generating Authority of Thailand

### **Electric Power Business**

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

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.



### **Business Overview**



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**

• Telecommunications business, coal sales business, environment-related business, etc.

### **Business Overview**

### **Electric Power Business**



Matsuura Thermal Power Plant (Nagasaki Prefecture)

#### Segment Operating Revenues/ Segment Income\*





\* In the fiscal 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 ordinarv income.

### Principal Customers of Electric Power Business\*<sup>2</sup>

(Fiscal 2012)



### Wholesale Electric Power Business (Thermal Power)

### **Performance Highlights**

In the fiscal year ended March 31, 2013, the electricity sales volume increased 1.1% to 54.3 billion kWh due to the load factor increasing from 77% to 78%. Although electric power sales increased, operating revenues from thermal power decreased 2.5%, to ¥413.9 billion, due mainly to the decrease in fuel prices.



### **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 plantssuch as those at Matsuura and Tachibanawan—that run on imported coal and increasing the scale of its business, 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. As an economical and stable source of energy, J-POWER's coal-fired thermal power plants maintain high utilization rates. The Company therefore unfailingly conducts the appropriate maintenance of its power generation facilities, controls decreases in thermal efficiency and facility problems brought about by aging facilities, and endeavors to maintain and improve their efficiency.

J-POWER is maintaining its efforts in geothermal power. Continuing with its Onikobe Geothermal Power Plant that is in operation in Miyagi Prefecture, the Company is currently implementing environmental assessment procedures for a new location in Yuzawa, Akita Prefecture.

Mostly derived from revenues from the sale of electricity supplied to EPCOs, the earnings of J-POWER's thermal power business are based on electricity supply contracts with each site on a cost basis. In undertaking the supply of electric power, J-POWER calculates contract rates on a fair assumed cost plus fair return on capital basis, 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 31.)



Tachibanawan Power Plant (Tokushima Prefecture)



Onikobe Geothermal Power Plant (Miyagi Prefecture)

### Thermal Power: Sales/Load Factor

### Calorific Unit Price by Fossil Fuel (Imports) (Yen/1,000kcal) 12.0 –





Source: The Institute of Energy Economics, Japan

#### J-POWER's Coal-Fired Power Plants in Japan (As of March 31, 2013)

#### Beginning of Operation Maximum Capacity (kW) **Power Plants** Location New No. 1 2002 Kanagawa Prefecture 600,000 Isogo 2009 600,000 New No. 2 Takasago 1968 250,000 No. 1 Hyogo Prefecture No. 2 1969 250,000 No. 1\*1 250,000 Takehara 1967 Hiroshima Prefecture No. 2\*1 1974\*2 350,000 No. 3 1983 700,000 2000 Tokushima Prefecture 1,050,000 Tachibanawan No. 1 1,050,000 No. 2 2000 Matsushima No. 1 1981 Nagasaki Prefecture 500,000 No. 2 1981 500,000 Matsuura 1990 1,000,000 No. 1 Nagasaki Prefecture 1997 1,000,000 No. 2 Ishikawa Coal 1986 Okinawa Prefecture 156,000 No. 1 No. 2 1987 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. \*2 Converted from heavy oil-fueled boiler to coal-fueled fluidized boiler in 1995

#### J-POWER's Geothermal Power Plant in Japan

(As of March 31, 2013)

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

### Wholesale Electric Power Business (Hydroelectric Power)

### **Performance Highlights**

In the fiscal year under review, the electricity sales volume for hydroelectric power decreased 12.5%, to 9.0 billion kWh, due to a decrease in the water supply rate from 115% in the previous fiscal year to 102%. The decrease in the water supply rate resulted in operating revenues from hydroelectric power decreasing 1.7%, to ¥106.6 billion.

### Share of Hydroelectric Power Generation Capacity in Japan (As of March 31, 2013)



### **Overview of Operations and Salient Features**

Currently, J-POWER owns and operates 58 hydroelectric power plants throughout Japan. Their total capacity of 8,556 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 largescale, 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.

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, the Company is contributing to the power supply around the country. As hydroelectric power is capable of rapidly responding to changes in electricity demand, 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. Furthermore, hydroelectric power represents a valuable national energy resource and, as a  $CO_2$ -free power source, plays a central role in renewable energy. Having developed its hydroelectric power business over many years, J-POWER responds appropriately to natural disasters and to the problems caused, for example, by sediment deposits that flow down to dam reservoirs. While continuing to ensure and maintain efficient power plants, the Company is working on the long-term, stable management of its hydroelectric power stations.

Most of J-POWER's rates for conventional-type 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 31.)



Okukiyotsu Power Plant (Niigata Prefecture)



#### Average Generation Capacity per Hydroelectric Power Plant of J-POWER and EPCOs (As of March 31, 2013)



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

### **Comprehensive Renewals and New Construction of Hydroelectric Power Plants**

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

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.

### J-POWER's Major Hydroelectric Power Plants in Japan

(As of March 31, 2013)

In addition, J-POWER is moving ahead with construction work at the Isawa No. 1 Hydroelectric Power Plant (14.2 MW output capacity) that utilizes a specific multi-purpose dam in Iwate Prefecture.

Construction plans are proceeding for a small-scale hydroelectric power development using river maintenance discharge at the Kuttari dam in Hokkaido.



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

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	400,000	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

### Wholesale Electric Power Business (Power Transmission/Transformation) Performance Highlights

In fiscal 2012, operating revenues from the power transmission/transformation business decreased 0.8% from the previous fiscal year, to ¥52.6 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 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, 2013)

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, 2013)

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)
Isawa	2012	Iwate Prefecture	9,000 (kVA)

#### Frequency Converter Station (As of March 31, 2013)

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

### AC/DC Converter Stations (As of March 31, 2013)

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, for PPSs, and Wind Power)

### **Performance Highlights**

In fiscal 2012, total electricity sales volume increased 11.4% from the previous fiscal year, to 2.2 billion kWh, due mainly to the increase in the load factor in electric power plants for IPPs and power plants for power producers and suppliers (PPSs). As a result, operating revenues increased 37.3% from the previous fiscal year, to ¥30.7 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 for PPSs.

### Wind Power Generation

The J-POWER Group owns 18 wind farms (208 units) throughout Japan with a total capacity of 353 MW (owned capacity: 332 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). Leveraging its diverse experience, J-POWER is making its O&M systems more efficient while working to improve utilization rates and enhancing profitability. With regard to its wind farms that are already in operation, J-POWER acquired facility accreditation for the renewable energy feed-in tariff system in fiscal 2012.

With a view to expanding its business, J-POWER is currently building two wind farms, one in Hokkaido Prefecture, the other in Ehime Prefecture. In continuing to discover areas offering suitable wind conditions, the Company is steadily promoting new developments.

Furthermore, between fiscal 2009 and fiscal 2013, J-POWER is conducting experimental studies into an offshore wind observation system off the coast of Kita-Kyushu in Fukuoka Prefecture on behalf of the New Energy and Industrial Technology Development Organization (NEDO). From fiscal 2011 to fiscal 2014, the Company is working jointly with NEDO to advance experimental studies into an embedded offshore wind power generation system and will be working toward making offshore wind power more commercially viable in the years to come.

### 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 (owned capacity: 270 MW). Wholesale electricity supplies for 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 (owned capacity: 226 MW).



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



Sales of wind power (left) ••• Operating revenues (right)



Bayside Energy Ichihara (Chiba Prefecture)

Wind Power Farms/Plants	Operating Companies	Location	Number of Wind Turbines	Capacity (kW)	Ownership	Completion
Sarakitomanai Wind Farm	Sarakitomanai Wind Power Co., Ltd.	Hokkaido Prefecture	(9)	14,850	49%	2001 (2009)
Tomamae Winvilla Wind Farm	J-Wind Co., Ltd.	Hokkaido Prefecture	(19)	30,600	100%	2000
Shimamaki Wind Farm	J-Wind Co., Ltd.	Hokkaido Prefecture	(6)	4,500	100%	2000 (2009)
Setana Seaside Wind Power Farm	J-Wind Co., Ltd.	Hokkaido Prefecture	(6)	12,000	100%	2005
Green Power Kuzumaki Wind Farm	J-Wind Co., Ltd.	Iwate Prefecture	(12)	21,000	100%	2003
Nikaho Kogen Wind Farm	Nikaho-Kogen Wind Power Co., Ltd.	Akita Prefecture	(15)	24,750	67%	2001
Koriyama-Nunobiki Kogen Wind Farm	J-Wind Co., Ltd.	Fukushima Prefecture	(33)	65,980	100%	2007
Hiyama Kogen Wind Farm	J-Wind Co., Ltd.	Fukushima Prefecture	(14)	28,000	100%	2011
Tokyo Bayside Wind Power Plant	J-Wind Co., Ltd.	Tokyo Metropolitan Area	(2)	1,700	100%	2003
Irouzaki Wind Farm	J-Wind Co., Ltd.	Shizuoka Prefecture	(17)	34,000	100%	2010
Tahara Bayside Wind Farm	J-Wind Co., Ltd.	Aichi Prefecture	(11)	22,000	100%	2005
Tahara Wind Farm	J-Wind Co., Ltd.	Aichi Prefecture	(1)	1,980	100%	2004
Awara-Kitagata Wind Farm	J-Wind Co., Ltd.	Fukui Prefecture	(10)	20,000	100%	2011
Yokihi no Sato Wind Park	J-Wind Co., Ltd.	Yamaguchi Prefecture	(3)	4,500	100%	2003 (2009)
Nagasaki-Shikamachi Wind Farm	Nagasaki-Shikamachi Wind Power Co., Ltd.	Nagasaki Prefecture	(15)	15,000	70%	2005
Aso-Nishihara Wind Farm	Green Power Aso Co., Ltd.	Kumamoto Prefecture	(10)	17,500	100%	2005
Aso-Oguni Wind Farm	Green Power Aso Co., Ltd.	Kumamoto Prefecture	(5)	8,500	100%	2007 (2009)
Minami Oosumi Wind Farm	Minami Kyushu Wind Power Co., Ltd.	Kagoshima Prefecture	(20)	26,000	99%	2003 (Nejime) (2009)
						2004 (Sata) (2009)
Total			(208)	352,860		
Zajaczkowo Wind Farm	Zajaczkowo Windfarm Sp. zo.o.	Poland	(24)	48,000	47%	2008
Total including overseas			(232)	400,860		

### Wind Power Project List (As of March 31, 2013)

\*1 Figures in ( ) are the years when the Company purchased its current holdings of shares from other companies.

### IPPs, Wholesale Power for PPSs List (As of March 31, 2013)

Plant Name	Operating Companies	Location	Capacity (kW)	Fuel Type	Ownership* <sup>2</sup>	Completion Date* <sup>3</sup>
IPPs						
Genex Mizue	GENEX Co., Ltd.*4	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.*4	Kochi Prefecture	150,000	Coal	45% Shikoku Electric Power Co., Inc. 35% TAIHEIYO CEMENT CORPORATION 20%	2005
Subtotal			522,000			
Wholesale Power for PPSs						
Ichihara Power	Ichihara Power Co., Ltd.	Chiba Prefecture	110,000	Gas*⁵	60% Mitsui Engineering & Shipbuilding Co., Ltd. 40%	2004
Bayside Energy Ichihara	Bay Side Energy Co., Ltd.	Chiba Prefecture	107,650	Gas*⁵	100%	2005
Mihama Seaside Power Shinminato	Mihama Seaside Power Co., Ltd.*4	Chiba Prefecture	104,770	Gas*⁵	50% Diamond Power Corporation 50%	2005
Subtotal			322,420			

\*2 Name of joint venture \*3 Date of investment participation by J-POWER \*4 Companies accounted for by the equity method \*5 Generation method: combined cycle

### **Business Overview**

### **Electric Power-Related Business**



### Segment Operating Revenues/ Segment Income\*



Operating income (right)

\* In the fiscal 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.

### **Performance Highlights**

In fiscal 2012, the operating revenues of electric power-related businesses increased 1.3% from the previous fiscal year, to ¥345.8 billion. This was mainly due to increased revenue of consolidated subsidiaries, which took orders for periodic inspection.

Segment ordinary income increased 8.7% from the previous fiscal year, to ¥9.0 billion, due mainly to the increase in sales.

### **Overview of Operations and Salient Features**

J-POWER develops businesses that support the smooth and efficient implementation of its electric power business. Specifically, these businesses are required for the operation of power generation, transmission, and transformation facilities and include businesses undertaking the design, construction, inspection, and maintenance of power generation facilities; importing coal; and employing their own vessels to transport coal. J-POWER conducts the maintenance of the power-generation facilities of its domestic wholesale electric power business in close partnership with its subsidiaries.

### **Coal Procurement**

As Japan's largest fuel coal user, procuring approximately 21 million tons of fuel coal a year, J-POWER imports coal primarily from Australia and Indonesia. In Australia, the Company owns interests in coal-mining projects through subsidiaries.

Major changes can take place in the global supply and demand of coal due to coal demand from developing countries, including from China and India, a trend for energy resources other than coal, such as liquefied natural gas (LNG), and other geopolitical factors. In view of this situation, J-POWER is expanding its upstream presence with respect to ownership of coal mines and securing diversified sources of procurement to stably procure coal as fuel for thermal power generation over the long term.



#### Coal Mining Projects (As of June 30, 2013)

Mine Name	Location	Loading Port	Production Volume 2012*1	Investment Ratio* <sup>2</sup>	Commercial Production
Clermont	Queensland	Dalrymple Bay	8.27 million t (Approx. 12 million t/yr)	15%	2010
Narrabri	New South Wales	Newcastle	1.43 million t (Approx. 6 million t/yr)	7.5%	2010
Maules Creek	New South Wales	Newcastle	 (Approx. 10.7 million t/yr)	10%	2014 (planned)

<sup>\*1</sup> The production volumes in parentheses represent figures for anticipated peak production.

Note: The Blair Athol Coal Mine in which the J-POWER Group holds a 10% stake finished production in November 2012.

<sup>\*2</sup> Investment through a subsidiary, J-POWER AUSTRALIA PTY., LTD.
### **Business Overview**

## **Overseas Business**



Kaeng Khoi 2 (Thailand)

Segment Operating Revenues/ Segment Income\*



Operating income (right)

\* Segment income is stated in terms of ordinary income.

## **Performance Highlights**

In fiscal 2012, operating revenues of overseas business decreased 17.9% from the previous fiscal year, to  $\pm$ 1.6 billion.

Segment ordinary income increased 11.7% from the previous fiscal year, to ¥3.9 billion, due mainly to the increase in equity income of affiliates.

## **Overview of Operations and Salient Features**

The J-POWER Group has been involved in the overseas consulting business since 1960. Since that time, it has undertaken long-term consulting business throughout the world, including environmental impact assessments, the transfer of desulfurization and denitrification technologies in thermal power generation, and the planning, design, and construction supervision of hydroelectric power and power transmission projects.

Subsequently, amid the ongoing deregulation of the world's electric power industries, J-POWER established a dedicated in-house organization in 1997, commenced activities that would lead to an overseas power generation business that participates in projects, while injecting capital and technologies into overseas markets where ongoing strong demand was expected.

At first, the focus was on participation in joint venture-model small businesses based on partial involvement in such operations and the building of power plants as comparatively small-scale injections of capital. Amid intense competition, experience and results were steadily gained, and the Company expanded its business participation to major capital investments and greenfield projects. In 2005, a subsidiary was established in the United States, where full-scale business development was commenced. In 2007, J-POWER began operations at the large-scale Kaeng Khoi 2 gas combined cycle power plant, in which it had been involved since construction in Thailand.

Through this step-by-step approach, J-POWER is redoubling its efforts to make its overseas power generation business into a second area alongside its domestic business. In March 2013, the Company has 31 projects in operation in seven countries and regions worldwide, including Thailand, the United States, China, Taiwan, and the Philippines, bringing its overseas owned capacity to 4,253 MW.

## Owned Capacity (Operating) and Equity Income/Loss of Overseas Power Generation Business



Note: Owned capacity [left]: Output is calculated by the total project capacity multiplied by J-POWER's equity ratio, and this is the amount recorded for the fiscal year-end.



Current Status	Project	Name	Electricity Generation Source	Output Capacity (MW)	Ownership	Participation Year	Power Purchaser	Validity of Purchase Agreement
	Thail	and						
	1	Roi-Et	Biomass (Chaff)	10	24.7%	FY2000	Electricity Generating Authority of Thailand	21 years
In operation	2	Rayong	Gas (Combined Cycle)*1	112	20.0%	FY2000	Electricity Generating Authority of Thailand/ Companies in the industrial park	21 years
	3	Gulf Cogeneration (Kaeng Khoi)	Gas (Combined Cycle)*1	110	49.0%	FY2001	Electricity Generating Authority of Thailand/ Companies in the industrial park	21 years
	4	Samutprakarn	Gas (Combined Cycle)*1	117	49.0%	FY2002	Electricity Generating Authority of Thailand/ Companies in the industrial park	21 years
	5	Nong Khae	Gas (Combined Cycle)*1	120	49.0%	FY2002	Electricity Generating Authority of Thailand/ Companies in the industrial park	21 years
	6	Yala	Biomass (Rubber Wood Waste)	20	49.0%	FY2003	Electricity Generating Authority of Thailand	25 years
	7	Kaeng Khoi 2	Gas (Combined Cycle)	1,468	49.0%	FY2004	Electricity Generating Authority of Thailand	25 years
	8	KP1* <sup>2</sup>	Gas (Combined Cycle)*1	110	90.0%	FY2007	Electricity Generating Authority of Thailand/ Companies in the industrial park	25 years
	9	KP2* <sup>2</sup>	Gas (Combined Cycle)*1	110	90.0%	FY2007	Electricity Generating Authority of Thailand/ Companies in the industrial park	25 years
	10	TLC* <sup>2</sup>	Gas (Combined Cycle)*1	110	90.0%	FY2007	Electricity Generating Authority of Thailand/ Companies in the industrial park	25 years
	Subtotal 10 projects 2,287 (Owned: 1,221 MW)							
	11	NNK*2	Gas (Combined Cycle)*1	110	90.0%	FY2007	Electricity Generating Authority of Thailand Companies in the industrial park	25 years
	(12)	NLL* <sup>2</sup>	Gas (Combined Cycle)*1	120	67.5%	FY2007	Electricity Generating Authority of Thailand Companies in the industrial park	25 years
Under construction	13	CRN* <sup>2</sup>	Gas (Combined Cycle)*1	110	90.0%	FY2007	Electricity Generating Authority of Thailand Companies in the industrial park	25 years
	14	NK2* <sup>2</sup>	Gas (Combined Cycle)*1	120	90.0%	FY2007	Electricity Generating Authority of Thailand Companies in the industrial park	25 years
	15	Nong Saeng	Gas (Combined Cycle)	1,600	90.0%	FY2007	Electricity Generating Authority of Thailand	25 years
	(16)	U-Thai (formerly Samet Tai)	Gas (Combined Cycle)	1,600	90.0%	FY2007	Electricity Generating Authority of Thailand	25 years

\*1 Co-generation facilities that make use of waste heat resulting from power generation \*2 Gemeng International Energy Co., Ltd., is an electric power company that owns 14 power generation companies.



Gulf Cogeneration, Kaeng Khoi (Thailand)



Green Country (U.S.A.)



Hezhou (China)



TLC (Thailand)



CBK, Kalayaan (Philippines)

Current Status	Project I	Name	Electricity Generation Source	Output Capacity (MW)	Ownership	Participation Year	Power Purchaser	Validity of Purchase Agreement
	China	1						
In operation	1	Tianshi	Coal Waste	50	24.0%	FY2000	Shanxi Province Power Corporation	Renewed for 1 year* <sup>4</sup>
	<b>18-19</b>	Hanjiang (Xihe/Shuhe)	Hydroelectric	450	27.0%	FY2009	Shaanxi Electric Power Company	Renewed for 1 year* <sup>4</sup>
moperation	20	Gemeng	Mainly Coal	5,885	7.0%	FY2009	Shanxi Province Power Corporation	_
	21	Hezhou* <sup>3</sup>	Coal	2,000	17.0%	FY2007	Guanxi Power Grid Co.	Renewed for 1 year*4
		Subtotal 5 projects		8,475 (C	Wned: 902 N	/W)		
	U.S.A							
	22	Tenaska Frontier	Gas (Combined Cycle)	830	31.0%	FY2006	Exelon Generation Company, LLC	20 years
	23	Elwood Energy	Gas (Simple Cycle)	1,350	25.0%	FY2006	Exelon Generation Company, LLC/ Constellation	Valid to 2012/ 2016/2017
	24	Green Country	Gas (Combined Cycle)	795	50.0%	FY2007	Exelon Generation Company, LLC	20 years
	25	Birchwood	Coal	242	50.0%	FY2008	Virginia Electric and Power Company	25 years
	26	Pinelawn	Gas (Combined Cycle)	80	50.0%	FY2008	Long Island Power Authority	Valid to 2025
In operation	27	Equus	Gas (Simple Cycle)	48	50.0%	FY2008	Long Island Power Authority	Valid to 2017
	28	Fluvanna	Gas (Combined Cycle)	885	15.0%	FY2008	Shell Energy North America	Valid to 2024
	29	Edgewood	Gas (Simple Cycle)	80	50.0%	FY2009	Long Island Power Authority	Valid to 2018
	30	Shoreham	Jet Fuel (Simple Cycle)	80	50.0%	FY2009	Long Island Power Authority	Valid to 2017
	3)	Orange Grove	Gas (Simple Cycle)	96	50.0%	FY2007	San Diego Gas & Electric	25 years
		Subtotal 10 projects	4,486 (Owned: 1,438 MW)					
	Othe	r Countries/Region						
	32-34	CBK (Philippines) (3 projects)	Hydroelectric	728	50.0%	FY2004	National Power Corporation	25 years
	35	Chiahui (Taiwan)	Gas (Combined Cycle)	670	40.0%	FY2002	Taiwan Power Company	25 years
In operation	36	Zajaczkowo (Poland)	Wind Power	48	46.8%	FY2006	ENERGA OBROT S.A.	15 years
	<b>3</b> 7	Nhon Trach 2 (Vietnam)	Gas (Combined Cycle)	750	5.0%	FY2008	Vietnam Electricity	Contract under negotiation
		Subtotal 6 projects		2,196 (C	Wned: 692 N	/W)		
In planning stage	38	Central Java (Indonesia)	Coal	2,000	34.0%	FY2011	PT PLN	25 years

\*3 Hezhou No. 1 (1,000 MW) commenced operations in August 2012. \*4 Although power purchase agreements are renewed every year, J-POWER makes other agreements with power purchasers for continuous power purchase during operations.

#### **Business Overview**

## **Other Business**



Fuel Production Facilities, Hiroshima City Seibu Water Reclamation Cen (Hiroshima Prefecture)

Segment Operating Revenues/ Segment Income/Loss\*



 Operating revenues ( Sales to customers outside the Gro Operating income/loss (right)

\* In the fiscal 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.

## **Performance Highlights**

In fiscal 2012, operating revenues of other businesses increased 10.7% compared with the previous year, to ¥24.7 billion. This was mainly due to an increase in revenues from the telecommunications construction operations of consolidated subsidiaries.

Due to such factors as the increase in sales, ordinary income rose to ¥0.9 billion after having been near the breakeven level (an ordinary loss of ¥3 million) in the previous fiscal year.

## **Overview of Operations and Salient Features**

Aiming to make full use of the management resources and know-how at its disposal, J-POWER is developing diverse businesses. These include telecommunications, coal sales, and environmental businesses through its consolidated subsidiaries and affiliates.

J-POWER's coal sales business sells coal the Company has procured to users in Japan and overseas, thereby contributing to improvements in the overall coal value chain. With a view to utilizing biomass fuel at its coal-fired thermal power plants, J-POWER's environment-related business undertakes the recycling of sewage sludge into solid fuel.

In addition to these operations, J-POWER is active in innovative power generation business through waste power generating business and a cogeneration system, and is also involved in the technical consulting service business in Japan.

#### Main Projects under Other Business (As of March 31, 2013)

Project Name	Location	Business	Ownership (%)	Year Operation Commenced
Kanamachi Filtration Plant PFI*1 Business	Tokyo Metropoli- tan Area	Cogeneration at Kanamachi Filtration Plant of Tokyo Metropolitan Government's Bureau (Gas turbine generator output: 12.28kW)	20%	2000
Narumi Plant PFI Business	Aichi Prefecture	Repair and maintenance work at Narumi Plant in Nagoya (General waste processing capacity: 530t/day)	11%	2009
Hiroshima City Seibu Water Reclamation Center/ Sewage Sludge Fuel Project	Hiroshima Prefecture	Integrated DBO-type* <sup>2</sup> sewage sludge-based biofuels recycling project, from the construc- tion of biofuel processing facilities to mixed combustion in J-POWER's coal-fired thermal power plants (Sludge processing capacity: 100t/day)	34%	2012
Kumamoto Sewage Sludge Solid Fuel Project	Kumamoto Prefecture	Integrated DBO-type <sup>*2</sup> sewage sludge-based biofuels recycling project, from the construction of biofuel processing facilities to mixed com- bustion in J-POWER's coal-fired thermal power plants (Sludge processing capacity: 50t/day)	44%	2013*3
Osaka City Hirano Sewage Treatment Plant/ Sludge and Solid Fuel Project	Osaka Prefecture	Integrated PFI-type* <sup>1</sup> sewage sludge-based biofuels recycling project, from the construc- tion of biofuel processing facilities to mixed combustion in J-POWER's coal-fired thermal power plants (Sludge processing capacity: 150t/day)	60%	2014 (Planned)
Omuta Waste-Fueled Power Plant	Fukuoka Prefecture	Recycling power generation using solid fuel (RDF: Refuse derived fuel) made by compress- ing and forming general waste (Output: 20.6MW, RDF processing capacity: 315t/day)	45.2%	2002

\*1 PFI (Private finance initiative) projects: This is a method of conducting public-sector projects from construction through the operating stages by drawing on private-sector funding, management know-how, technology, and other resources.

\*2 DBO (Design, build, operate): A system whereby the public sector finances projects and then commissions the private sector to undertake their design, construction, and operation

\*3 Commenced operations in April 2013

# Aiming for Sustainable Development with Society

- Corporate Governance
- 44 Directors and Corporate Auditors
- J-POWER Group's Corporate Social Responsibility (CSR)
- Environmental Management Efforts
- Relations with Communities, Society, and Employees

We seek to be an enterprise that develops energy business in a way that helps people enjoy lifestyles characterized by abundance, safety, and comfort. That is the J-POWER Group's primary objective. By dependably carrying out its day-to-day operations, the Group is aiming to achieve sustained corporate growth while contributing to the sustainable development of society.

## **Basic Philosophy**

In accordance with its corporate philosophy of meeting people's needs for energy without fail and playing its part for the sustainable development of Japan and the rest of the world, J-POWER seeks to realize business development and corporate value over the long term while endeavoring to maintain the confidence of its diverse stakeholders. The Company thus believes that strengthening corporate governance systems and ensuring rigorous compliance performance are important management objectives.

### **Corporate Governance**

Having built a corporate governance system that centers on two units the Board of Directors, which has 12 members, including one outside director, and the Board of Corporate Auditors, which has five members, including three outside corporate auditors—J-POWER is working to further strengthen the system's supervisory and monitoring functions.

Representative directors, executive managing officers, and executive officers not only are responsible for executing operations, but also overseeing each other through Board of Directors' meetings where the non-executive director is present with them and participates in management decision making with an independent perspective. In addition, J-POWER's corporate auditors attend Board of Directors' meetings and other meetings, and they are positioned to constantly monitor the directors' execution of their management duties. More than half of the corporate auditors are outside corporate auditors with abundant experience in such fields as the management of leading Japanese listed companies and the execution of governmental financial policies, and we are confident that their inclusion in our corporate governance system enables the system to fully carry out corporate governance functions.

The outside director and outside auditors are all "independent" corporate officers (outside corporate officers with a high level of independence and no potential conflicts of interest with ordinary shareholders) in accordance with the Securities Listing Regulations of the Tokyo Stock Exchange.

#### **Revision of Executive Officer System**

We revised our executive officer system as of June 26, 2012 to better define functions and lines of authority in the execution of duties. Under the new system, directors have a supervisory function, and the representative director, who has business administrative authority under the Companies Act, together with executive managing officers\* and executive officers, hold executive functions. This has clarified responsibilities and authority, enabling precise and prompt decision making and efficient corporate management.

\* Executive Managing Directors hold the post of Executive Managing Officer.

#### Legal Compliance of Directors in Execution of Their Duties

In accordance with the J-POWER Group corporate philosophy and the J-POWER Group Corporate Conduct Rules, directors take the initiative in displaying exemplary honest and fair conduct based on a firm spirit of respect for the law and a solid sense of ethics while also endeavoring to instill similarly rigorous conduct standards among all J-POWER employees. In addition, the directors resolutely refuse to allow the Group to engage in any activities related to antisocial elements that threaten the safety and order of civil society, and they work to ensure that all employees are aware of this policy and thoroughly implement it.

#### System for Execution of Directors' Duties

The Board of Directors meets monthly, in principle, and also on an as-needed basis, with the attendance of all directors and corporate auditors, including outside directors and auditors. The Executive Committee meets every week, in principle, with the attendance of all directors (excluding the outside director), executive managing officers, and full-time corporate auditors. This committee discusses matters that will be subject to deliberation by the Board of Directors as well the important operational execution duties of the president and executive vice presidents along the lines with decisions approved by the Board of Directors that have impact on the entire Company. Management Executing Committee meetings are held twice each month, in principle-with the attendance of the representative directors, executive managing officers, and executive officers with responsibilities related to matters under discussion, as well as all the full-time corporate auditors-to discuss important matters concerning the operational execution of each division. In addition to allocating functions among the Board of Directors, the Executive Committee, and the Management Executing Committee, we have introduced an executive officer system. By building a management system in which representative directors, executive managing officers, and executive officers share responsibility for operational execution, we have clearly defined management responsibilities and authorities in a manner that enables the representative directors, executive managing officers, and executive officers to make sound and speedy decisions and conduct efficient corporate management.

The representative directors, executive managing officers, and executive officers provide reports regarding the performance of their duties to the Board of Directors and the Executive Committee on a regularly scheduled basis as well as on an as-needed basis. In accordance with relevant laws and regulations and Company regulations, the minutes of meetings are prepared and appropriately stored and managed. Other documents related to the performance of directors' duties are properly prepared, stored, and managed in accordance with Company regulations.

In addition to maintaining these supervisory and monitoring functions, to ensure that operations are conducted in an appropriate manner, we have established the Internal Audit Department, which conducts internal audits from a perspective that is independent of other organizational units. Moreover, each organizational unit regularly conducts self-audits with respect to its own operational execution.

Regarding the disclosure of information to those outside the Company, we are seeking to improve the transparency and accountability of our corporate activities and have, therefore, established the Disclosure Committee. Chaired by the president, this committee works to ensure that the Company discloses information that is fair and transparent in a timely and proactive manner.

#### **Advisory Board**

Aiming to further improve our corporate governance, we have established the J-POWER Advisory Board, which provides a forum for experts from outside the Company to provide suggestions and proposals designed to increase corporate value based on diverse, objective perspectives. Comprised of four outside members and several inside members (all representative directors, including the president), the J-POWER Advisory Board meets several times each year. Rather than recruiting outside members with expertise directly related to the energy business, we have emphasized the selection of people who have a broad range of experience and insight and are well positioned to actively provide opinions related to management situations, management plans, and important corporate challenges and objectives.

## Outside Members of the J-POWER Advisory Board

(13 01 34110 30, 2013)			
Takamitsu Sawa			
Nobuhiko Shima			
Mieko Nishimizu			
Takashi Wachi			

(President, Shiga University; Professor) (Journalist) (Senior Partner, Think Tank SophiaBank) (Ex-Director and Honorary Chairman, Terumo Corporation)

#### Audits by Corporate Auditors

J-POWER's corporate auditors audit directors, executive managing officers, and executive officers in the execution of their duties by attending Board of Directors' meetings and other important meetings. In addition, the corporate auditors implement accounting audits and audits of the Company's organizational units and main subsidiaries.

In the course of accounting audits, corporate auditors liaise with the independent auditors to coordinate auditing schedules and exchange

opinions regarding auditing results as a means of ensuring the consistency of their auditing results and the independent auditors' auditing results. The Company's corporate auditors liaise with the Internal Audit Department when auditing the Company's organizational units and, when auditing principal subsidiaries, they liaise with that subsidiary's corporate auditors. In the course of conducting their own audits, the Company's corporate auditors receive reports regarding their liaison counterpart's audit findings.

To provide the corporate auditors with support, we have established a Corporate Auditors' Office, which is an independent unit outside of the directors' chain of command. The office's full-time specialist staff members assist the corporate auditors in the performance of their audits.

#### **Group Governance**

The J-POWER Group employs fully consolidated accounting processes. We recognize the increasing importance of consolidated business results as a means of measuring the Group's overall strength and seek to clarify the role of each Group company and increase corporate value based on a system in which individual Group companies perform specialized roles.

With regard to the administration of subsidiaries and affiliates, J-POWER's basic policy calls for Group-wide business development in accordance with the Group's management plan. The administration of subsidiaries and affiliates is undertaken in accordance with the Company's internal regulations, and the Group Management Committee works to ensure the appropriateness of operations within the corporate Group. In addition, the corporate auditors and the Internal Audit Department implement audits of subsidiaries and affiliates with the objective of ensuring proper operations at all Group companies.

In addition, we have established the J-POWER Summit, a Companywide committee consisting of business unit senior management, with the objective of promoting information exchanges and other activities within the Group as a whole. The J-POWER Summit is held several times each year with the attendance of the president as well as such other participants as executive directors, executive managing officers, executive officers, full-time corporate auditors, general directors of domestic and overseas units of the Company, and representatives of principal subsidiaries. Besides promoting awareness of issues with respect to which the Group should be concertedly sharing information and implementing measures, participants make requests and exchange opinions related to those issues.

#### **Risk Management**

With respect to risks associated with the execution of corporate activities, J-POWER incorporates mutual checks and balances in its decision-making processes, undertakes discussions in various meetings and committees, and creates risk management frameworks covering ordinary operations as well as crisis management operations in accordance with Company regulations. These and other initiatives are designed to ensure awareness of risks and thorough risk avoidance measures as well as to minimize the impact of any damage eventuating from risks.

#### **Response to Internal Control and Reporting System**

With respect to the financial reporting-related internal control and reporting system stipulated by Japan's Financial Instruments and Exchange Act, the J-POWER Group is establishing, operating, and evaluating internal control systems centered on the Accounting & Finance Department and Internal Audit Department.

In fiscal 2012, as in the previous year, evaluations of the development and operation of internal controls were conducted by management with respect to Company-wide internal controls, operational process-related internal controls, and information technology-based internal controls in accordance with the implementation standards of Japan's Financial Services Agency, and it was determined that the Company's financial reporting-related internal control system is effective. Compiled in the form of an Internal Control Report, this evaluation result was submitted to the prime minister in June 2013 via an audit carried out by the Company's independent auditors.

Going forward, the J-POWER Group will continue working to improve its internal control system and to ensure the reliability of its financial reporting.

#### Corporate Governance Framework and Internal Control System (As of June 30, 2013)



#### Implementation Decisions in Overseas Businesses, etc. (Processes and Management Systems)

With respect to overseas business strategies, each year, J-POWER undertakes regularly scheduled project reevaluation measures based on investment scale, geographic region, and types of power.

International business units promoting overseas business undertake feasibility studies and consultations with associated parties as an initial screening process to determine which of numerous candidate projects are to be implemented and promoted. At the time of this screening process, J-POWER carefully studies various factors, including the power industry and overall situations of candidate countries, the associated types of fuel, the creditworthiness of prospective electric power receivers, the conditions of prospective power purchase agreements, and the associated power transmission infrastructure.

Decisions on project selections are made after the candidate projects are subjected to numerous stages of checks and deliberations based on the investment and financing management regulations instituted within the Company.

The check/deliberation process begins with detailed working-level studies cooperatively conducted by staff in planning, legal affairs, and finance units. At this stage, project-related risk factors and issues of concern are identified, and the issues to be discussed during management deliberations are clarified and organized. Next, a Management Executing Committee meeting is convened with the attendance of the president and related corporate officers, and each issue is subjected to management-level deliberations. Decisions on projects within the scope of the decision-making authority of the president or vice president are made by them at Management Executing Committee meetings, based on deliberations. Other projects undergo additional deliberations and are considered by the Executive Committee before being submitted to the Board of Directors for a final decision.

Specific investment decisions are made in accordance with investment evaluation guidelines instituted within the Company. A hurdle rate determined based on a comprehensive evaluation of such criteria as project duration, project type, and country risk is compared with the projected internal rate of return. In principle, J-POWER uses project finance to fund its overseas projects, which are subjected to reviews by the financial institutions providing funds, and the Company, therefore, strives to engineer each of its business projects in a manner that is clearly rational with respect to both technology and finance.

Projects that are actually undertaken as a result of this decision-making process are subject to day-to-day operation and management by international business units as well as to regular monitoring by planning, legal affairs, and finance units. We strive to maintain an accurate grasp of capacity utilization levels and other factors liable to impact projects' profitability as well as to quickly identify and respond to problematic situations. We also undertake similar processes with respect to domestic projects.

## Screening and Decision-Making Process for Overseas Investments and Financing

All allowed and a set of a set of a set of the set of	
All directors and auditors	Board of Directors' meeting
All directors, executive managing	<b>A</b>
officers, and senior corporate auditors	Executive Committee
	<b>A</b>
Directors in charge (related divisions)	Management Executing Committee
Preliminary discussions on	<b>A</b>
projects under consideration	Business Strategy Committee
Early-stage screening	Business Divisions

#### Setting of Stock Purchasing Guidelines

To provide an additional incentive for management to work to reflect the perspective of shareholders in business operations and to raise long-term shareholder value, J-POWER has established guidelines for the purchase of shares by directors and executive officers. In accordance with these guidelines, directors and executive officers have purchased J-POWER shares monthly through the corporate officers' shareholding plan.

## Compliance

Based on the J-POWER Group corporate philosophy, we have formulated basic guidelines for behavior in line with compliance and business ethics principles that must be observed in the course of implementing business operations. The J-POWER Corporate Conduct Rules set forth basic principles for compliance, while the Compliance Code lays down more concrete decision-making standards for actions taken by individual employees, including members of management, when conducting business activities. In addition, the Company distributes copies of *The Compliance Manifesto* to all employees and works to encourage awareness of compliance by having them sign and carry the manifesto with them.

J-POWER has given its chairman responsibility for overseeing Company-wide compliance. The Company's compliance promotion system centers on the director in charge of compliance, who implements compliance promotion programs and assists the chairman and president in this regard. In addition, the Compliance Action Committee, chaired by the chairman, has been established to discuss and evaluate the implementation status of Company-wide compliance promotion measures and address issues related to compliance violations. To quickly and accurately promote operations pertaining to compliance promotion, two task forces have been set up, one regarding Company-wide compliance promotion and the other autonomous safety activities based on the safety regulation of the Company. Two vice presidents have been assigned to chair these task forces.

At such major operating units as branches and thermal power plants, J-POWER has also established compliance committees in individual units to carry out compliance activities tailored to the special characteristics of each unit. Group companies also participate in these compliance committees, so that compliance activities are consistently promoted throughout the Group. Additionally, a Compliance Consulting Point has been established at the Internal Audit Department and at an external law firm to serve as a consulting hotline in the event that employees face compliance issues.

The J-POWER Group is working to promote compliance by dividing compliance-related duties and responsibilities among these units while also encouraging cooperation and collaboration among the units.

#### The J-POWER Group's Compliance Promotion System



#### **Group Companies**

• Deciding on and conducting compliance promotion measures



## **Directors and Corporate Auditors**

(As of June 30, 2013)



Chairman (Representative Director) Yasuo Maeda Company-wide compliance Group technology improvements



President (Representative Director) Masayoshi Kitamura



Executive Vice President (Representative Director) **Yoshihiko Sakanashi** Assistant to the president for businesses described below:

Corporate Planning & Administration Dept.; Accounting & Finance Dept.; Personnel & Employee Relations Dept.; Siting & Environment Dept.; Energy Business Dept.; Environment & Energy Business Dept.; International Business Management Dept.; and International Business Development Dept. Compliance and risk management (matters under

special assignment) Hydroelectric power business (matters under

special assignment) Department Director of International Business (delegation of administrative works) Regional operations (central)



Executive Managing Director **Kuniharu Takemata** Siting & Environment Dept. Environment & Energy Business Dept. Regional operations (east region)



Executive Vice President (Representative Director) Minoru Hino

## Assistant to the president for businesses described below:

Geschied Delow: Civil & Architectural Engineering Dept.; Transmission System & Telecommunications Dept.; Thermal Power Dept.; Thermal Power Engineering Dept.; Nuclear Power Management Dept.; Nuclear Power Construction Dept.; Ohma General Management Dept. and Research & Development Dept.

Compliance and risk management (matters under special assignment) Department Director of Nuclear Power Business (delegation of administrative works) Regional operations (central, west & east regions)



Executive Managing Director Junji Nagashima Nuclear Power Construction Dept. Ohma General Management Dept. Department Deputy Director of Nuclear Power Business (delegation of administrative works)



Executive Vice President (Representative Director) **Toshifumi Watanabe** Assistant to the president for businesses described

below: Secretaria (Afairs & Public Relation Dept.; General Affairs Dept.; Business Planning Dept.; Power Sales Dept., Procurement Office; Power System Operation Dept.; and Hydropower Dept. Compliance and risk management (matters under special assignment)

Disaster prevention (matters under assignment) Nuclear power business (matters under special assignment) Thermal power business (matters under special assignment) Department Deputy Director of Nuclear Power Business (delegation of administrative works) Regional operations (central region)



Executive Managing Director Seigo Mizunuma Accounting & Finance Dept. International Business Development Dept. Department Deputy Director of International Business (delegation of administrative works)



Naori Fukuda Civil & Architectural Engineering Dept. Hydroelectric power business, thermal power engineering, nuclear power and international business (matters under special assignment) Regional operations (central region)



Executive Director Go Kajitani\*<sup>1,3</sup>



Executive Managing Director **Hitoshi Murayama** Thermal Power Dept. Thermal Power Dept. Research & Development Dept. International business (matters under special assignment) Thermal power business (matters under special assignment) Regional operations (west region)



Executive Managing Director Masato Uchiyama Personnel & Employee Relations Dept. Power Sales Dept. Power System Operation Dept.



Akihito Urashima Kiyotaka Koshiba Masayoshi Murakoshi Michio Arai Shinichi Kawatani Hiromi Minaminosono Hiroyasu Sugiyama Hideki Tsukuda

Senior Corporate Auditors

Takashi Fujiwara\*<sup>2, 3</sup>

Akira Samata

Corporate Auditors

Mutsutake Otsuka\*<sup>2,3</sup>

Kiyoshi Nakanishi\*<sup>2,3</sup>

Executive Managing Officers

Koichiro Kikuchi

Shirou Otsuka

Shuji Etoh

Itaru Nakamura Yoshiki Onoi

### 44 \*1 Outside Director \*2 Outside Corporate Auditor \*3 Independent Officer

## J-POWER Group's Corporate Social Responsibility (CSR)

## J-POWER Group's Corporate Social Responsibility

Our corporate philosophy calls for meeting people's needs for energy without fail, and playing our part for the sustainable development of Japan and the rest of the world. This is fundamental to our ongoing efforts to deliver efficient, reliable electricity while conserving the environment. It is this corporate philosophy that forms the basis of our social responsibility. In addition, the J-POWER Corporate Conduct Rules have been laid down as standard for the conduct of business grounded in our corporate philosophy.

We endeavor to fulfill our corporate social responsibility by adhering to our corporate philosophy and Corporate Conduct Rules as we press forward in our operations.

#### J-POWER Group Corporate Conduct Rules (Established on January 1, 2001)

Reliable supply of energy	We will put forth every effort to reliably supply energy both in Japan and abroad utilizing our experienced personnel and cutting-edge technology.
Safety assurance	In conducting operations, we will constantly work to raise safety awareness and give the highest priority to public and work- er safety.
Environmental conservation	Based on an awareness that our business operations are deeply linked with the environment, we will actively engage in environmental conservation activities.
Communication with society	To establish communication with society, we will conduct information disclosure and public relations activities in a fair and transparent manner.
Contribution to society	Aiming to be a good corporate citizen, we will undertake activities to contribute to society and assist in the development of local communities both in Japan and abroad.
Creation of a rewarding corporate culture	In addition to providing safe and comfortable work environments, we will respect the individuality of our employees and endeavor to establish a rewarding corporate culture that encourages them to take on new challenges.
Compliance with laws, regu- lations, and corporate ethics	We will conduct business in good faith and in a fair manner with a strong commitment to compliance and ethics. We will stand firm against anti-social forces that undermine the order and security of civil society.
Role of top management	Recognizing their responsibility in putting into practice the spirit of these Corporate Conduct Rules, our top management must set an example for others and work to spread awareness of these Rules. Should an event occur that violates the spirit of these Rules, top management must take the initiative in dealing with the problem to determine the causes and prevent recurrence. Top management must also identify and take disciplinary action against those responsible, including themselves.

## J-POWER Group's Corporate Social Responsibility and Principal Themes of Action Taken

The J-POWER Group carries out its responsibilities to society in line with its corporate philosophy, living up to the expectations of the diverse stakeholders who support it. The following is an outline of the principal themes of the action it has been taking.

Corporate Philosophy	Theme	Principal Action Taken
	Stable supply of electric power	Ensuring supply capacity through proper facilities maintenance
We value integrity and pride, which drive	Enhancement of internal controls	Enhancing the corporate governance structure Thorough regulatory compliance
everything we do.	Gaining of the trust of society	Conducting appropriate information disclosure Giving attention to safety in all business activities
We pursue harmony with the	Efforts relating to global environmental issues	Reducing CO <sub>2</sub> emissions from power generation Maintaining and improving thermal efficiency of thermal power generation
of communities where we live and work.	Efforts relating to local environmental issues	Reducing emissions of SOx, NOx, etc. Promoting waste recycling Initiatives to protect biodiversity
We regard profits as the source of our	Return of value to shareholders	Maintaining stable dividends and raising them in line with growth performance
growth, and share the muits with society.	Contribution to society as a whole	J-POWER Group social contribution activities
We refine our knowledge constantly, to	Nurturing of human resources	Enhancing ability to conduct business by improving basic knowledge and professional capabilities
and wisdom.	Promotion of innovation	Human-resource development and organizational generation to foster creation of new concepts
We unite diverse personalities and	Enhancement of workplace environments	Promoting work-life balance
better tomorrow.	Active participation by diverse human resources	Creating workplace environments and systems that facilitate active participation by senior citizens and women

Based on its corporate philosophy of "harmonizing energy supply with the environment," the J-POWER Group practices environmental management that simultaneously aims to improve both environmental friendliness and economic value as a means of increasing the Group's contribution to the development of a sustainable society.

## The J-POWER Group's Environmental Management Vision (Revised on July 1, 2011) Basic Stance

As an energy supplier, we will contribute to the sustainable development of Japan and the rest of the world by harmonizing our operations with the environment and ensuring the constant supply of energy essential to human life and economic activity.

- As an energy supplier, the J-POWER Group will strive to bring together its expertise and its technologies in the utilization of a wide variety of energy sources, including fossil fuels, nuclear power, and renewable energies, to ensure the efficient and uninterrupted supply of the power essential to human life and economic activity.
- We will contribute to sustainable development in Japan and the rest of the world as a whole by minimizing the environmental impact of our business activities, reducing environmental risks such as global warming, and improving eco-efficiency by achieving higher productivity with a lower environmental load, thus promoting greater environmental responsibility while enhancing economic value.

Efforts Aimed at Realizing a Low-Carbon Society

## **Efforts Relating to Global Environmental Issues**

Directing our most intensive efforts towards the provision of a stable energy supply, we will also steadily advance initiatives towards the realization of low-carbon technologies both domestically and internationally, and will contribute to the reduction of CO, emissions on a global scale.

To that end, we will work from mid- and long-term perspectives with technology as our central focus to realize a stable supply of energy and





Reducing CO, Emissions from

including expanding the application of biomass mixed combustion, replacing aging thermal power plants, and deploying high-efficiency, coal-fired power generation internationally.

reduce CO<sub>2</sub> emissions domestically and internationally through mea-

sures including reducing CO<sub>2</sub> emissions from coal-fired power genera-

Conducting Research and Development of Next-Generation Low-Carbon Technologies



We will conduct research and development in areas including further high-efficiency power generation technologies, CO<sub>2</sub> capture and storage technologies, and technologies for ocean-based wind power generation.

While sparing no efforts in continuing to develop nuclear power stations, with safety as our top priority and with the understanding of the local communities in the areas in which the facilities are located, we will also work to expand our use of hydroelectric, wind power, and geothermal power generation.





## Efforts Relating to Local Environmental Issues

In addition to adopting measures to reduce the environmental impact of our operations, we will seek to operate in harmony with the local environments in which our facilities are located by working to save, recycle, and reuse resources in order to limit the amount of waste that we produce.

## **Ensuring Transparency and Reliability**

We will ensure that our business activities comply with all laws and regulations, disclose a wide range of environmental information, and enhance communication with stakeholders.

## **Relations with Communities, Society, and Employees**

## **Coexistence with Communities and Society**

The J-POWER Group conducts business based on harmonious coexistence with local communities and society as an electric power company with power generation and power transmission and substation facilities throughout Japan and overseas. Going forward, we will perform busi-\_\_\_\_\_

#### **Communication with Society**

The J-POWER Group implements fair and transparent public relations (PR) activities and information disclosure in order to secure good lines of communication with many stakeholders in different communities and in society. We are committed to making pinpoint responses when it comes to PR in light of the characteristics of the stakeholders and our relationship with them, including citizens in particular regions, shareholders, investors, and society at large. We also promote stakeholders dialog, cognizant of the importance of two-way communication. In terms of information disclosure, we distribute information through our PR activities and respond to inquiries while also disclosing IR information via the Disclosure Committee.

ness that centers on "Communication with society" and "Contribution to society" as advocated in the J-POWER Corporate Conduct Rules as a means to drive advancement in local communities and society.

#### Contributions to Communities and Society—Approaches to Social Contribution Activities

"We pursue harmony with the environment, and thrive in the trust of communities where we live and work. We regard profits as the source of our growth, and share the fruits with society." Under this corporate philosophy, the J-POWER Group has long engaged in social contribution activities as a member of society to help society develop soundly and sustainably.

#### **Community Involvement (Principal Themes I)**

The J-POWER Group's activities are supported by the communities where its power stations and other facilities are located. Every employee is committed to being a good resident in these local communities. In addition, our business sites and offices strive to be good corporate citizens that benefit communities and society as a whole. We will strive to exist harmoniously with local communities and grow together with society through activities that are accepted and trusted by local residents



A J-POWER employee delivers a lecture at a school

Theme	Principal Action Taken
Participation in regional/traditional events, exchange activities	Cooperation in festivals held in areas where power stations are located; holding of Community Concerts in areas where power stations are located; local cleanup activities, etc.
Educating and supporting the next generation	Conducting of lectures; handicraft workshop in electrical engineering; internships, etc.
Activities in support of areas affected by the Great East Japan Earthquake	Contribution of relief donations/supplies; use of agricultural products from affected areas, etc., in purchases/ employee canteens; community-building support activities that use composting technologies
Communication with society	The holding of electric power plant open days; active receiving of local elementary schoolchildren on tours, etc., of power plants and power transmission facilities; receiving of tour visits by the general public, etc.
Efforts overseas	Cooperative assistance for those affected by the floods in Thailand; job training for local residents living close to the Philippine CBK project, etc.

#### Harmonizing Energy Supply with the Environment (Principal Themes II)

People's lives are enriched by energy and the natural environment. In order to achieve a society of sustainable growth that makes effective use of limited energy resources and the bounties of nature, we must cultivate the technology and the state of mind that treats both energy and the natural environment with care as "connections" rather than as antagonistic entities. Drawing on the wealth of discoveries already made and working with a variety of people toward a symbiosis of energy and the environment, J-POWER is encouraging a host of activities that includes the ecology and energy experiential learning tour.



Ecology and energy experiential learning

Provide hands-on energy/ environment teaching programs	Ecology and energy experiential learning tour; Ecology and Energy Cafe; Kaze no Ko (Child of the Wind) school; holding of workshops "Be the Energy Minister", etc.
Local environment protection activities	Forest conservation activities; put into effect full flower campaigns/planting activities, etc.
Nature observation/science classes	Hold "hands-on" classes and nature observation tours in the areas where power plants are located, etc.

## **Developing Human Resources and Creating a Dynamic Workplace**

Recognizing its human resources as an asset responsible for corporate sustainable growth, the J-POWER Group strives to provide safe and comfortable working environments for every one of its employees. At the same time, we endeavor to create a corporate culture that respects the character and individuality of our employees and makes them feel it is worthwhile to constantly take on new challenges.

#### J-POWER Group's Basic Philosophy on Human Resources

### Building a Human Resources Foundation for Sustainable Group Growth

In order to support the sustainable growth of a corporation, it is necessary for all our employees to cultivate their individual skills and abilities and to generate new ideas in order to continue creating added value.

At the J-POWER Group, we place the greatest importance on measures to secure and develop human resources as a way to seek sustainable growth. We are reinforcing the foundation for career development, with a focus on Career Development Programs (CDPs), establishing workplace environments and systems that make advantageous use of diversity, and promoting work-life balance in order to improve individual skills and workforce productivity. Human Resources Are Key to Corporate Sustainability

Developing Group Human Resources and Creating Dynamic Workplaces

#### Securing Human Resources

- Build a foundation of small groups of independent and highly talented personnel who support sustainable growth
- Promote diversity in line with environmental changes

#### **Developing Human Resources**

- Ability to perform work to accommodate changing or expanding business opportunities
- Strengthen CDPs for maintaining and raising technical skills (Job rotations, on/off-the-job training, etc.)
- Develop the next generation of leaders

### Improving the Environment

- to Achieve Invigoration
- Establish working environments that motivate employees to take on an active role
- Promote work-life balance
- Establish working environments and systems that enable experienced employees and women to flourish

#### Securing and Developing of Human Resources

In addition to undertaking recruitment, the J-POWER Group seeks personnel in a wide range of fields and age-groups, and is encouraging the creation of systems and working environments in which diversified personnel can fully demonstrate their capabilities.

With regard to personnel hiring and utilization, the J-POWER Compliance Code stipulates respect for individuality and human rights and prohibits discrimination. We are also conducting awareness-raising on these matters in level-specific training and in human rights training conducted within each unit.

The J-POWER Group aims to develop all of its employees into independent, highly talented personnel (professional human resources) who refine a multiplicity of specialized skills and knowledge so as to contribute to achievement of organizational objectives from a broad perspective. We have adopted the CDPs as an education and training program that is effective for that purpose. The program provides management with specific guidelines for fostering personnel. It provides employees with an interactive development tool that helps them think about their own career trajectories and take the initiative in developing their abilities and raising their value to the Company. We encourage employees to make active use of the program. By combining OJT and Off-JT in this program, J-POWER is promoting human resource development that raises the value of its workforce and the Company.

#### **Energizing the Workforce**

J-POWER has established a wide range of options in work and leave programs so that employees will be able to fully demonstrate their abilities in accordance with their life circumstances. We are improving our various systems that provide for a healthy work-life balance by granting leave, arranging shorter working hours, or taking other such measures, in particular for employees who are involved in child-rearing or caring for elderly family members. We are also developing a framework to support voluntary employee activities by means of a leave system and other measures to allow participation in volunteer programs and the like.

#### Safety and Health Management

As set forth in its Corporate Conduct Rules, the J-POWER Group "constantly works to raise safety awareness in expediting work, and gives highest priority to assuring the safety of the public and of the workers." In addition, we aim for "creation of a safe, healthful workplace that provides job satisfaction as the foundation for business activities," and, to that end, we operate occupational safety and health management systems within the Group, promote overall safety management, and work to raise system levels. In these ways, we are striving to prevent workplace accidents and maintain or improve employee health.

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## **Consolidated Balance Sheets**

	(Millions of	
	2012/3	<b>2013</b> /3
Assets		
Noncurrent assets	1,849,786	1,975,202
Electric utility plant and equipment	1,111,251	1,058,849
Hydroelectric power production facilities	374,510	363,437
Thermal power production facilities	423,049	387,957
Internal combustion engine power production facilities	4,296	3,956
Renewable power production facilities	34,479	31,358
Transmission facilities	186,274	185,754
Transformation facilities	31,774	30,608
Communication facilities	9,065	8,638
General facilities	47,801	47,137
Other noncurrent assets	65,657	118,840
Construction in progress	380,425	464,674
Construction and retirement in progress	380,425	464,674
Nuclear fuel	54,157	59,769
Nuclear fuel in processing	54,157	59,769
Investments and other assets	238,295	273,067
Long-term investments	181,132	202,464
Deferred tax assets	52,571	47,234
Other	5,653	24,416
Allowance for doubtful accounts	(1,062)	(1,047)
Current assets	166,607	194,707
Cash and deposits	35,112	49,283
Notes and accounts receivable-trade	59,283	61,644
Short-term investments	1,331	402
Inventories	34,972	38,160
Deferred tax assets	6,688	7,423
Other	29,284	37,847
Allowance for doubtful accounts	(63)	(54)
Total assets	2,016,394	2,169,909

	(Millior	
	2012/3	<b>2013</b> /3
Liabilities		
Noncurrent liabilities	1,324,663	1,402,287
Bonds payable	714,914	694,930
Long-term loans payable	522,407	608,977
Lease obligations	983	982
Provision for retirement benefits	58,015	59,012
Other provision	25	36
Asset retirement obligations	4,585	3,971
Deferred tax liabilities	6,390	7,801
Other	17,339	26,574
Current liabilities	284,761	313,311
Current portion of noncurrent liabilities	166,342	196,999
Short-term loans payable	18,443	18,475
Commercial papers	12,999	3,999
Notes and accounts payable-trade	20,011	25,049
Accrued taxes	11,408	10,811
Other provision	325	273
Asset retirement obligations	626	1,495
Deferred tax liabilities	4	3
Other	54,599	56,202
Reserves under the special laws	777	425
Reserve for fluctuation in water levels	777	425
Total liabilities	1,610,202	1,716,024
Net assets		
Shareholders' equity	441,369	460,673
Capital stock	152,449	152,449
Capital surplus	81,849	81,849
Retained earnings	270,334	289,639
Treasury stock	(63,264)	(63,265)
Accumulated other comprehensive income	(33,985)	(6,768)
Valuation difference on available-for-sale securities	(772)	4,855
Deferred gains or losses on hedges	(4,209)	(6,929)
Foreign currency translation adjustment	(29,003)	(4,693)
Minority interests	(1,191)	(19)
Total net assets	406,192	453,885
Total liabilities and net assets	2,016,394	2,169,909

## **Consolidated Statements of Income**

		(Millions of yen)
	2012/3	<b>2013</b> /3
Operating revenue	654,600	656,056
Electric utility operating revenue	609,775	605,338
Other business operating revenue	44,825	50,717
Operating expenses	604,800	601,490
Electric utility operating expenses	553,873	542,195
Other business operating expenses	50,927	59,295
Operating income	49,800	54,566
Non-operating income	15,356	17,577
Dividends income	1,315	1,321
Interest income	968	1,195
Equity in earnings of affiliates	9,565	11,728
Other	3,506	3,331
Non-operating expenses	28,536	27,318
Interest expenses	22,005	22,362
Other	6,530	4,956
Total ordinary revenue	669,957	673,634
Total ordinary expenses	633,337	628,808
Ordinary income	36,619	44,825
Provision or reversal of reserve for fluctuation in water levels	—	(351)
Reversal of reserve for fluctuation in water levels	_	(351)
Extraordinary loss	3,382	—
Disaster recovery expenses	3,382	—
Income before income taxes and minority interests	33,237	45,176
Income taxes-current	12,953	11,940
Income taxes-deferred	4,370	3,622
Total income taxes	17,324	15,562
Income before minority interests	15,913	29,613
Minority interests in loss	(200)	(194)
Net income	16,113	29,808

## **Consolidated Statements of Cash Flows**

		(Millions of yen)
	2012/3	<b>2013</b> /3
Net cash provided by (used in) operating activities		
Income before income taxes and minority interests	33,237	45,176
Depreciation and amortization	105,271	95,254
Impairment loss	946	180
Loss on retirement of noncurrent assets	2,434	2,418
Disaster recovery expenses	3,382	_
Increase (decrease) in provision for retirement benefits	971	987
Increase (decrease) in reserve for fluctuation in water levels	_	(351)
Interest and dividends income	(2,284)	(2,517)
Interest expenses	22,005	22,362
Decrease (increase) in notes and accounts receivable-trade	(1,607)	(2,133)
Decrease (increase) in inventories	(2,488)	(3,133)
Increase (decrease) in notes and accounts payable-trade	3,148	5,642
Loss (gain) on sales of securities	(484)	(620)
Loss (gain) on valuation of securities	1,791	242
Equity in (earnings) losses of affiliates	(9,565)	(11,728)
Loss (gain) on sales of noncurrent assets	747	526
Other, net	8,526	(8,922)
Subtotal	166,031	143,385
Interest and dividends income received	6,869	7,926
Interest expenses paid	(21,765)	(21,974)
Income taxes paid	(25,244)	9,552
Net cash provided by (used in) operating activities	125,891	119,786
Net cash provided by (used in) investing activities		
Purchase of noncurrent assets	(133,711)	(165,201)
Proceeds from contribution received for construction	3,102	6,343
Proceeds from sales of noncurrent assets	2,285	1,140
Payments of investment and loans receivable	(6,068)	(1,347)
Collection of investment and loans receivable	4,915	7,938
Proceeds from sales of investments in subsidiaries		
resulting in change in scope of consolidation	1,425	_
Other, net	(8,802)	(19,242)
Net cash provided by (used in) investing activities	(136,852)	(170,369)
Net cash provided by (used in) financing activities		
Proceeds from issuance of bonds	_	39,877
Redemption of bonds	(35,000)	(20,000)
Proceeds from long-term loans payable	176,745	207,887
Repayment of long-term loans payable	(127,173)	(146,048)
Increase in short-term loans payable	103,760	108,500
Decrease in short-term loans payable	(103,070)	(110,038)
Proceeds from issuance of commercial papers	359,968	326,969
Redemption of commercial papers	(359,000)	(336,000)
Cash dividends paid	(10,502)	(10,501)
Cash dividends paid to minority shareholders	(196)	_
Other, net	3,764	856
Net cash provided by (used in) financing activities	9,296	61,502
Effect of exchange rate change on cash and cash equivalents	(585)	2,615
Net increase (decrease) in cash and cash equivalents	(2,248)	13,535
Cash and cash equivalents at beginning of period	38,002	35,359
ncrease (decrease) in cash and cash equivalents	·	
resulting from change of scope of consolidation	(394)	
Cash and cash equivalents at end of period	35,359	48,894

## **Management's Discussion and Analysis**

## **Electricity Sales Volume and Operating Revenues**

With regard to sales (operating revenues) during the consolidated fiscal year ended March 31, 2013 (fiscal 2012), a decrease in the water supply rate resulted in a decrease in revenues from the previous fiscal year at hydroelectric power business in the wholesale electric power business. Although the thermal power plant load factor increased, revenues from thermal power decreased due mainly to a decrease in fuel prices in wholesale electric power sales. Revenues in the other electric power businesses increased due mainly to a higher load factor of IPPs (independent power producers) and power plants for PPSs (power producers and suppliers). Including revenues from other businesses, sales (operating revenues) increased ¥1.4 billion (0.2%) from the previous fiscal year, to ¥656.0 billion. Electric power sales volume and operating revenues for individual segments are reviewed in the following sections.

#### **Electric Power Business**

In the wholesale electric power business, the electricity sales volume for hydroelectric power for the fiscal year under review decreased 12.5% from the previous fiscal year, to 9.0 TWh, due to a decrease in the water supply rate from 115% in the previous fiscal year to 102%, representing a decrease of 1.28 TWh. Operating revenues from hydroelectric power decreased 1.7%, to ¥106.6 billion.

The thermal power sales volume increased 1.1% from the previous fiscal year, to 54.3 TWh, due to the load factor increasing from 77% to 78%, representing an increase of 0.5 TWh. Despite the increase in thermal power sales volume, operating revenues from thermal power decreased ¥10.4 billion (2.5%) from the previous fiscal year, to ¥413.9 billion, due mainly to the decrease in fuel prices.

As a result, in the wholesale electric power business, total electricity sales volume from hydroelectric and thermal power plants decreased by 1.1% compared with the previous year, to 63.3 TWh. Electric power sales in wholesale electric power sales decreased ¥12.2 billion (2.3%), to ¥520.6 billion.

In the other electric power businesses, electricity sales volume increased 11.4% compared with the previous year, to 2.2 billion kWh, owing to such factors as the increase in the load factor in electric power plants for IPPs and power plants for PPSs. Electric power sales in other electric power business surged ¥8.3 billion (37.3%) year on year, to ¥30.7 billion.

Consequently, for the electric power business overall, electricity sales volume edged down 0.7%, to 65.6 billion TWh from the previous year, and electric power sales in electric power business were down ¥4.4 billion (0.7%), to ¥551.3 billion. Adding transmission revenue to this, revenues in the electric power business decreased ¥4.8 billion (0.8%) from the previous fiscal year, to ¥608.0 billion.

#### **Electric Power-Related Businesses**

In fiscal 2012, operating revenues of electric power-related businesses increased ¥4.4 billion (1.3%) from the previous fiscal year, to ¥345.8 billion. This was mainly due to increased revenue of consolidated subsidiaries which took orders for periodic inspection.

#### **Overseas Business**

In fiscal 2012, operating revenues of overseas business decreased ¥0.3 billion (17.9%) year on year, to ¥1.6 billion.

#### **Other Businesses**

In fiscal 2012, operating revenues of other businesses increased ¥2.3 billion (10.7%) compared with the previous year, to ¥24.7 billion. This was mainly due to an increase in revenue from the telecommunications construction operations of consolidated subsidiaries.

## **Operating Expenses and Operating Income**

In fiscal 2012, operating expenses dipped ¥3.3 billion (0.5%) year on year, to ¥601.4 billion, due to a decrease in depreciation and amortization in the electric power business owing to progress in fixed depreciation rates. As a result, operating income increased ¥4.7 billion (9.6%) year on year, to ¥54.5 billion. The operating margin edged up by 0.7 percentage point, to 8.3%.

## Non-Operating Revenues and Expenses and Ordinary Income

In fiscal 2012, non-operating revenues increased ¥2.2 billion (14.5%) from the previous fiscal year, to ¥17.5 billion, reflecting such factors as an increase in equity income of affiliates. Non-operating expenses for the year decreased ¥1.2 billion (4.3%) from the previous fiscal year, to ¥27.3 billion.

Consequently, ordinary income amounted to ¥44.8 billion, up ¥8.2 billion (22.4%) from the level in the previous year. The ordinary income margin rose 1.2 percentage points, to 6.8%.

#### **Electric Power Business**

Ordinary income increased 39.5% from the previous fiscal year, to ¥31.0 billion, reflecting such factors as the decrease in depreciation and amortization owing to progress in fixed depreciation rates.

#### Electric Power-Related Businesses

Ordinary income increased 8.7% from the previous fiscal year, to ¥9.0 billion, due to such factors as the increase in sales.

#### **Overseas Business**

Ordinary income increased 11.7% from the previous fiscal year, to ¥3.9 billion, due mainly to the increase in equity income of affiliates.

#### Other Businesses

Due to such factors as the increase in sales, ordinary income rose  $\pm 0.9$  billion in comparison with the previous fiscal year, to  $\pm 0.9$  billion.

### Net Income

In fiscal 2012, income before income taxes and minority interests increased ¥11.9 billion (35.9%) compared with the previous fiscal year, to ¥45.1 billion, reflecting such factors as the rise in ordinary

income. Net income increased ¥13.6 billion (85.0%) compared with the previous fiscal year, to ¥29.8 billion.

### Net Income per Share

Net income per share was ¥198.65 in fiscal 2012, compared with ¥107.39 in the previous fiscal year.

## **Dividend Policy** –

The most-distinctive characteristic of J-POWER's business is that the Company uses its expertise with respect to the construction of power plants and other facilities and the operation of those facilities over the long term to make investments in power plants and other kinds of infrastructure and then seeks to obtain returns on its investments through the long-term operation of those assets. J-POWER will continue to allocate an appropriate level of internal reserves to business investments aimed at new growth, while increasing equity capital based on the recognition that it must further reinforce its financial position.

J-POWER's top priority with respect to shareholder returns is to maintain stable dividend levels in line with the characteristics of its business, and the Company also strives to enhance shareholder returns by expanding its business operations and increasing its corporate value in a sustained manner. The nature of prospective conditions in the Company's operating environment has been increasingly difficult to anticipate since the Great East Japan Earthquake disaster that occurred in March 2011. Going forward, however, J-POWER intends to strengthen the competitiveness of its core wholesale electric power business while striving to bolster its earnings power by expanding its operations.

In light of these situations and J-POWER's emphasis on maintaining stable shareholder returns over the long term, the Company distributed a fiscal year-end dividend of ¥35 per share. Together with the interim dividend of ¥35 per share, total dividends applicable to fiscal 2012 amounted to ¥70 per share.

As a result, the consolidated payout ratio decreased 30.0 percentage points compared with the previous fiscal year, to 35.2%, while the consolidated dividend on net assets ratio was 2.4%, down 0.2 percentage point.

## **Financial Position**

#### Assets

As of March 31, 2013, total assets amounted to ¥2,169.9 billion, up ¥153.5 billion (7.6%) from the previous fiscal year-end. This was due to increased capital investment in projects under development in Thailand and other factors.

As of March 31, 2013, total liabilities amounted to ¥1,716.0 billion, up ¥105.8 billion (6.6%) from the previous fiscal year-end.

Included in the above is an increase in interest-bearing debt, which rose ¥87.3 billion from the end of the previous fiscal year, to ¥1,523.0 billion. Included in the interest-bearing debt is ¥163.3 billion in non-recourse loans.

The debt-equity ratio was 3.4 times, down from 3.5 times at the previous fiscal year-end.

## **Capital Expenditures** -

Capital expenditures in fiscal 2012 amounted to ¥175.1 billion, an increase of ¥37.3 billion (27.1%) compared with the previous fiscal year.

Capital expenditures in the electric power business increased ¥1.1 billion (1.6%) from the previous fiscal year, to ¥69.3 billion.

## Fund Procurement

Most of J-POWER's financing requirements are related to capital expenditures and debt refinancing, and the Company has a basic policy of procuring long-term funds. When procuring long-term funds, the Company issues straight bonds and borrows long-term loans from financial institutions as a means of maintaining low interest rates and a stable fund procurement platform. The balances of outstanding straight bonds and outstanding borrowings as of March 31, 2013, were ¥754.9 billion and ¥744.1 billion, respectively. In addition, the Company obtains short-term funding as a means of procuring operating funds as well as enhancing the responsiveness and flexibility of procurement operations. To meet short-term funding needs, the Company is currently able to issue up to a total of ¥300.0 billion in commercial paper.

#### Liabilities

to ¥453.9 billion.

As a result, the shareholders' equity ratio increased 0.7 percentage point, from 20.2% at the end of the previous fiscal year to 20.9%.

As of March 31, 2013, total net assets stood at ¥453.8 billion, up

¥47.6 billion from the previous fiscal year-end, reflecting increases

in net income and foreign currency translation adjustments.

Shareholders' equity increased ¥46.5 billion (11.4%) year on year,

Net Assets and Total Shareholders' Equity\*

\* Net assets - Minority interests - Share subscription rights (equivalent to shareholders' equity until fiscal 2005)

## **Cash Flows**

#### Cash Flows from Operating Activities

Cash inflow from operating activities decreased ¥6.1 billion (4.8%) from the previous fiscal year to ¥119.7 billion, due mainly to a decrease in internal reserves for depreciation and others.

#### Cash Flows from Investing Activities

Cash outflow from investing activities increased ¥33.5 billion (24.5%) from the previous fiscal year to ¥170.3 billion, due mainly to an increase in investment in the projects currently under development in Thailand.

As a result, free cash flow was a negative ¥50.5 billion.

#### Cash Flows from Financing Activities

Cash inflow from financing activities increased ¥52.2 billion (561.5%) from the previous fiscal year to ¥61.5 billion, due mainly to an increase in proceeds from the issuance of bonds.

As a result of these activities, cash and cash equivalents as of March 31, 2013, accounted for ¥48.8 billion, an increase of ¥13.5 billion (38.3%) compared with the end of the previous fiscal year.

## **Risk Factors**

This section discusses the main potential risks related to J-POWER's financial position and business results as well as potential risks related to current (as of June 26, 2013) and future business operations and other matters. In light of the objective of proactively disclosing information to investors, this section also provides information to help investors understand business and other risks that the Company does not necessarily consider significant.

## Impact of Progressive Systemic Reforms in the Electric Power System on J-POWER's Wholesale Electricity Rates and Business

J-POWER derives most of its operating revenues from the wholesale supply of power to Japan's 10 EPCOs. Amid intensifying competition driven by industry reforms in the electric power business, the EPCOs have reduced their retail electricity rates.

Because our contract rates for the wholesale supply of power to the EPCOs are calculated on a fair cost plus fair return on capital basis, those contract rates are not directly affected by the reduction in retail electricity rates. Nevertheless, EPCOs have been calling for a reduction in our contract rates, and it is possible that declines in retail electricity rates and intensifying competition could lead to stronger calls for the Company to lower its contract costs. In the event of an additional reduction in our contract rates going forward, this could potentially have an adverse effect on the results of our operations. Wholesale power trading on the Japan Electric Power Exchange commenced in April 2005. J-POWER is currently trading in the wholesale power markets. Although we do not currently expect a surge in the amount of electricity traded on the exchange during the near term, an increase in the importance of exchange-traded power prices as a price indicator could potentially have an indirect effect on our rate levels. If the rates set in contracts between J-POWER and EPCOs were to be higher than price indicators, this could potentially have an adverse effect on the results of our operations.

In addition, there remains the possibility that the business environment surrounding the Company will see drastic changes as a result of industry reforms in the electric power business. The Cabinet decisions have been made regarding "the Policy on Electric System Reform" in April 2013. Debates are to commence regarding establishing the Organization for Operations of Widearea Electrical Grids, detailed review of full liberalization of the retail market, removal of wholesale regulation, legal structural separation for the power transmission/distribution sector, and the revision of the Electricity Utilities Industry Law. Depending on the outcome of these debates, this could potentially have an adverse effect on business and on the results of our operations.

## Delay or Discontinuation of Power Plant Construction Plans

Slackening growth in electricity demand forecast in recent years has prompted EPCOs to postpone or cancel new power plant development and to shut down inefficient thermal power plants on a long-term or permanent basis. In some cases, we have also postponed the start of commercial operations or cancelled the planned construction of power plants to supply EPCOs based on consultations with our EPCO clients. Due to difficulties in acquiring sites for power plants, there have been cases in which plans were cancelled in consultation with the power-receiving companies. The Company bears the appropriate amount for these cancellations and the expenses arising from them in consultation with the planned power receiving company.

Going forward, if revisions of the nation's energy policies and major changes surrounding the electric power business, the occurrence of unforeseen circumstances, or other factors result in the cancellation of construction plans, this could potentially have a material adverse effect on the results of our operations.

#### **Global Warming**

J-POWER has a large number of coal-fired thermal power plants, which emit relatively high amounts of carbon dioxide with respect to power output compared to power plants that use LNG and other fossil fuels. Accordingly, both in Japan and overseas, we have taken various initiatives to combat global warming.

Going forward, if new regulations or other rules related to global warming countermeasures were to be introduced, this could potentially have an adverse effect on the results of our operations.

### Overseas Power Generation Business and Other Areas of New Business

J-POWER is pursuing new initiatives in the overseas power generation business and new electric power businesses in Japan, with the aim of creating new profit sources. However, these businesses may not generate the level of profits that we anticipate, due to unforeseeable circumstances, including a major change in operating conditions; weakening demand; and changes in regulations. Moreover, changes in our business plans or the suspension of operations prompted by these circumstances could result in related expenses that could potentially have an adverse effect on the results of our operations. These businesses also include some that the Company operates in the form of joint ventures, in which the Company retains a minority interest. Overseas businesses also entail foreign exchange risk as well as country risk based on political instability and other factors.

### **Capital Funds**

Over the next 10 years, we anticipate the need to raise a significant amount of funds to proceed with investment plans in our main development projects of the Ohma Nuclear Power Plant and the Takehara New No. 1 Thermal Power Plant, to repay existing obligations, and to proceed with investment in overseas electric power plant projects. If we are unable to raise the required funds on acceptable terms and in a timely manner due to the prevailing conditions in the financial markets, the Company's credit situation, or other factors at that time, then this could potentially have a materially adverse effect on our business development and profitability.

### Ohma Nuclear Power Plant Construction Plan

With regard to the Ohma Nuclear Power Plant Plan, following the August 1995 decision of the Japan Atomic Energy Commission, the plan was considered to have been in the political position, under the auspices of the state and electricity utility companies, to expand the flexibility of the plan to use MOX (a uranium-plutonium mixed oxide) fuel in a light water reactor—an advanced boiling water reactor (full-MOX ABWR)—with a view to using MOX fuel for the entire core. The Company was identified as having to bear responsibility for this. Having already concluded basic agreements with nine general electric utility companies, excluding the Okinawa Electric Power Company, all nine companies had agreed to the total amount of electricity to be received at a fair cost.

In April 2008, J-POWER obtained a permit to install a nuclear reactor at the Ohma Nuclear Power Plant (Aomori Prefecture, 1,383 MW) and in May commenced work after obtaining a permit to proceed with the first stage of the construction plan. Construction work, suspended immediately after the Great East Japan Earthquake that struck in March 2011, was resumed in October 2012.

We are determined to do whatever we can to establish a safe electric power plant through ensuring that we appropriately reflect new safety standards, which will be established by the Nuclear Regulation Authority, and steadily implement safety enhancement measures where necessary. However, nuclear power generation involves various risks. These include revisions to plans due to significant changes in the situation regarding the nuclear power business caused by review of Japan's nuclear policy or unexpected circumstances, also those associated with the storage and handling of radioactive materials, as well as risks other electric power plants are exposed to, such as natural disasters and unforeseen accidents after operations have commenced. (Please refer to the Natural Disasters and Accidents section). J-POWER intends to ensure that these risks are avoided or minimized. However, should any of these risks arise, the business performance of the Company could be adversely affected.

#### Coal-Fired Thermal Power Plant Fuel

J-POWER's coal-fired thermal power plants use imported coal as their main source of fuel, and fuel costs are affected by price fluctuations for imported coal, supply and demand dynamics for transport vessels, and problems with the facilities or operations of fuel suppliers, among other factors.

Fuel prices are reflected in our electricity rates for EPCOs on a cost basis. (These rates are generally revised every two years, though they are subject to annual revision if costs change significantly.) As a result, fluctuations in coal prices have a limited impact on business performance. However, following a revision to whole-sale electricity rates, if coal prices rise sharply before the next revision, there will be a delay before the rise in fuel prices is reflected in electricity rates. This could have a temporary adverse effect on the results of our operations.

#### Natural Disasters and Accidents

Should a natural disaster, human error, terrorist activity, fuel supply stoppage, or other unforeseen circumstance result in a major disruption of one of J-POWER's power plants, transmission or substation facilities, or with the information systems that control operations at these facilities, this could potentially hamper our business operations and consequently have an adverse effect on the surrounding environment. In addition, should a J-POWER facility halt operations, for example, due to an accident, and should that accident have an adverse effect on the surrounding environment, there exists the possibility that this could have an adverse effect on the results of our operations.

#### **Regulatory Requirements**

J-POWER's mainstay wholesale electric power business is subject to Electricity Business Law regulations. In addition to this law, our business operations are subject to a variety of other laws. If we are unable to comply with these laws and regulations, or if these laws and regulations are revised, this could potentially have an adverse effect on our business operations and performance.

Furthermore, on August 10, 2011, the Nuclear Damage Compensation Facilitation Corporation Act was promulgated and enacted. As a nuclear operator, J-POWER is required to make contributions to the corporation's operating costs and, depending on the amounts involved, these contributions could have a negative impact on our performance. Should operations according to our Ohma Nuclear Power Plant Plan in which we will proceed with be commenced as set out in the Act on Compensation for Nuclear Damage, we will be required to make such contributions.

### High Level of Dependence on a Limited Number of Customers

Sales to EPCOs account for the majority of J-POWER's operating revenues. We expect EPCOs to remain our most important customers going forward, and, accordingly, the results of our operations could potentially be affected by EPCOs' market share trends in the retail electricity market as well as by trends in demand for electric power in Japan and other factors.

#### Protection of Sensitive Information

J-POWER holds a large amount of important information that must be kept confidential, including personal information. J-POWER controls this information carefully by implementing information security measures, employee training programs, and through other means. However, a leak of sensitive information outside the Company could adversely affect J-POWER's reputation and business performance.

## **Financial Highlights**

	2004/3	2005/3	2006/3	
Consolidated: Operating Revenues and Expenses				
Operating Revenues	569,854	594,375	621,933	
Electric Utility Operating	522,922	547,960	573,198	
Wholesale Electric Power Business (Non-Consolidated)	453,478	476,335	495,061	
Other Electric Power Businesses	4,472	8,679	16,495	
Transmission Revenue (Non-Consolidated)	63,398	61,194	58,255	
Other	1,573	1,751	3,386	
Other Business Operating Revenue	46,931	46,414	48,734	
Operating Expenses	437,715	482,489	520,464	
Electric Utility Operating Expenses	386,463	431,678	469,720	
Personnel Expenses	42,220	33,764	21,273	
Fuel Cost	85,927	116,622	160,823	
Repair Expenses	28,652	47,452	38,712	
Consignment Costs	26,193	34,000	31,418	
Taxes and Duties	23,984	24,974	29,959	
Depreciation and Amortization Costs	128,395	122,016	131,511	
Other	51,089	52,846	56,022	
Other Business Operating Expenses	51,251	50,810	50,744	
Operating Income	132,138	111,885	101,469	
Non-Operating Income	4,067	3,880	7,620	
Equity Income of Affiliates	804	_	2,042	
Other	3,263	3,880	5,577	
Non-Operating Expenses	91,759	58,673	41,182	
Interest Expenses	83,519	50,881	35,732	
Equity Loss of Affiliates	—	1,311	—	
Other	8,239	6,479	5,449	
Ordinary Income	44,446	57,093	67,906	
Extraordinary Income	_	—	_	
Extraordinary Loss	_		_	
Net Income	27,623	35,559	43,577	
Consolidated: Balance Sheet Items				
Total Assets	2,076,107	2,021,655	1,964,667	
Construction in Progress	160,832	170,613	199,524	
Total Shareholders' Equity*2	359,645	391,327	433,028	
Interest-Bearing Debt Outstanding	1,592,908	1,498,010	1,408,232	
Consolidated: Cash Flow Items				
Cash Flows from Operating Activities	179,948	172,637	173,954	
Cash Flows from Investing Activities	(64,507)	(60,586)	(72,326)	
(for reference) Capital Expenditures on a Non-Consolidated Basis* <sup>3</sup>	*1	*1	(62,365)	
Free Cash Flow	115,440	112,051	101,628	

\*1 Not released publicly \*2 Definition of shareholders' equity is total shareholders' equity prior to the fiscal year ended March 2006. From the fiscal year ended March 2007 onward, it is "Total Net Assets - Minority Interests." \*3 Non-Consolidated Capital Expenditures: The amount of the increase in tangible noncurrent assets and intangible noncurrent assets

2007/3	2008/3	<b>2009</b> /3	2010/з	2011/3	2012/3	<b>2013</b> /3
						(Millions of ven)
573.277	587,780	704.936	584,484	635.975	654.600	656.056
523.782	531.764	648.362	530.289	584.436	609.775	605.338
450.034	457,292	571.282	458,688	514,640	532,915	520,620
16.868	17,702	20.055	14.754	13,723	22.371	30,707
55,184	54,934	55,414	54,402	54,343	53,059	52,632
1,694	1,833	1,610	2,444	1,729	1,429	1,378
49,494	56,016	56,574	54,194	51,539	44,825	50,717
496,136	537,056	647,828	535,544	565,387	604,800	601,490
444,463	477,869	588,808	478,644	509,116	553,873	542,195
27,235	37,768	43,651	36,264	31,354	34,536	34,186
149,865	191,579	264,397	178,048	214,261	249,421	250,887
41,175	30,403	51,476	44,480	46,035	52,915	53,665
31,785	30,289	33,244	32,058	31,491	34,700	32,062
28,566	27,753	29,162	26,507	27,259	27,608	27,044
118,588	110,393	110,122	116,095	106,929	101,139	90,251
47,246	49,681	56,752	45,190	51,783	53,551	54,096
51,673	59,186	59,019	56,899	56,271	50,927	59,295
77,141	50,724	57,108	48,939	70,588	49,800	54,566
13,011	21,543	13,282	18,734	14,965	15,356	17,577
5,560	8,879	7,470	11,722	9,072	9,565	11,728
7,451	12,664	5,812	7,011	5,893	5,790	5,849
34,639	29,394	30,791	25,979	29,231	28,536	27,318
22,585	22,749	22,616	23,085	22,371	22,005	22,362
_			_	_		
12,054	6,644	8,174	2,894	6,860	6,530	4,956
55,513	42,873	39,599	41,694	56,322	36,619	44,825
—	—	12,170	—	1,635	—	_
—	—	19,648	—	19,176	3,382	
35,167	29,311	19,457	29,149	19,583	16,113	29,808
1 000 704	2 012 121	2 005 460	2 024 090	2 012 296	2 016 204	(Millions of yen)
249 710	2,013,131	2,005,409	2,024,060	2,012,360	2,010,394	2,109,909
46,710	<u> </u>	321,009	412 677	<u> </u>	300,425	404,074
1 401,100	1 / 22 070	1 470 749	412,077	1 /20 027	1 /25 726	453,905
1,421,342	1,423,070	1,470,740	1,452,515	1,423,037	1,433,/30	1,525,059
						(Millions of yen)
157,241	136,252	158,628	169,148	151,236	125,891	119,786
(155,407)	(152,518)	(132,350)	(129,504)	(124,675)	(136,852)	(170,369)
(86,898)	(122,874)	(150,228)	(97,908)	(73,796)	(68,493)	(66,262)
1,834	(16,265)	26,278	39,643	26,560	(10,960)	(50,582)

	2004/3	2005/3	2006/3	
Consolidated: Capacity of Power Generation Facilities (In Operation)				
Domestic: Wholesale Electric Power Business (Non-Consolidated)	16,375	16,375	16,375	
Hydroelectric	8,551	8,551	8,551	
Thermal	7,825	7,825	7,825	
Domestic: Other Electric Power Businesses*1	134	375	495	
IPPs, Wholesale Power for PPSs	134	244	352	
Wind Power		131	143	
Overseas: Power Generation Output*2	600	964	964	
Consolidated: Power Sales				
Wholesale Electric Power Business (Non-Consolidated)	58,787	60,517	62,627	
Hydroelectric	10,850	11,172	8,583	
Water Supply Rate	109%	118%	90%	
Thermal	47,937	49,345	54,044	
Load Factor	75%	77%	84%	
Other Electric Power Businesses	517	965	1,701	
Total	59,304	61,482	64,328	
Other Business Data				
Coal Consumption (Non-Consolidated) (million tons)	18.41	19.07	20.76	
Australian Coal* <sup>3</sup> (FOB price, US\$ per ton)	27	45	52.5-54	
Average Exchange Rates* <sup>4</sup> (Yen per US\$)	113	108	113	
Non-Consolidated: Operating Revenues and Expenditures				
Operating Revenues	522,595	546,702	566,016	
Electric Utility Operating Revenue	518,978	540,665	558,306	
Wholesale Electric Power Business	453,478	476,335	495,061	
Hydroelectric	135,758	137,106	126,810	
Thermal	317,719	339,228	368,250	
Transmission Revenues	63,398	61,194	58,255	
Other Electricity Revenues	2,100	3,136	4,989	
Incidental Business Operating Revenue	3,617	6,037	7,709	
Operating Expenses	403,807	447,964	480,041	
Electric Power Business Operating Expenses	400,754	442,754	473,056	
Fixed Expenses	298,681	312,064	299,429	
Personnel Expenses	43,461	33,823	21,489	
Repair Expenses	30,874	52,018	42,565	
Taxes and Duties	29,182	29,945	29,366	
Depreciation	130,376	122,825	130,844	
Other	64,786	73,451	75,163	
Variable Expenses	102,072	130,689	173,626	
Fuel Costs	87,435	115,838	155,977	
Waste Disposal Costs	14,636	14,850	17,648	
Incidental Business Operating Expenses	3,053	5,210	6,985	
Operating Income	118,788	98,738	85,974	

\*1 Output of facilities of consolidated subsidiaries (The Company's ownership ratio has not been taken into consideration.) \*2 The output of all project facilities in which the Company has an equity interest times the Company's equity interest (equity share output) \*3 Reference price \*4 TTM

2007/3	2008/3	2009/3	2010/3	2011/3	2012/3	<b>2013</b> /3
						(5.43.67)
						(IVIVV)
16,380	16,380	16,385	16,988	16,993	16,993	16,983
8,556	8,556	8,561	8,561	8,566	8,566	8,556
7,825	7,825	7,825	8,427	8,427	8,427	8,427
560	560	606	623	705	705	705
352	352	352	352	352	352	352
209	209	254	271	353	353	353
2,162	2,705	3,043	3,574	3,738	3,673	4,253
						(kWh)
58,672	60,786	57,532	55,760	64,353	64,074	63,366
10,633	8,287	8,384	9,214	10,267	10,318	9,032
112%	85%	88%	96%	106%	115%	102%
48,039	52,499	49,147	46,546	54,086	53,756	54,333
75%	81%	76%	68%	78%	77%	78%
1,657	1,682	1,616	1,477	1,462	2,010	2,239
60,329	62,469	59,148	57,238	65,815	66,084	65,605
18.57	20.23	19.41	18.14	21.15	20.79	21.03
52-53	55-56	125	71	97-98	130	115
117	114	101	93	86	79	83
						(Millions of yen)
517,273	529,250	645,850	530,436	583,213	599,973	586,993
510,248	517,318	631,452	518,682	573,878	590,553	577,284
450,034	457,292	571,282	458,688	514,640	532,915	520,620
123,490	114,557	110,945	108,994	108,152	108,479	106,681
326,543	342,734	460,336	349,693	406,488	424,436	413,938
55,184	54,934	55,414	54,402	54,343	53,059	52,632
5,029	5,090	4,755	5,591	4,894	4,579	4,031
7,024	11,932	14,398	11,753	9,335	9,419	9,708
456,433	489,363	601,122	489,531	520,569	557,628	543,659
450,203	478,579	588,224	479,085	513,395	549,010	534,765
289,497	275,420	314,140	285,847	280,891	285,864	270,738
27,180	37,689	43,571	36,187	31,276	34,441	34,084
46,477	32,757	55,419	45,390	50,635	54,286	56,454
27,800	27,044	28,380	25,792	26,594	26,755	26,015
117,973	109,739	109,741	115,585	106,080	100,423	89,485
70,064	68,188	77,026	62,892	66,304	69,958	64,698
160,706	203,159	274,083	193,237	232,503	263,146	264,026
				200.067		
144,053	185,357	255,156	173,957	209,967	238,497	238,441
144,053 16,652	185,357 17,801	255,156 18,927	173,957 19,280	209,967 22,536	238,497 24,649	238,441 25,584
	2007/3  16,380  8,556 7,825 7,825 560 352 209 2,162  58,672 10,633 112% 48,039 75% 1,657 60,329 75% 1,657 60,329 18.57 52-53 117 18.57 52-53 117 52-53 117 510,248 450,034 123,490 326,543 55,184 5,029 7,024 456,433 450,203 289,497 27,180 46,477 27,800 117,973 70,064	20073         20083           16,380         16,380           8,556         8,556           7,825         7,825           560         560           352         352           209         209           2,162         2,705           58,672         60,786           10,633         8,287           112%         85%           48,039         52,499           75%         81%           1,657         1,682           60,329         62,469           1         1           18.57         20.23           52-53         55-56           1117         114           1         1           1         1           5         517,273           529,250         510,248           517,273         529,250           510,248         517,318           450,034         457,292           123,490         114,557           326,543         342,734           55,184         54,934           5,029         5,090           7,024         11,932           456,433	20073         20083         20093           16,380         16,380         16,385           8,556         8,556         8,561           7,825         7,825         7,825           560         560         606           352         352         352           209         209         254           2,162         2,705         3,043           58,672         60,786         57,532           10,633         8,287         8,384           112%         85%         88%           48,039         52,499         49,147           75%         81%         76%           1,657         1,682         1,616           60,329         62,469         59,148           1         517,273         529,250         645,850           510,248         517,318         631,452           450,034         457,292         571,282           123,490         114,557         110,945           326,543         342,734         460,336           55,184         54,934         55,414           5,029         5,090         4,755           7,024         11,932         14,3	20072         20083         20093         20103           16,380         16,380         16,385         16,988           8,556         8,556         8,561         8,561           7,825         7,825         7,825         8,427           560         560         606         623           352         352         352         352           209         209         254         271           2,162         2,705         3,043         3,574           58,672         60,786         57,532         55,760           10,633         8,287         8,384         9,214           112%         85%         88%         96%           48,039         52,499         49,147         46,546           75%         81%         76%         68%           1,657         1,682         1,616         1,477           60,329         62,469         59,148         57,238           117         114         101         93           517,273         529,250         645,850         530,436           510,248         517,318         631,452         518,682           123,490         114,557	20073         20083         20093         20103         20113           16,380         16,385         16,988         16,993           8,556         8,556         8,561         8,561         8,566           7,825         7,825         7,825         8,427         8,427           560         560         606         623         705           352         352         352         352         352           209         209         254         271         353           2,162         2,705         3,043         3,574         3,738           58,672         60,786         57,532         55,760         64,353           10,633         8,287         8,384         9,214         10,267           112%         85%         88%         96%         106%           48,039         52,499         49,147         46,546         54,086           7,556         815%         76%         68%         78%           1,657         1,682         1,616         1,477         1,462           60,329         62,469         59,148         57,238         65,815           510,248         517,273         529,250 <td>20073         20083         20103         20103         20103         20123           16,380         16,385         16,988         16,993         16,993           8,556         8,556         8,561         8,561         8,561         8,566           7,825         7,825         7,825         352         352         352         352           209         209         254         271         353         353           2,162         2,705         3,043         3,574         3,738         3,673           10,633         8,287         8,384         9,214         10,267         10,318           112%         85%         88%         96%         106%         115%           48,039         52,499         49,147         46,546         54,086         53,756           75%         81%         76%         68%         78%         77%         1,657         1,682         1,616         1,477         1,462         2,010           60,329         62,469         59,148         57,238         65,815         66,084           117         114         101         93         86         79           510,248         517,318</td>	20073         20083         20103         20103         20103         20123           16,380         16,385         16,988         16,993         16,993           8,556         8,556         8,561         8,561         8,561         8,566           7,825         7,825         7,825         352         352         352         352           209         209         254         271         353         353           2,162         2,705         3,043         3,574         3,738         3,673           10,633         8,287         8,384         9,214         10,267         10,318           112%         85%         88%         96%         106%         115%           48,039         52,499         49,147         46,546         54,086         53,756           75%         81%         76%         68%         78%         77%         1,657         1,682         1,616         1,477         1,462         2,010           60,329         62,469         59,148         57,238         65,815         66,084           117         114         101         93         86         79           510,248         517,318

	2004/3	2005/3	2006/з	
Non-Consolidated: Composition of Operating Expenses				
Personnel Expenses	43,461	33,823	21,489	
Amortization of the Actuarial Gains or Losses				
on Pension Plan Assets Measured at Fair Value*1	3,846	(104)	(8,993)	
Other Personnel Expenses	39,615	33,927	30,483	
Repair Expenses	30,874	52,018	42,565	
Hydroelectric	8,757	12,854	15,649	
Thermal	19,433	34,930	23,889	
Transmission/Transformation	1,539	2,128	1,623	
Others	1,144	2,105	1,403	
Depreciation* <sup>2</sup>	130,376	122,825	130,844	
Hydroelectric	28,749	28,230	27,029	
Thermal	73,583	68,220	77,936	
Transmission/Transformation	23,647	22,157	21,583	
Others	4,396	4,217	4,295	
Consolidated: Principal Einancial Indicators				
	2 10/	2.00/	2 40/	
Return on Assets (ROA) <sup>44</sup>	Ζ.Ι%	2.8%	3.4%	
ROA (after exclusion of the construction in progress	2 20/	2 004	2 00/	
Poturp op Equity (POE)*5	10.5%	0.5%	10.6%	
Net Income per Share (EPS)* <sup>6</sup> (Ven)	20/1.02	255 01	260.76	
Net Accete per Share (EFS) (Tell)	2 500 00	2,010,04	200.70	
Reutassets per sindle (bFS) (Tell)	2,590.00	2,010.04	2,396.90	
Equity Ratio	17.5%	19.4%	22.0%	
	4.4	5.8	5.5	
Shareholder Returns (Returns to Shareholders)				
Cash Dividends per Share (Yen)	60	60	60	
Dividend Payout Ratio	19.7%	23.5%	23.0%	
Number of Common Shares Issued at the End of the Period				
(Thousands) (excluding treasury stock)*7	138,808	138,808	166,565	
Number of Employees				
Consolidated	5,871	5,925	5,868	
Non-Consolidated	2,386	2,144	2,132	

\*1 Prior to the fiscal year ended March 31, 2009, actuarial gains or losses were treated as expenses in the fiscal year when they were accrued, but from the fiscal year ended March 31, 2010, they have been treated as expenses in the fiscal year following the fiscal year when they accrue.
\*2 Depreciation charges on fixed assets in the electric power business
\*3 ROA: Ordinary income/Average total assets during the period - Average construction in progress of fixed assets)
\*5 ROE: Net income/Average total stareholders' equity
\*6 J-POWER carried out a 1.2-for-1 stock split on March 1, 2006. Calculations assume that this stock split was carried out at the beginning of the fiscal year.
\*7 In the fiscal year ended March 2004, capital increases were implemented through allocating 68,208 thousand shares to third parties. J-POWER carried out a 1.2-for-1 stock split on March 1, 2006.

	2007/3	2008/3	2009/3	2010/з	2011/3	2012/3	<b>2013</b> /3
							(Millions of yen)
2	7,180	37,689	43,571	36,187	31,276	34,441	34,084
	(3,865)	6,355	10,787	3,408	(2,213)	1,752	505
3	1,045	31,334	32,783	32,778	33,490	32,689	33,578
4	6,477	32,757	55,419	45,390	50,635	54,286	56,454
	8,659	6,893	14,572	8,009	8,112	13,039	11,340
3	4,534	22,436	36,195	33,242	38,765	35,733	40,438
	1,547	1,875	2,518	2,327	2,259	3,761	3,161
	1,736	1,553	2,133	1,811	1,496	1,753	1,513
11	7,973	109,739	109,741	115,585	106,080	100,423	89,485
2	6,122	25,425	24,921	24,054	23,553	23,418	21,852
6	7,899	61,069	61,970	69,307	61,318	56,707	48,411
2	0,202	19,021	18,470	17,752	16,849	16,053	15,302
	3,748	4,222	4,379	4,470	4,359	4,242	3,919
	2.8%	2.1%	2.0%	2.1%	2.8%	1.8%	2.1%
	3.2%	2.5%	2.4%	2.5%	3.3%	2.2%	2.7%
	7.9%	6.3%	4.6%	7.4%	4.7%	3.9%	6.9%
2	11.14	175.99	121.65	194.26	130.51	107.39	198.65
2,7	68.95	2,800.18	2,533.28	2,750.20	2,770.77	2,714.94	3,024.98
2	23.1%	23.2%	19.0%	20.4%	20.7%	20.2%	20.9%
	3.1	3.1	3.9	3.5	3.4	3.5	3.4
	60	70	70	70	70	70	70
2	28.4%	39.8%	57.5%	36.0%	53.6%	65.2%	35.2%
1.0			150.054	150.052	150.052	150.052	150.052
16	מככ,טו	100,554	150,054	150,053	150,053	150,053	150,052
	6 494	6 52/	6 5ጶ1	6 701	6 774	6 983	7 156
	2 174	2 201	2 224	2 257	2 299	2 321	2 373

## **Consolidated Financial Statements**

Consolidated Balance Sheets	2004/3	2005/3	2006/3	
Assets				
Noncurrent Assets	1,945,140	1,890,001	1,827,868	
Electric Utility Plant and Equipment	1,623,367	1,547,374	1,438,443	
Hydroelectric Power Production Facilities	506,703	499,017	481,068	
Thermal Power Production Facilities	746,203	686,072	613,349	
Internal Combustion Engine Power Production Facilities		10,071	16,931	
Renewable Power Production Facilities				
Transmission Facilities	289,771	276,661	257,253	
Transformation Facilities	43,795	41,605	38,605	
Communication Facilities	10,983	9,985	9,170	
General Facilities	25,909	23,961	22,065	
Other Noncurrent Assets	28,982	27,877	28,336	
Construction in Progress	160,832	170,613	199,524	
Construction and Retirement in Progress	160,832	170,613	199,524	
Nuclear Fuel	_	_		
Nuclear Fuel in Processing		_	_	
Investments and Other Assets	131,958	144,135	161,564	
Long-Term Investments	86,081	95,031	114,600	
Deferred Tax Assets	44,270	46,150	42,944	
Other	1,688	2,954	4,018	
Allowance for Doubtful Accounts	(81)	(1)	(0)	
Current Assets	130,967	131,654	136,798	
Cash and Deposits	27,804	30,351	28,961	
Notes and Accounts Receivable–Trade	49,722	52,150	56,484	
Short-Term Investments	7,918	1,551	1,556	
Inventories	11,750	13,158	18,160	
Deferred Tax Assets	4,943	5,083	5,635	
Other	28,844	29,383	25,999	
Allowance for Doubtful Accounts	(17)	(24)		
Total Assets	2,076,107	2,021,655	1,964,667	

Note: In accordance with revisions in Electric Utility Accounting Regulations, wind power and geothermal power generation facilities are now recorded as "Renewable Power Production Facilities" from the fiscal year ended March 31, 2010.

2007/3	2008/3	2009/3	2010/3	2011/3	2012/3	<b>2013</b> /3
						(Millions of ven)
1,861,818	1,864,374	1,843,143	1,879,804	1,842,658	1,849,786	1,975,202
1,351,994	1,265,497	1,235,044	1,226,640	1,178,492	1,111,251	1,058,849
469,750	450,635	441,694	403,329	389,892	374,510	363,437
555,959	504,468	463,682	482,045	454,823	423,049	387,957
15,471	14,141	12,906	11,764	4,694	4,296	3,956
_			24,334	38,436	34,479	31,358
242,675	229,312	217,723	207,948	197,163	186,274	185,754
36,581	34,310	36,615	35,089	34,456	31,774	30,608
9,626	9,289	9,591	9,339	9,539	9,065	8,638
21,928	23,339	52,830	52,789	49,486	47,801	47,137
33,682	40,270	46,634	49,619	64,920	65,657	118,840
248,710	327,429	321,889	309,740	301,676	380,425	464,674
248,710	327,429	321,889	309,740	301,676	380,425	464,674
_	10,310	27,650	38,688	46,693	54,157	59,769
	10,310	27,650	38,688	46,693	54,157	59,769
227,430	220,866	211,923	255,115	250,875	238,295	273,067
180,325	165,015	150,332	195,414	181,934	181,132	202,464
43,094	51,777	58,711	57,207	56,843	52,571	47,234
4,223	4,222	3,414	2,964	13,292	5,653	24,416
(213)	(149)	(534)	(471)	(1,196)	(1,062)	(1,047)
137,976	148,756	162,325	144,276	169,727	166,607	194,707
35,029	33,961	27,628	38,749	37,202	35,112	49,283
47,204	44,650	50,014	47,003	57,781	59,283	61,644
376	2,983	2,592	2,253	2,346	1,331	402
20,783	25,329	43,110	25,717	32,400	34,972	38,160
5,421	5,655	6,264	5,560	5,998	6,688	7,423
29,214	36,253	32,718	24,995	34,006	29,284	37,847
(53)	(77)	(2)	(2)	(9)	(63)	(54)
1,999,794	2,013,131	2,005,469	2,024,080	2,012,386	2,016,394	2,169,909

	2004/3	2005/3	2006/3
Liabilities			(Millions of yen)
Noncurrent Liabilities	1,510,088	1,286,912	1,215,033
Bonds Payable	829,751	591,171	521,684
Long-Term Loans Payable	625,116	639,929	644,340
Provision for Retirement Benefits	49,546	45,729	36,233
Other Provision	404	460	417
Deferred Tax Liabilities	254	314	602
Other	5,014	9,307	11,756
Current Liabilities	205,165	340,405	313,999
Current Portion of			
Noncurrent Liabilities	57,595	111,163	106,772
Short-Term Loans Payable	40,466	50,750	24,436
Commercial Paper	40,000	105,000	111,000
Notes and Accounts Payable–Trade	12,776	11,053	9,936
Accrued Taxes	14,515	21,783	20,867
Other Provision	95	90	273
Deferred Tax Liabilities	1	0	0
Other	39,713	40,562	40,713
Reserves under Special Laws	689	1,798	1,399
Reserve for Fluctuation in			
Water Levels	689	1,798	1,399
Total Liabilities	1,715,943	1,629,115	1,530,432
	F40	4 242	1 200
	519	1,212	1,206

### **Shareholders' Equity**

Total Liabilities, Minority Interests and Shareholders' Equity	2,076,107	2,021,655	1,964,667
Total Shareholders' Equity	359,645	391,327	433,028
Treasury Stock		(1)	(17)
Foreign Currency Translation Adjustments	(1,605)	(1,299)	1,935
Unrealized Gain on Other Securities	3,738	6,207	14,050
Retained Earnings	123,213	152,121	182,760
Capital Surplus	81,849	81,849	81,849
Common Stock	152,449	152,449	152,449

Liabilities
Noncurrent Liabilities
Bonds Payable
Long-Term Loans Payable
Lease Obligations
Provision for Retirement Benefits
Other Provision
Asset Retirement Obligations
Deferred Tax Liabilities
Other
Current Liabilities
Current Portion of Noncurrent Liabilities
Short-Term Loans Payable
Commercial Paper
Notes and Accounts Payable–Trade
Accrued Taxes
Other Provision
Asset Retirement Obligations
Deferred Tax Liabilities
Other
Reserves under Special Laws
Reserve for Fluctuation in Water Levels
Total Liabilities
Net Assets
Shareholders' Equity
Capital Stock
Capital Surplus
Retained Earnings
Treasury Stock
Accumulated Other Comprehensive Income
Valuation Difference on
Available-for-Sale Securities
Deferred Gains or Losses on Hedges
Foreign Currency Translation Adjustment
Minority Interests
Total Net Assets
Total Liabilities and Net Assets

2007/3	2008/3	2009/3	2010/3	2011/3	2012/3	2013/3
 2007/3	2000/3	2003/5	2010/5	2011/3	2012/3	2010/5
						(Millions of yen)
1,193,139	1,276,354	1,304,830	1,346,526	1,319,146	1,324,663	1,402,287
573,229	602,903	717,867	689,883	734,898	714,914	694,930
576,615	624,495	513,239	580,925	500,913	522,407	608,977
_		520	811	1,093	983	982
32,611	39,083	51,931	57,855	57,069	58,015	59,012
474	553	1,098	1,111	16	25	36
—	—	—	—	3,620	4,585	3,971
1,260	1,462	2,352	3,459	5,869	6,390	7,801
8,948	7,856	17,820	12,479	15,666	17,339	26,574
341,844	267,097	317,379	261,837	277,563	284,761	313,311
173,638	101,565	120,700	142,923	162,958	166,342	196,999
2,115	6,126	9,098	13,327	17,528	18,443	18,475
95,944	88,949	109,971	24,998	11,999	12,999	3,999
13,248	14,790	10,144	14,804	20,112	20,011	25,049
8,752	11,407	16,317	7,952	21,322	11,408	10,811
528	555	713	855	317	325	273
				473	626	1,495
21	2	9	5	11	4	3
47,595	43,700	50,423	56,970	42,839	54,599	56,202
2,155	1,560	1,146	734	777	777	425
2,155	1,560	1,146	734	777	777	425
1,537,140	1,545,012	1,623,356	1,609,099	1,597,487	1,610,202	1,716,024
 444.055	464.966	400.000	426.600	425 360		
444,956	464,266	408,036	426,680	435,760	441,369	460,673
152,449	152,449	152,449	152,449	152,449	152,449	152,449
81,849	81,849	81,849	81,849	81,849	81,849	81,849
210,/13	230,032	236,998	255,643	264,724	270,334	289,639
(56)	(64)	(63,260)	(63,262)	(63,263)	(63,264)	(63,265)
16,230	2,116	(27,908)	(14,003)	(19,997)	(33,985)	(6,/68)
1/ 271	1 03/	(404)	2 960	(127)	(772)	1 855
(4.121)	(6 750)	(404)	(2,300	611	(772)	(6 020)
 (4,131)	(0,759) 6 0/1	(0,20)	(3,/4/)	(20.471)	(4,203)	(0,929)
0,090	0,941 <b>1 735</b>	1 001	(13,217)	(20,471)	(29,003)	(4,093)
 1,408	1,755	1,904	2,304	(003)	(1,191)	(19)
402,004	400,110	302,112	4 14,90 1	4 14,098	2 016 204	400,000
1,999,794	2,013,131	2,005,469	2,024,080	2,012,386	2,016,394	2,169,909

Consolidated Statements of Income						
	2004/3	2005/3	2006/3			
	500 054	504 275	624.022			
	569,854	594,375	621,933			
	522,922	547,960	5/3,198			
Other Business Operating Revenue	46,931	46,414	48,/34			
Operating Expenses	437,715	482,489	520,464			
Electric Utility Operating Expenses	386,463	431,678	469,720			
Other Business Operating Expenses	51,251	50,810	50,744			
Operating Income	132,138	111,885	101,469			
Non-Operating Income	4,067	3,880	7,620			
Dividends Income	912	1,241	1,937			
Interest Income	794	846	711			
Gain on Sales of Securities		_	_			
Equity Income of Affiliates	804		2,042			
Other	1,556	1,792	2,928			
Non-Operating Expenses	91,759	58,673	41,182			
Interest Expenses	83,519	50,881	35,732			
Equity Loss of Affiliates	—	1,311	—			
Other	8,239	6,479	5,449			
Total Ordinary Revenue	573,921	598,255	629,553			
Total Ordinary Expenses	529,475	541,162	561,646			
Ordinary Income	44,446	57,093	67,906			
Provision or Reversal of Reserve for Fluctuation						
in Water Levels	689	1,108	(399)			
Provision of Reserve for Fluctuation in Water Levels	689	1,108	_			
Reversal of Reserve for Fluctuation in Water Levels	_		(399)			
Extraordinary Income	—	_	—			
Distribution by Dissolution of Anonymous Association		—	—			
Gain on Sales of Securities	—	—	—			
Extraordinary Loss	—	—	—			
Disaster Recovery Expenses	—	—	—			
Loss on Valuation of Securities		_				
Loss on Liquidation of Business	_	_	_			
Impairment Loss	_	_	_			
Income before Income Taxes and Minority Interests	43,757	55,984	68,305			
Income Taxes–Current	16,222	22,909	26,151			
Income Taxes–Deferred	(309)	(2,511)	(1,488)			
Total Income Taxes	15,912	20,397	24,663			
Income before Minority Interests	_	_	_			
Minority Interests in Income (Losses)	220	27	65			
Net Income	27,623	35,559	43,577			
2007/3	2008/3	2009/3	2010/3	2011/3	2012/3	<b>2013</b> /3
--------------------------------	-----------------------------	-------------------	--------------------------------	-----------------------------	-------------------------------------	-------------------------------------
						(Millions of yep)
573.277	587,780	704,936	584,484	635,975	654,600	656.056
523,782	531,764	648,362	530,289	584,436	609,775	605,338
49,494	56,016	56,574	54,194	51,539	44,825	50,717
496,136	537,056	647,828	535,544	565,387	604,800	601,490
444,463	477,869	588,808	478,644	509,116	553,873	542,195
51,673	59,186	59,019	56,899	56,271	50,927	59,295
77,141	50,724	57,108	48,939	70,588	49,800	54,566
13,011	21,543	13,282	18,734	14,965	15,356	17,577
1,384	1,567	1,706	1,406	1,499	1,315	1,321
899	1,213	960	581	1,220	968	1,195
	3,911	_	—	—		
5,560	8,879	7,470	11,722	9,072	9,565	11,728
5,167	5,972	3,145	5,024	3,172	3,506	3,331
34,639	29,394	30,791	25,979	29,231	28,536	27,318
22,585	22,749	22,616	23,085	22,371	22,005	22,362
12,054	6,644	8,174	2,894	6,860	6,530	4,956
586,289	609,324	718,219	603,218	650,941	669,957	673,634
530,775	566,450	678,619	561,524	594,619	633,337	628,808
55,513	42,873	39,599	41,694	56,322	36,619	44,825
750	(505)	(442)		12		
/56	(595)	(413)	(411)	42		(351)
/56	(505)	(112)	(44.4)	42		(254)
	(595)	(413)	(411)			(351)
		12,170		1,635		
		12,170		1.625		
		10.648		1,635		
—		19,048		19,176	<b>3,302</b>	
		10.649		5 250	5,562	
		19,040		3,559		
				4,550		
 	12 160	22 526	42 105	9,200		
19.461	45,409	17 029	42,103	20,739	12 052	45,170
1 // 21	(1 920)	(/ 0/5)	1 992	20,403	12,333	2 6 7 7
1,431	11.07.71	(4,343)	1,005	2,409	4,370	5,022
10 202	1/ 122	12 092	12 152	22 865	17 27/	15 562
19,893	14,132	12,982	13,153	22,863	17,324	15,562
19,893 — (302)	14,132	12,982	13,153 — (107)	22,863 15,876 (3,707)	17,324 15,913 (200)	15,562 29,613 (19/)
19,893 — (302) 35 167	14,132 — 24 29 311	12,982 — 95	13,153 — (197) 29 1/9	22,863 15,876 (3,707)	17,324 15,913 (200) 16,113	15,562 29,613 (194) 29,808

Consolidated Statements of Cash Flows	2004/3	2005/3	2006/3	
Cash Flows from Operating Activities				
Income before Income Taylor and Minority Interacts	10 757	EE 004	60 205	
Depreciation and Amortization	45,757	125 330	135 010	
		1 959	729	
Loss on Liquidation of Rusiness		1,959	129	
Loss on Retirement of Noncurrent Assets	2 /6/	3 7/18	2 735	
Disaster Recovery Expanses	2,404			
Increase (Decrease) in Provision for Retirement Repetits	107	(3.817)	(0.405)	
Increase (Decrease) in Reserve for Eluctuation in Water Levels	689	1 108	(300)	
Interest and Dividends Income	(1 707)	(2 0 97)	(2.640)	
	83 510	<u>(2,007)</u> 50.881	25 732	
Decrease (Increase) in Notes and Accounts Poseivable. Trade	01	(2 974)	(2 244)	
Decrease (Increase) in Inventories	(226)	(2,074)	(5,244)	
Increase (Increase) in Notes and Accounts Payable_Trade	4 406	1 151	(1,000)	
Loss (Gain) on Salos of Socurities	4,400	1,151	(1,010)	
LOSS (Gain) on Valuation of Socurities				
Equity (Income) Loss of Affiliates	(204)	1 211	(2 0 4 2)	
Loss (Cain) on Sala of Nancurrent Assots	(004)	202	(2,042)	
Distribution by Dissolution of Anonymous Association	49	505	(107)	
Other Net	22 620	6 504	15 097	
		0,504	10,987	
SUD-TOTAL	287,572	238,042	233,621	
	1,323	1,85/	2,606	
Interest Expenses Paid	(87,223)	(51,940)	(36,472)	
Income Taxes Paid	(21,/24)	(15,322)	(25,800)	
Net Cash Provided by Operating Activities	179,948	1/2,63/	173,954	
Cash Flows from Investing Activities				
Purchase of Noncurrent Assets	(52,337)	(57,825)	(68,449)	
Proceeds from Contribution Received for Construction	3,124	4,386	7,881	
Proceeds from Sales of Noncurrent Assets	258	543	1,396	
Payments of Investments and Loans Receivable	(22,250)	(19,952)	(14,180)	
Collections of Investments and Receivable	7,056	13,678	2,931	
Purchase of Investments in Subsidiaries Resulting in	•	•	,	
Change in Scope of Consolidation	_	_	_	
Proceeds from Purchase of Investments in Subsidiaries.				
Net of Cash Acquired	_	8		
Proceeds from Sales of Investments in Subsidiaries Resulting in				
Change in Scope of Consolidation	_	_		
Other Net	(359)	(1 424)	(1 905)	
Net Cash Used in Investing Activities	(64,507)	(60,586)	(72,326)	
	(0.1/2017)	(00,000)	(*=/===)	
Cash Flows from Financing Activities	40.000	00.052	1.10.200	
Proceeds from Issuance of Bonds	49,988	89,952	149,360	
Redemption of Bonds	(45,010)	(279,910)	(234,090)	
Proceeds from Long-Term Loans Payable	166,035	73,600	131,587	
Repayment of Long-Term Loans Payable	(499,603)	(64,497)	(117,473)	
Increase in Short-Term Loans Payable	239,730	198,485	128,547	
Decrease in Short-Term Loans Payable	(256,087)	(188,902)	(154,964)	
Proceeds from Issuance of Commercial Paper	83,998	348,994	580,977	
Redemption of Commercial Paper	(44,000)	(284,000)	(575,000)	
Issuance of Common Stock	163,115			
Proceeds from Stock Issuance to Minority Shareholders				
Payments for Acquisition of Shares from Minority Shareholders	(1,439)		—	
Purchase of Treasury Stock				
Cash Dividends Paid	(4,236)	(5,410)	(12,472)	
Cash Dividends Paid to Minority Shareholders	(7)	(108)	(71)	
Other, Net	(4.47.546)	(1)	(15)	
Net Cash Provided by (Used in) Financing Activities	(147,516)	(111,/98)	(103,613)	
Effect of Exchange Rate Change on Cash and Cash Equivalents	(184)	17	291	
Net Increase (Decrease) in Cash and Cash Equivalents	(32,260)	270	(1,693)	
Cash and Cash Equivalents at Beginning of Period	59,787	27,673	30,221	
Increase (Decrease) in Cash from the Addition of				
Consolidated Subsidiaries	147	2,276	346	
Cash and Cash Equivalents at the End of Period	27,673	30,221	28,874	

2007	7/3 2008/3	2009/3	2010/3	2011/3	2012/3	<b>2013</b> /3
E 4 71		22 526	42 10E	20 720	22.22	(Millions of yen)
	<u>57 45,469</u> 83 115.021	114 669	120 313	<u>38,739</u>	<u></u>	<u> </u>
34	47 267	439	384	9,266	946	180
				4,550		
2,7*	10 2,611	4,182	2,516	2,941	2,434	2,418
(4.0		12 848	5 923	(779)	<u>5,562</u> 971	987
75	56 (595	) (413)	(411)	42		(351)
(2,28	34) (2,780)	) (2,666)	(1,987)	(2,720)	(2,284)	(2,517)
22,58	35 22,749	22,616	23,085	22,371	22,005	22,362
(2.2)	<u>53 2,120</u> 05) (4,375)	(6,040)	17.645	(10,753)	(1,607)	(2,133)
2,29	95 4,027	(1,109)	7,034	3,171	3,148	5,642
	— (3,911)	) 2	(231)	(1,450)	(484)	(620)
		19,648	(4.4.722)	5,359	1,791	242
(5,50	(8,8/9) (8,8/9)	) (7,470)	(11,722)	(9,072)	(9,565)	(11,728)
(5)	<u>/////////////////////////////////////</u>	(12,170)	(590)	432		
2,25	50 (6,398	) 24,235	(10,205)	8,355	8,526	(8,922)
205,66	65 168,792	183,709	200,170	175,965	166,031	143,385
2,66	<u>51 3,370</u>	15,368	5,845	7,644	6,869	7,926
(21,9:	<u>34) (22,453</u> 51) (13,458	) (22,079) ) (18,369)	(22,987) (13.880)	(22,881) (9.492)	(21,765) (25,244)	<u>(21,974)</u> (9552)
157,24	41 136,252	158,628	169,148	151,236	125,891	119,786
^						
(OE 89	00) (124 722	) (172 110)	(114.067)	(11E 027)	(100 711)	(165.201)
22,00 8 38	<u>59) (154,725</u> 83 7 509	<u>(175,119)</u> 8.619	9 962	7.068	3 102	6 343
1,52	20 1,552	58,657	1,860	2,453	2,285	1,140
(70,34	45) (35,965)	) (27,643)	(23,456)	(14,184)	(6,068)	(1,347)
3,48	34 6,650	7,901	3,896	5,235	4,915	7,938
-	— (1,280	) (2,611)	(495)	_	_	
	24					
	<u> </u>					
	— 8,064				1,425	
(2,58	35) (4,325)	) (4,154)	(6,305)	(9,419)	(8,802)	(19,242)
(155,40	)) (152,518	) (132,350)	(129,504)	(124,675)	(136,852)	(1/0,369)
89,63	36 89,675	114,570	59,792	79,726		39,877
(59,06	57) (38,384	) (60,300)		(88,000)	(35,000)	(20,000)
62,8	11 114,864 (125,522)	9,803	122,794	49,036	1/6,/45	207,887
22.08	<u>135,552</u> 84 18,551	193.040	42,500	84.880	103.760	108.500
(44,43	36) (14,549	) (190,023)	(38,294)	(80,680)	(103,070)	(110,038)
416,66	<u>56 586,322</u>	639,380	475,905	392,965	359,968	326,969
(432,00	)) (594,000	) (619,000)	(561,000)	(406,000)	(359,000)	(336,000)
	(7)	) (63,195)				
(9,98	<u>39) (9,989)</u>	) (12,499)	(10,503)	(10,503)	(10,502)	(10,501)
5) [] []	<u>24/</u> 39) (7	) (20) ) (83)	( <u>2)</u> 11	<u>(8)</u> אמד ד	3 764	
(2,10	<u>68) 17,174</u>	(29,615)	(30,351)	(29,172)	9,296	61,502
2:	21 1/7	(2 761)	1 506	205	(EQE)	2 615
	(3) 1.056	(6.101)	10.798	(2.326)	(2.248)	13.535
28,87	74 34,575	35,631	29,530	40,329	38,002	35,359
r 7/	04				(20.4)	
34.5	75 35,631	29,530	40,329	38,002	35,359	48,894

Segment Information	2004/3	2005/3	2006/3	
Sales to Customers				
Electric Power Business	522,922	547,960	573,198	
Electric Power-Related Business	_	_	_	
Overseas Power Generation	_	_	_	
Other Businesses	46,931	46,414	48,734	
Consolidated	569,854	594,375	621,933	
Operating Income				
Electric Power Business	119,404	99,270	87,057	
Electric Power-Related Businesses	_	_	_	
Other Businesses	12,785	12,026	13,797	
Eliminations	(50)	589	613	
Consolidated	132,138	111,885	101,469	
Ordinary Income*1				
Electric Power Business	_	_	_	
Electric Power-Related Businesses	_	_	_	
Overseas Power Generation	_	_	_	
Other Businesses	_	_	_	
Eliminations		_	_	
Consolidated		_	—	
Depreciation				
Electric Power Business	131,869	125,371	134,747	
Electric Power-Related Businesses	_		_	
Overseas Power Generation	_	_	—	
Other Businesses	3,001	3,322	3,507	
Eliminations	(3,489)	(3,354)	(3,235)	
Consolidated	131,380	125,339	135,019	
Increase in Tangible and Intangible Noncurrent Assets* <sup>2</sup>				
Electric Power Business	44,896	50,454	55,125	
Electric Power-Related Businesses	—	—	—	
Overseas Power Generation	_		_	
Other Businesses	3,837	3,962	8,441	
Eliminations	(2,531)	(3,492)	(2,705)	
Consolidated	46,202	50,925	60,861	

Notes: 1. From the fiscal year ended March 31, 2007, the segment that had been called "Other Business" has been divided into "Electric Power-Related Businesses" and "Other Businesses."

From the fiscal year ended March 31, 2011, the Company has increased the detail of its segmentation by shifting from a three-segment structure ("Electric Power Businesses," and "Other Businesses") to a four-segment structure ("Electric Power Business," "Electric Power-Related Businesses," "Overseas Power Generation," and "Other Businesses").
 \*1 From the fiscal year ended March 31, 2011, segment income is stated in terms of ordinary income rather than operating income.
 \*2 From the fiscal year ended March 31, 2011, segment investment is stated in terms of "increase in tangible and intangible noncurrent assets" rather than "capital expenditure."

2007/3	2008/3	2009/3	2010/3	2011/3	2012/3	<b>2013</b> /3
						(1.1)
						(Millions of yen)
522 792	521 76/	648 363	520 280	584 436	609 775	605 228
 26 996	2/ 185	23 /88	24 095	26 29/	23 133	26 599
 	24,105	23,400	1 576	1 881	2 005	1 647
 22 /197	31 831	33.085	28 522	23 363	19 686	22 /71
 573 277	587 780	70/ 936	58/ /8/	635 975	654 600	656.056
575,277	567,780	704,950	564,464	055,975	054,000	050,050
61.436	39,897	44,610	38,294			
15,604	10.403	11,569	11,207			
 1.156	900	360	(301)			
 (1.056)	(478)	567	(260)			
 77.141	50.724	57.108	48.939			
,						
	_	_	22,320	41,832	22,290	31,088
_	_	_	11,521	10,425	8,373	9,099
_	_	_	6,511	5,047	3,499	3,907
_	_	_	1,614	(1,517)	(3)	986
	_		(273)	533	2,460	(256)
	_		41,694	56,322	36,619	44,825
121,853	113,468	113,112	119,241	110,179	104,344	93,163
3,387	3,573	3,406	2,839	3,362	3,514	4,498
_	_		48	115	55	84
963	1,061	1,174	1,349	1,231	521	492
(3,121)	(3,082)	(3,023)	(3,166)	(3,244)	(3,164)	(2,984)
123,083	115,021	114,669	120,313	111,644	105,271	95,254
90,378	113,566	154,096	106,737	70,742	68,286	69,390
5,470	7,125	13,170	2,507	5,236	7,119	46,713
		_	5,727	18,091	62,548	60,175
542	5,457	4,897	344	643	340	494
(5,687)	(4,093)	(36)	(3,084)	(1,584)	(570)	(1,667)
90,704	122,056	172,128	112,233	93,128	137,725	175,106

### **Non-Consolidated Financial Statements**

Non-Consolidated Balance Sheets	2004/3	2005/3	2006/3	
Assets				
Noncurrent Assets	1,918,851	1,856,227	1,791,860	
Electric Utility Plant and Equipment	1,644,724	1,545,226	1,428,485	
Hydroelectric Power Production Facilities	515,781	494,625	475,920	
Thermal Power Production Facilities	751,760	691,781	619,059	
Renewable Power Production Facilities	_			
Transmission Facilities	293,841	280,726	261,139	
Transformation Facilities	44,870	42,733	39,744	
Communication Facilities	11,811	10,748	9,919	
General Facilities	26,659	24,609	22,701	
Incidental Business Facilities	35	399	493	
Non-Operating Facilities	_	513	917	
Construction in Progress	164,696	174,187	200,807	
Construction in Progress	163,837	173,466	200,645	
Retirement in Progress	858	720	161	
Nuclear Fuel	_	_	_	
Nuclear Fuel in Processing	_	_	_	
Investments and Other Assets	109,395	135,901	161,155	
Long-Term Investments	37,233	43,186	56,109	
Long-Term Investments for Subsidiaries and Affiliates	45,205	63,263	78,577	
Long-Term Prepaid Expenses	1,659	2,730	3,017	
Deferred Tax Assets	25,296	26,721	23,796	
Allowance for Doubtful Accounts	—	_	(344)	
Current Assets	85,852	93,432	96,473	
Cash and Deposits	6,299	7,505	6,501	
Acceptance Receivable	3	_	3	
Accounts Receivable–Trade	44,877	47,207	51,244	
Other Accounts Receivable	3,839	6,667	5,721	
Short-Term Investments	7,281		_	
Supplies	8,167	11,999	16,471	
Prepaid Expenses	1,005	1,122	1,228	
Short-Term Receivables from Subsidiaries and Affiliates	2,246	7,142	5,124	
Deferred Tax Assets	3,068	3,346	3,801	
Other Current Assets	9,061	8,440	6,376	
Allowance for Doubtful Accounts	_			
Total Assets	2,004,703	1,949,660	1,888,333	

Note: In accordance with revisions in Electric Utility Accounting Regulations, geothermal power generation facilities are now recorded as "Renewable Power Production Facilities" from the fiscal year ended March 31, 2010.

2007/3	2008/3	2009/3	2010/з	2011/3	2012/3	<b>2013</b> /3
						(Millions of yon)
1.802.277	1.819.393	1.796.175	1.808.678	1.768.302	1.728.454	1.749.201
1,338,430	1,254,172	1,220,808	1.215.919	1,159,857	1.095.654	1.045.889
458,977	441,129	428,270	413,221	399,744	384,125	372,980
562,071	510,443	469,618	489,556	462,070	429,797	394,071
_		_	2,084	1,765	1,526	1,533
246,578	233,026	221,274	211,312	200,373	189,304	188,695
37,819	35,559	37,929	36,360	35,721	32,944	31,762
10,423	10,125	10,384	10,121	10,274	9,767	9,308
22,559	23,887	53,331	53,261	49,907	48,187	47,537
1,825	2,504	2,321	2,070	2,297	2,186	1,980
626	607	461	248	335	260	798
251,250	326,336	313,664	287,204	295,682	315,318	331,810
251,193	326,175	313,542	286,540	295,449	314,737	331,120
56	161	121	664	233	580	690
_	10,310	27,650	38,688	46,693	54,157	59,769
_	10,310	27,650	38,688	46,693	54,157	59,769
210,144	225,462	231,268	264,546	263,435	260,877	308,954
77,343	72,069	46,787	72,083	62,572	60,522	67,029
106,808	117,195	143,118	152,399	164,876	169,582	212,363
2,678	3,256	2,164	1,824	2,480	1,548	3,760
23,759	33,515	40,084	39,079	38,992	35,411	31,004
(446)	(574)	(886)	(840)	(5,485)	(6,188)	(5,204)
91,400	90,896	114,416	93,826	116,528	115,806	121,090
5,008	4,051	4,973	5,151	4,362	4,295	4,440
41,661	39,036	44,178	39,848	49,264	50,745	48,758
5,424	7,198	5,186	4,870	4,845	507	3,618
		22				
18,439	21,800	38,414	19,087	28,529	31,565	33,083
1,125	1,355	1,002	1,219	1,672	2,388	2,405
6,521	5,793	4,880	9,516	11,637	6,876	7,808
3,232	3,482	4,150	2,993	3,732	4,599	4,917
10,005	8,198	11,622	11,138	12,604	14,895	16,166
(17)	(20)	(14)		(121)	(65)	(108)
1,893,678	1,910,290	1,910,592	1,902,504	1,884,830	1,844,261	1,870,291

	2004/3	2005/3	2006/3
Liabilities			(Millions of ven)
Noncurrent Liabilities	1,487,194	1,253,566	1,182,685
Bonds Payable	829,751	591,171	521,684
Long-Term Loans Payable	614,784	619,495	625,039
Long-Term Accrued Liabilities	1,092	956	961
Provision for Retirement Benefits	38,237	34,409	25,089
Other Noncurrent Liabilities	3,328	7,533	9,910
Current Liabilities	178,484	324,157	305,531
Current Portion of			
Noncurrent Liabilities	54,960	107,593	103,954
Short-Term Loans Payable	38,600	47,000	23,000
Commercial Paper	40,000	105,000	111,000
Accounts Payable-Trade	1,853	3,446	3,495
Accounts Payable–Other	4,473	4,309	4,254
Accrued Expenses	12,845	10,994	9,961
Accrued Taxes	8,994	18,708	16,699
Deposits Received	487	236	229
Short-Term Debt to Subsidiaries			
and Affiliates	15,171	24,857	30,099
Other Advances	423	399	413
Other Current Liabilities	674	1,610	2,424
Reserves under Special Laws	689	1,798	1,399
Reserve for Fluctuation in			
Water Levels	689	1,798	1,399
Total Liabilities	1,666,367	1,579,522	1,489,616

### Shareholders' Equity

Common Stock	152,449	152,449	152,449
Capital Surplus	81,849	81,852	81,852
Additional Paid-in Capital	81,849	81,852	81,852
Retained Earnings	100,683	129,979	150,819
Legal Reserve	5,999	6,029	6,029
Voluntary Reserve	57,022	74,887	94,897
Reserve for Loss from			
Overseas Investment, etc.	51	51	56
Reserve for Special Disaster	10	14	19
Exchange-Fluctuation			
Preparation Reserve	1,960	1,960	1,960
General Reserve	55,000	72,861	92,861
Unappropriated Retained Earnings			
at the End of the Term	37,661	49,062	49,892
Unrealized Gain on Securities	3,353	5,858	13,613
Treasury Stock	_	(1)	(17)
Total Shareholders' Equity	338,336	370,137	398,717
Total Liabilities and			
Shareholders' Equity	2,004,703	1,949,660	1,888,333

Liabilities
Noncurrent Liabilities
Bonds Payable
Long-Term Loans Payable
Long-Term Accrued Liabilities
Lease Obligations
Long-Term Debt to Subsidiaries and Affiliates
Provision for Retirement Benefits
Assets Retirement Obligations
Other Noncurrent Liabilities
Current Liabilities
Current Portion of Noncurrent Liabilities
Short-Term Loans Payable
Commercial Paper
Accounts Payable–Trade
Accounts Payable–Other
Accrued Expenses
Accrued Taxes
Deposits Received
Short-Term Debt to Subsidiaries and Affiliates
Other Advances
Other Current Liabilities
Reserves Under Special Laws
Reserve for Fluctuation in Water Levels
Total Liabilities

Net Assets
Shareholders' Equity
Capital Stock
Capital Surplus
Legal Capital Surplus
Retained Earnings
Legal Retained Earnings
Other Retained Earnings
Reserve for Special Disaster
Exchange-Fluctuation Preparation Reserve
General Reserve
Retained Earnings Brought Forward
Treasury Stock
Valuation and Translation Adjustments
Valuation Difference on
Available-for-Sale Securities
Deferred Gains or Losses on Hedges
Total Net Assets
Total Liabilities and Net Assets

2007/3	2008/3	2009/3	2010/3	2011/3	2012/3	<b>2013</b> /3
						(Millions of yon)
1,136,290	1,241,004	1,256,467	1,302,695	1,257,747	1,211,719	1,206,654
573 229	602 903	717 867	689 883	734 898	714 914	694 930
 533.539	599.350	481.577	550.955	461.256	429.373	438.228
 4	3	2	1	0		
		133	218	314	392	374
17	2,767	3,073	4,887	5,709	5,192	4,999
21,543	28,585	41,439	46,351	45,259	46,053	47,155
				158	175	189
7,955	7,395	12,373	10,396	10,149	15,617	20,777
343,441	262,882	316,383	252,974	277,226	285,725	304,261
170,884	98,995	117,815	136,703	159,747	163,166	192,821
2,000	6,000	9,000	12,750	17,350	18,350	18,350
95,944	88,949	109,971	24,998	11,999	12,999	3,999
3,713	3,649	1,220	4,452	5,055	2,194	2,375
12,219	4,771	8,040	9,892	2,970	3,094	2,843
10,643	9,598	11,349	10,407	9,760	10,191	10,276
4,404	8,920	13,539	3,790	18,821	8,877	7,201
389	279	261	278	282	454	474
41,041	39,932	42,331	47,298	47,634	60,697	59,093
334	444	938	583	1,034	666	741
1,865	1,341	1,916	1,818	2,569	5,032	6,081
 2,155	1,560	1,146	734	777	777	425
 2,155	1,560	1,146	734	777	777	425
1,481,888	1,505,447	1,573,998	1,556,404	1,535,751	1,498,222	1,511,341
 398,912	403,672	338,012	343,879	348,159	346,824	354,914
152,449	152,449	152,449	152,449	152,449	152,449	152,449
81,852	81,852	81,852	81,852	81,852	81,852	81,852
81,852	81,852	81,852	81,852	81,852	81,852	81,852
164,667	169,436	166,971	172,839	177,121	175,787	183,878
6,029	6,029	6,029	6,029	6,029	6,029	6,029
158,638	163,406	160,941	166,810	171,092	169,758	177,848
38	47	50	53	57	70	77
1,960	1,960	1,960	1,960	1,960	1,960	1,960
117,861	132,861	137,861	137,861	142,861	147,861	147,861
38,778	28,538	21,070	26,935	26,213	19,866	27,950
(56)	(64)	(63,260)	(63,262)	(63,263)	(63,264)	(63,265)
12,877	1,169	(1,417)	2,220	919	(785)	4,035
12,761	1,068	(1,214)	2,634	(479)	(1,158)	4,281
116	101	(203)	(414)	1,399	373	(245)
411,789	404,842	336,594	346,099	349,079	346,039	358,950
1,893,678	1,910,290	1,910,592	1,902,504	1,884,830	1,844,261	1,870,291

Non-Consolidated Statements of Income	2004/3	2005/3	2006/3	
Operating Revenue	522 505	5/6 702	566 016	
Electric Utility Operating Revenue	518 978	540,665	558 306	
Sold Power to Other Suppliers	453 478	476 335	495.061	
Transmission Revenue	63 398	61 194	58 255	
Other Electricity Revenue	2 100	3 136	4 989	
Incidental Business Operating Revenue	3.617	6.037	7.709	
Operating Expenses	403.807	447.964	480.041	
Electric Utility Operating Expenses	400,754	442.754	473.056	
Hydroelectric Power Production Expenses	64.292	68,883	69.844	
Thermal Power Production Expenses	226,968	262.271	308,191	
Renewable Power Production Expenses	·	,	,	
Purchased Power from Other Suppliers			81	
Transmission Expenses	32,529	32,391	35,250	
Transformation Expenses	7,711	7,577	6,737	
Selling Expenses	922	948	1,439	
Communicating Expenses	4,880	5,384	5,655	
General and Administrative Expenses	56,662	58,229	38,571	
Enterprise Tax	6,787	7,067	7,285	
Incidental Business Operating Expenses	3,053	5,210	6,985	
Operating Income	118,788	98,738	85,974	
Non-Operating Income	2,839	3,871	5,218	
Financial Revenue	1,788	2,683	3,327	
Dividends Income	1,077	1,841	2,521	
Interest Income	711	842	806	
Non-Operating Revenue	1,050	1,187	1,890	
Gain on Sales of Noncurrent Assets	18	16	111	
Miscellaneous Revenue	1,031	1,171	1,779	
Non-Operating Expenses	88,104	55,193	39,958	
Financial Expenses	84,024	51,044	35,737	
Interest Expenses	83,236	50,374	35,088	
Amortization of Stock Issue Expenses	583		10	
Bond Issue Cost		_		
Amortization of Bond Issue Expenses	192	621	590	
Amortization of Bond Issue Discount	12	48	49	
Non-Operating Expenses	4,080	4,149	4,220	
Loss on Sales of Noncurrent Assets	10	23	126	
Miscellaneous Expenses	4,069	4,126	4,094	
Total Ordinary Revenue	525,434	550,573	571,234	
Total Ordinary Expenses	491,911	503,158	520,000	
Ordinary Income	33,522	47,415	51,234	
Provision or Reversal of Reserve for Fluctuation in	200		(200)	
Water Levels	689	1,108	(399)	
Provision of Reserve for Fluctuation in Water Levels	689	1,108	(200)	
Reversal of Reserve for Fluctuation in Water Levels			(399)	
Extraordinary income				
Distribution by Dissolution of Anonymous Association				
Gain on Extinguishment of Tie-in Shares		_		
Disaster Descuent Expanses				
Disdster Recovery Expenses				
LOSS OIT Valuation of Securities				
FIOUSION OF ANOWARCE FOR DOUDLINE ACCOUNTS FOR				
		46 206	51 622	
Income Taxes_Current	<u>32,033</u> 10 502	10,300	20 1/2	·
Income Taxes-Current	<u>ווע,סטב</u> בסס	(2 111)	(1 202)	
Total Income Taxes		15 020	18 250	
Net Income	21.718	31.266	33.382	

Note: In accordance with revisions in Electric Utility Accounting Regulations, geothermal power generation facilities-related costs are now recorded as "Renewable Power Production Expenses" from the fiscal year ended March 31, 2010.

2007/3	2008/3	2009/3	2010/з	2011/3	2012/3	<b>2013</b> /3
						(N dillions of use)
F47 272	F20.2F0		F20 42C	F02 242	F00 072	
517,273	529,250	621 452	530,430	583,213	599,973	580,993
<b>510,248</b>	<u> </u>	<u>571 282</u>	<u> </u>	<u> </u>	532 015	<u> </u>
55 184	54 934	55 414	54 402	54 343	53 059	52 632
5 029	5 090	<u> </u>	5 591	<u>54,545</u>	4 579	4 031
7.024	11,932	14,398	11,753	9,335	9,419	9,708
456.433	489.363	601.122	489.531	520,569	557.628	543.659
450,203	478,579	588,224	479,085	513,395	549,010	534,765
63,728	61,114	68,281	60,904	60,005	66,325	60,762
290,013	312,292	402,159	319,569	358,156	381,201	377,701
	—	_	802	976	2,274	2,036
433	1,214	80	15	1,388	3,428	256
30,502	28,680	28,475	27,523	26,943	29,031	26,586
6,595	6,621	7,020	6,785	6,453	5,968	6,623
1,237	1,546	1,307	1,225	1,223	1,482	2,570
6,191	6,000	6,242	6,275	6,480	6,360	5,815
44,837	54,353	66,407	49,349	44,466	45,429	45,040
6,662	6,756	8,250	6,634	7,300	7,508	7,371
6,229	10,783	12,897	10,446	7,174	8,617	8,894
60,840	39,887	44,728	40,904	62,644	42,344	43,333
8,386	9,844	6,61/	6,463	6,348	9,089	8,304
4,521	<u> </u>	4,933	3,54/	4,649	<b>6,726</b>	6,063
3,580	4,275	3,775	2,340	3,403	5,401	4,395
935 2 965	1,057	1,100	2,016	1,240	1,323	1,008
270	<u>4,512</u>		<b>2,910</b>	<u>880,1</u>	<b>2,302</b>	<u> </u>
3 /0/	3 444	1 678	2 316	1 616	2 286	2 121
31 686	27 6/8	28 950	2,510	25 800	2,200	2,131
21 565	21,040	28,950	23,370	23,800	20,730	22,735
21,505	21,557	21 915	21 967	21,327	20,525	20,585
288	288	379	207	273		122
10,121	5,710	6,655	1,400	4,173	5,230	2,091
4	2	32		625	643	630
10,117	5,708	6,622	1,400	3,547	4,587	1,461
525,659	539,095	652,468	536,899	589,561	609,062	595,298
488,119	517,011	630,072	513,107	546,370	583,384	566,459
37,540	22,083	22,395	23,791	43,191	25,677	28,839
	(= - = )	(	(			
/56	(595)	(413)	(411)	42		(351)
/56		(412)	(411)	42		(251)
	(595)	(4 3)	(411)	1.625		(351)
—		12,170		1,035		
		2 201				
		2,501		1 635		
		19 647		13 757	3 434	
					<u> </u>	
		19 647		6 092		
				5,652		
_	_	_	_	4,255	_	
				3,408		
36,783	22,678	17,635	24,203	31,027	22,243	29,190
11,865	11,338	13,389	6,660	16,395	10,148	7,999
1,020	(3,421)	(5,781)	1,170	(153)	2,924	2,596
12,886	7,917	7,608	7,831	16,242	13,073	10,595
23,897	14,761	10,026	16,372	14,785	9,169	18,594

# Major Group Companies (As of March 31, 2013)

Company Name	Main Businesses	Equity Stake (%)
Electric Power Business		
Bay Side Energy Co., Ltd.	Electric power supply	100.0
ITOIGAWA POWER Inc.	Electric power supply	80.0
Ichihara Power Co., Ltd.	Electric power supply	60.0
J-Wind Co., Ltd.	Construction and operation of wind power plants	100.0
Green Power Aso Co., Ltd.	Construction and operation of wind power plants	100.0
Japan Clean Energy Development Co., Ltd.	Construction and operation of wind power plants	100.0
Minami Kyushu Wind Power Co., Ltd.	Construction and operation of wind power plants	98.8
Nagasaki-Shikamachi Wind Power Co., Ltd.	Construction and operation of wind power plants	70.0
Nikaho-Kogen Wind Power Co., Ltd.	Construction and operation of wind power plants	67.0
Sarakitomanai Wind Power Co., Ltd.	Construction and operation of wind power plants	49.0
and 2 companies		
JPec Co., Ltd.	Construction, technical development, design, consulting, maintenance, and research for thermal and nuclear power plants; unloading and transporting of coal to thermal power plants; sale of fly ash; shipping of coal for thermal power plants; research and planning of environmental conservation	100.0
JPHYTECH Co., Ltd.	Construction, technical development, design, consulting, maintenance, and research for hydroelectric power plants, substations, and transmission lines; surveying and compensation of construction sites; civil engineering, construction management, and construction services	100.0
JP Business Service Corporation	Operation of welfare facilities; facility maintenance; business process outsourcing; development of computer software	100.0
KEC Corporation	Construction and maintenance of electronic and communications facilities	100.0
JP Design Co., Ltd.	Design, management, and research for electric power facilities and other facilities and construction consulting	100.0
J-POWER RESOURCES Co., Ltd.	Import, sales, and transportation of coal	100.0
J-POWER AUSTRALIA PTY., LTD.	Investments in coal mines in Australia	100.0
JPOWER GENEX CAPITAL Co., Ltd.	Management of IPP projects	100.0
J-Wind Service Co., Ltd.	Maintenance and operation of wind power plants	100.0
J-POWER EnTech Co., Inc.	Engineering services for atmospheric and water pollutant removal equipment	100.0
Miyazaki Wood Pellet Co., Ltd.	Operation of manufacturing facilities of wood pellets	98.3
JM Activated Coke, Inc.	Manufacturing, sales, and marketing of activated coke	90.0
EPDC CoalTech and Marine Co., Ltd.	Marine transportation of ash and fly ash from thermal power plants	100.0 (100.0)
and 12 companies		
Overseas Business		
J-Power Investment Netherlands B.V.	Management of overseas investments	100.0
J-POWER Holdings (Thailand) Co., Ltd.	Management of overseas investments	100.0 (100.0)
J-POWER Generation (Thailand) Co., Ltd.	Management of overseas investments and research and development projects	100.0 (100.0)
Gulf JP Co., Ltd.	Management of overseas investments	90.0 (90.0)
J-POWER North America Holdings Co., Ltd.	Management of overseas investments	100.0
J-POWER USA Investment Co., Ltd.	Management of overseas investments	100.0 (100.0)
J-POWER USA Development Co., Ltd.	Research and development of overseas investments	100.0
J-POWER Consulting (China) Co., Ltd.	Management of overseas investments and research and development projects	100.0
and 19 companies		
Other Businesses		
Kaihatsu Hiryou Co., Ltd.	Production and sales of fertilizer using ash	100.0
Japan Network Engineering Co., Ltd.	relecommunications; operation and maintenance of telecommunications facilities	100.0
Omuta Plant Service Co., Ltd.	Operation and maintenance of waste-fueled power generation plant	100.0
Biocoal Osaka-Hirano Co., Ltd.	Construction, operation, and other services for facilities that process sewage into fuel	60.0
Green Coal Saikai Co., Ltd.	Construction, operation, and other services for facilities that process non-industrial waste into fuel	60.0
ang 2 companies		

Company Name	Main Businesses	Equity Stake (%)
Electric Power Business		
Mihama Seaside Power Co., Ltd.	Electric power supply	50.0
Setouchi Power Corporation	Electric power supply	50.0
TOSA POWER Inc.	Electric power supply	45.0
GENEX Co., Ltd.	Electric power supply	40.0 (40.0)
Osaki CoolGen Corporation	Testing of integrated coal gasification combined cycle and separation and capture of $CO_{z}$	50.0
Yuzawa Geothermal Power Generation Corporation	Research for commercial development of geothermal resources, development and supply of geothermal resources, and electric power supply	50.0
Overseas Business		
Gulf Electric Public Co., Ltd.	Management of overseas investments	49.0 (49.0)
EGCO Green Energy Co., Ltd.	Management of overseas investments	26.0 (26.0)
JM Energy Co., Ltd.	Management of overseas investments	50.0
EGCO Cogeneration Co., Ltd.	Electric power supply	20.0 (20.0)
Roi-Et Green Co., Ltd.	Electric power supply	[95.0]
J-POWER USA Generation, L.P.	Management of overseas investments	50.0 (50.0)
Birchwood Power Partners, L.P.	Electric power supply	50.0 (50.0)
Green Country Energy, LLC	Electric power supply	[100.0]
Pinelawn Power LLC	Electric power supply	[100.0]
Equus Power I, L.P.	Electric power supply	[100.0]
Edgewood Energy, LLC	Electric power supply	[100.0]
Shoreham Energy, LLC	Electric power supply	[100.0]
Orange Grove Energy, L.P.	Electric power supply	[100.0]
Elwood Energy, LLC	Electric power supply	[50.0]
Tenaska Virginia Partners, L.P.	Electric power supply	[30.0]
Tenaska Frontier Partners, Ltd.	Electric power supply	[25.0]
China Resources Power (Hezhou) Co., Ltd.	Electric power supply	[100.0]
Shaanxi Hanjiang Investment & Development Co., Ltd.	Electric power supply	27.0
ShanXi TianShi Power Generation Co., Ltd.	Electric power supply	24.0
Chiahui Power Corporation	Electric power supply	40.0 (40.0)
CBK Netherlands Holdings B.V.	Management of overseas investments	50.0 (50.0)
CBK Power Co., Ltd.	Operation of hydroelectric and pumped-storage electric power plants	[100.0]
Zajaczkowo Windfarm Sp. z o.o.	Construction and operation of wind power plants	46.8 (46.8)
and 52 companies		

Notes: 1. The equity stake values in percentages are indirect holding ratios, while those shown in brackets are the ratios held by a closely related party or parties in agreement. 2. JPec Co., Ltd., J-POWER RESOURCES Co., Ltd., J-POWER AUSTRALIA PTY., LTD., J-POWER Holdings (Thailand) Co., Ltd. and Gulf JP Co., Ltd. are specified subsidiaries.

### **Corporate Profile/Stock Information**

(As of March 31, 2013)

Corporate Name		Electric	Power Development Co., Ltd.	
Communication Name		J-POWI	ER	
Date of Establishment		Sept. 1	6, 1952	
Headquarters Address		15-1, 6	Ginza 6-chome, Chuo-ku, Tokyo 104-8165, Ja	apan
Paid-in Capital		¥152,4	149,600,000	
Number of Shares Author	rized	660,00	00,000	
Number of Shares Outsta	nding	166,56	59,600	
Number of Shareholders		36,158	3	
Stock Exchange Listing		Tokyo		
Independent Public Accou	untants	Ernst &	& Young ShinNihon LLC	
Transfer Agent		Sumito	omo Mitsui Trust Bank, Limited	
Organization Chart (As of July 1, 2013)	t			
			Secretarial Affairs & Public Relation Dept.	
			<ul> <li>Corporate Planning &amp; Administration Dept.</li> </ul>	
			<ul> <li>Accounting &amp; Finance Dept.</li> </ul>	
			<ul> <li>Personnel &amp; Employee Relations Dept.</li> </ul>	
			— General Affairs Dept.	
	Interna	l Audit	<ul> <li>Siting &amp; Environment Dept.</li> </ul>	
	Depar	tment	— Business Planning Dept. ————	Wakamatsu Operations & General Management Office
	Chairman		Power Sales Dept.	
	President		- Energy Business Dent	
Decud of Directory	Executive Vice Presic	dents		
Board of Directors	Directors	20	Procurement Office	
	Officers	ng	<ul> <li>Power System Operation Dept.</li> </ul>	Regional Headquarters (Hokkaido, East, Chubu, West)
	Executive Officer	ſS	<ul> <li>Civil &amp; Architectural Engineering Dept.</li> </ul>	Isawa Hydro Project Construction Office
Shareholders'			— Hydropower Dept.	Ohme Main Transmission Line Designt Construction Office
meeting	Executive Committ	tee	Transmission System & Telecommunications Dept. —	Nishi-Tokyo Main-Transmission Line Project Construction Office
	Committee	ung	Thermal Power Dept	Thormal Power Stations / Jongo Takacago Takobara
Board of Corporate			- Thermal Power Engineering Dent	Tachibanawan, Matsushima, Matsuura, Ishikawa Coal)
Auditors Corporate Auditors'		Office	Nuclear Power Management Dept.	Onikobe Geothermal Power Station
		Nuclear Fower Management Dept.		
			<ul> <li>Nuclear Power Construction Dept.</li> </ul>	Ohma Nuclear Power Station Construction Office
			— Ohma General Management Dept. ————	Aomori Branch Office
			<ul> <li>Environment &amp; Energy Business Dept.</li> </ul>	
			International Business Management Dept.	Beijing Office
			International Business Development Dept.	Upper Kotomale Hydropower Project Office
			Research & Development Dept.	Chigasaki Research Institute Wakamatsu Research Institute

Main Subsidiaries -

J-POWER Generation (Thailand) Co., Ltd. J-POWER USA Development Co., Ltd. J-POWER Consulting (China) Co., Ltd.

#### Major Shareholders (Top 10) (As of March 31, 2013)

	Number of	Percentage of Total
Name or Designation	(Thousands of Shares)	(%)
Nippon Life Insurance Company	9,120	5.48
Japan Trustee Services Bank, Ltd. (Trust Account)	7,724	4.64
Mizuho Corporate Bank, Ltd.	7,465	4.48
The Master Trust Bank of Japan, Ltd. (Trust Account)	6,353	3.81
Sumitomo Mitsui Banking Corporation	4,295	2.58
J-POWER Employees Shareholding Association	4,246	2.55
Japan Trustee Services Bank, Ltd. (Trust Account 9)	3,385	2.03
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	3,331	2.00
Fukoku Life Insurance Company	2,750	1.65
Sumitomo Mitsui Trust Bank, Limited	2,247	1.35

Note: In addition to the above, J-POWER holds 16,517,290 shares.

## Breakdown of Issued Shares by Type of Shareholders



Note: Treasury stock of 16,517,290 shares is included in "Individuals and Others."



#### **Common Stock Price Range**

Stock Price (Yen)

85



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TATION

Printed in Japan 2013.8