

KOREA ELECTRIC POWER CORP  
Form 20-F  
April 30, 2013  
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As filed with the Securities and Exchange Commission on April 30, 2013

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549 F

**Form 20-F**

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2012

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
Date of event requiring this shell company report \_\_\_\_\_

For the transition period from            to

Commission File Number: 001-13372

## **KOREA ELECTRIC POWER CORPORATION**

*(Exact name of registrant as specified in its charter)*

N/A  
*(Translation of registrant's name into English)*

The Republic of Korea  
*(Jurisdiction of incorporation or organization)*

167 SAMSEONG-DONG, GANGNAM-GU, SEOUL 135-791, KOREA

*(Address of principal executive offices)*

Jungin Yoon, +822 3456 4216, junginyoon@kepco.co.kr, +822 3456 4299

*(Name, telephone, e-mail and/or facsimile number and address of company contact person)*

### **Securities registered or to be registered pursuant to Section 12(b) of the Act:**

**Title of each class:**  
Common stock, par value Won 5,000 per share  
American depositary shares, each representing  
one-half of share of common stock

**Name of each exchange on which registered:**  
New York Stock Exchange\*  
New York Stock Exchange

\* Not for trading, but only in connection with the listing of American depositary shares on the New York Stock Exchange, pursuant to the requirements of the Securities and Exchange Commission.

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Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

Twenty Year 7.40% Amortizing Debentures, due April 1, 2016

One Hundred Year 7.95% Zero-to-Full Debentures, due April 1, 2096

6% Debentures due December 1, 2026

7% Debentures due February 1, 2027

6<sup>3</sup>/<sub>4</sub>% Debentures due August 1, 2027

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the last full fiscal year

covered by the annual report:

641,964,077 shares of common stock, par value of Won 5,000 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes  No

Note: Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days: Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files): Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes  No

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**CERTAIN DEFINED TERMS AND CONVENTIONS**

All references to Korea or the Republic in this annual report on Form 20-F, or this report, are references to The Republic of Korea. All references to the Government in this report are references to the government of the Republic. All references to we, us, our, ours, the Company, KEPCO in this report are references to Korea Electric Power Corporation and, as the context may require, its subsidiaries, and the possessive thereof, as applicable. All references to the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance include the respective predecessors thereof (and, for the avoidance of doubt, in the case of the Ministry of Trade, Industry and Energy, including the Ministry of Knowledge Economy). All references to tons are to metric tons, equal to 1,000 kilograms, or 2,204.6 pounds. Any discrepancies in any table between totals and the sums of the amounts listed are due to rounding. All references to IFRS in this report are references to the International Financial Reporting Standards as issued by the International Accounting Standard Board. Unless otherwise stated, all of our financial information presented in this report has been prepared on a consolidated basis and in accordance with IFRS.

In addition, in this report, all references to:

KHNP are to Korea Hydro & Nuclear Power Co., Ltd.,

EWP are to Korea East-West Power Co., Ltd.,

KOMIPO are to Korea Midland Power Co., Ltd.,

KOSEP are to Korea South-East Power Co., Ltd.,

KOSPO are to Korea Southern Power Co., Ltd., and

KOWEPO are to Korea Western Power Co., Ltd.,  
each of which is our wholly-owned generation subsidiary.

**FORWARD-LOOKING STATEMENTS**

This report includes forward-looking statements (as defined in Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934), including statements regarding our expectations and projections for future operating performance and business prospects. The words believe, expect, anticipate, estimate, project and similar words used in connection with any discussion of our future operating or financial performance identify forward-looking statements. In addition, all statements other than statements of historical facts included in this report are forward-looking statements. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. We caution you not to place undue reliance on the forward-looking statements, which speak only as of the date of this report.

This report discloses, under the caption Item 3D. Risk Factors and elsewhere, important factors that could cause actual results to differ materially from our expectations ( Cautionary Statements ). All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the Cautionary Statements.



**Table of Contents****PART I****ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

**ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**ITEM 3. KEY INFORMATION****Item 3A. Selected Financial Data**

The selected consolidated financial data set forth below as of and for the years ended December 31, 2010, 2011 and 2012 have been derived from our audited consolidated financial statements which have been prepared in accordance with IFRS.

Our consolidated financial statements as of and for the years ended December 31, 2010, 2011 and 2012 included in this report have been audited by Deloitte Anjin LLC, a member firm of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee. Deloitte Anjin LLC is a Korean independent registered public accounting firm and is our current independent registered public accounting firm.

You should read the following data with the more detailed information contained in Item 5. Operating and Financial Review and Prospects and our consolidated financial statements included in Item 18. Financial Statements. Historical results do not necessarily predict future results.

**Consolidated Statement of Earnings Data**

	2010	2011	2012	
	(in billions of Won and millions of US\$, except per share data)			
Sales	39,507	43,175	49,121	\$ 46,199
Cost of sales	36,188	42,725	48,459	45,577
Gross Profit	3,319	450	662	622
Other operating income (expense), net	467	451	600	564
Selling and administrative expenses	1,645	1,752	1,780	1,674
Other income (loss)	119	166	(1,782)	(1,676)
Operating income (loss)	2,260	(685)	(2,300)	(2,164)
Finance income (expense), net	(1,967)	(1,911)	(1,940)	(1,824)
Profits of affiliates and joint ventures using equity method	77	123	177	166
Income (loss) before income taxes	370	(2,473)	(4,063)	(3,822)
Income tax expenses	439	820	(985)	(926)
Net loss for the year	(69)	(3,293)	(3,078)	(2,896)
Other comprehensive loss	(43)	(262)	(322)	(303)
Total comprehensive loss	(112)	(3,555)	(3,400)	(3,199)
Net income (loss) attributable to:				
Owners of the Company	(120)	(3,370)	(3,167)	(2,980)
Non-controlling interests	51	77	89	84
Total comprehensive income attributable to:				
Owners of the Company	(152)	(3,628)	(3,448)	(3,244)
Non-controlling interests	40	73	48	45
Earnings (loss) per share				
Basic <sup>(1)</sup>	(193)	(5,411)	(5,083)	(4,781)

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Diluted <sup>(2)</sup>	(193)	(5,411)	(5,083)	(4,781)
Earnings (loss) per ADS				
Basic <sup>(1)</sup>	(97)	(2,706)	(2,542)	(2,391)
Diluted <sup>(2)</sup>	(97)	(2,706)	(2,542)	(2,391)
Dividends per share				

**Table of Contents****Consolidated Statements of Financial Position Data**

	2010	As of December 31,		2012
		2011		
	(in billions of Won and millions of US\$, except share and per share data)			
Net working capital surplus (deficit) <sup>(3)</sup>	(916)	(3,973)	(4,884)	\$ (4,594)
Property, plant and equipment, net	107,406	112,385	122,376	115,097
Total assets	129,518	136,468	146,153	137,460
Total shareholders' equity	57,277	53,804	51,064	48,027
Controlling interest	56,818	53,270	49,889	46,922
Non-controlling interest	459	534	1,175	1,105
Common stock	3,208	3,210	3,210	3,019
Number of common shares as adjusted to reflect any changes in capital stock	641,567,712	641,964,077	641,964,077	641,964,077
Long-term debt (excluding current portion)	32,848	39,198	45,525	42,817
Other long term liabilities	25,321	25,725	30,747	28,918

*Notes:*

- (1) Basic earnings per share are calculated by dividing net income available to holders of our common shares by the weighted average number of common shares issued and outstanding for the relevant period.
- (2) Diluted earnings per share are calculated in a manner consistent with basic earnings per share, while giving effect to the potential dilution that could occur if convertible securities, options or other contracts to issue common shares were converted into or exercised for common shares.
- (3) Net working capital means current assets minus current liabilities.

**Currency Translations and Exchange Rates**

In this report, unless otherwise indicated, all references to Won or ₩ are to the currency of Korea, and all references to U.S. dollars, Dollars, or \$ are to the currency of the United States of America, all references to Euro or € are references to the currency of the European Union, and all references to Yen or ¥ are references to the currency of Japan. Unless otherwise indicated, all translations from Won to U.S. dollars were made at Won 1,063.2 to US\$1.00, which was the noon buying rate of the Federal Reserve Board (the Noon Buying Rate) in effect as of December 31, 2012. The source of these rates is the Federal Reserve Bank of New York until December 31, 2008. Since January 1, 2009, the Federal Reserve Bank of New York discontinued publication of foreign exchange rates. The source of the rates since January 1, 2009 is the H.10 statistical release of the Federal Reserve Board. On April 5, 2013, the Noon Buying Rate was Won 1,136.8 to US\$1.00. The exchange rate between the U.S. dollar and Korean Won may be highly volatile from time to time and the U.S. dollar amounts referred to in this report should not be relied upon as an accurate reflection of our results of operations. No representation is made that the Won or U.S. dollar amounts referred to in this report could have been or could be converted into U.S. dollars or Won, as the case may be, at any particular rate or at all.

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The following table sets forth, for the periods and dates indicated, certain information concerning the Noon Buying Rate in Won per US\$1.00.

Year Ended December 31,	At End of Period	Average <sup>(1)</sup> (Won per US\$1.00)	High	Low
2008	1,262.0	1,098.7	1,507.9	935.2
2009	1,163.7	1,274.6	1,570.1	1,149.0
2010	1,130.6	1,155.7	1,253.2	1,104.0
2011	1,158.5	1,106.9	1,197.5	1,049.2
2012	1,063.2	1,126.2	1,185.0	1,063.2
October	1,090.2	1,105.4	1,114.6	1,090.2
November	1,081.8	1,087.0	1,091.8	1,081.8
December	1,063.2	1,075.2	1,083.7	1,063.2
2013 (through April 5)	1,136.8	1,088.3	1,136.8	1,056.0
January	1,087.5	1,066.5	1,091.2	1,056.0
February	1,083.9	1,087.3	1,095.7	1,078.2
March	1,112.5	1,102.9	1,119.2	1,083.9
April (through April 5)	1,136.8	1,121.9	1,136.8	1,114.4

Source: Federal Reserve Bank of New York (for the periods ended on or prior to December 31, 2008) and Federal Reserve Board (for the period since January 1, 2009).

Note:

(1) Represents the daily average of the Noon Buying Rates during the relevant period.

**Item 3B. Capitalization and Indebtedness**

Not Applicable

**Item 3C. Reasons for the Offer and Use of Proceeds**

Not Applicable

**Item 3D. Risk Factors**

*Our business and operations are subject to various risks, many of which are beyond our control. If any of the risks described below actually occurs, our business, financial condition or results of operations could be seriously harmed.*

**Risks Relating to KEPCO**

*Increases in fuel prices will adversely affect our results of operations and profitability as we may not be able to pass on the increased cost to consumers at a sufficient level or on a timely basis.*

Fuel costs constituted 48.5% and 49.2% of our sales and cost of sales, respectively, in 2012. Our generation subsidiaries purchase substantially all of the fuel that they use (except for anthracite coal) from a limited number of suppliers outside Korea at prices determined in part by

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prevailing market prices in currencies other than Won. For example, most of the bituminous coal requirements (which accounted for approximately 42.2% of our entire fuel requirements in 2012 in terms of electricity output) are imported from a limited number of countries principally consisting of Indonesia and Australia and, to a lesser extent, the United States and Russia, which accounted for approximately 43.6%, 33.4%, 5.7% and 5.2%, respectively, of the annual bituminous coal requirements of our generation subsidiaries in 2012. Approximately 80.3% of the bituminous coal requirements of our generation subsidiaries in 2012 were purchased under long-term contracts and the remaining 19.7% from

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the spot market. Pursuant to the terms of our long-term supply contracts, prices are adjusted annually based on prevailing market conditions. In addition, our generation subsidiaries purchase a significant portion of their fuel requirements under contracts with limited duration. See Item 4B. Business Overview Fuel.

In recent years, the prices of bituminous coal, oil and liquefied natural gas, or LNG, have fluctuated significantly, creating uncertain outlook for our overall fuel costs. For example, the average free on board Newcastle coal 6300 GAR spot price index published by Platts was US\$99.2 per ton in 2010, US\$121.3 per ton in 2011, US\$96.2 per ton in 2012 and US\$92.3 per ton as of April 9, 2013. The prices of oil and LNG are substantially dependent on the price of crude oil, and according to Bloomberg (Bloomberg Ticker: PGCRDUBA), the average daily spot price of Dubai crude oil varied from US\$106.2 per barrel in 2011 to US\$108.9 per barrel in 2012 and to US\$103.9 per barrel as of April 5, 2013. If fuel prices increase sharply within a short span of time, our generation subsidiaries may be unable to secure requisite fuel supplies at prices commercially acceptable to them. In addition, any significant interruption or delay in the supply of fuel, bituminous coal in particular, from any of their suppliers may cause our generation subsidiaries to purchase fuel on the spot market at prices higher than the prices available under existing supply contracts, which would result in an increase in fuel cost. We cannot assure you that the fuel prices will not significantly increase in the remainder of 2013 or thereafter.

Because the Government regulates the rates we charge for the electricity we sell to our customers (see Item 4B. Business Overview Sales and Customers Electricity Rates ), our ability to pass on fuel and other cost increases to our customers is limited. The increase in fuel prices led to our recording of an operating loss in 2011 and 2012 and a net loss from 2008 to 2012. We expect that a sudden and substantial rise in the level of fuel prices will have a material adverse effect on our results of operation in 2013 and beyond. If fuel prices remain at the current level or continue to increase and the Government, out of concern for inflation or for other reasons, maintains the current level of electricity tariff or does not increase it to a level to sufficiently offset the impact of high fuel prices, the fuel price increases will negatively affect our profit margins or even cause us to suffer operating and/or net losses and our business, financial condition, results of operations and cash flows would suffer. In addition, partly because the Government may have to undergo a lengthy deliberative process to approve an increase in electricity tariff, which represents a key component of the consumer price index, the electricity tariff may not be adjusted to a level sufficient to ensure a fair rate of return to us in a timely manner or at all. For example, in August 2010, August 2011, December 2011, August 6, 2012 and January 14, 2013, the Government increased the electricity tariff by an average of 3.5%, 4.9%, 4.5%, 4.9% and 4.0%, respectively. However, such increases were insufficient to fully offset the adverse impact from the rise in fuel costs. Similarly, we cannot assure that any future tariff increase by the Government will be sufficient to fully offset the adverse impact on our results of operations from the current or potential rises in fuel costs.

Further to the announcement by the Ministry of Trade, Industry and Energy in February 2010, a new electricity tariff system went into effect on July 1, 2011. This system is designed to overhaul the prior system for determining electricity tariff chargeable to customers by more closely aligning the tariff levels to the movements in fuel prices, with the aim of providing more timely pricing signals to the market regarding the expected changes in electricity tariff levels and encouraging more efficient use of electricity by customers. Previously, the electricity tariff consisted of two components: (i) base rate and (ii) usage rate based on the cost of electricity and the amount of electricity consumed by the end-users. Under the new tariff system, the electricity tariff is also to have a third component of fuel cost pass-through adjustment ( FCPTA ) rate, which is to be added to or subtracted from the sum of the base rate and the usage rate on a monthly basis based on the three-month average movements of coal, LNG and oil prices, which is reflected as FCPTA two months later. The new tariff system is intended to provide greater financial stability and ensure a minimum return on investment to electricity suppliers, such as us. However, due to inflationary and other policy considerations relating to protecting the consumers from sudden and substantial rises in electricity tariff, the Ministry of Trade, Industry and Energy issued a hold order on July 29, 2011 suspending our billing and collecting of the FCPTA amount. The hold order remains in effect to-date. Furthermore, on January 11, 2013, the Ministry of Trade, Industry and Energy informed us that the FCPTA system needed to be reassessed in light of the current circumstances such as the prolonged unbilled

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period since the announcement of the FCPTA system. There is no assurance as to when the Government will lift the hold order and allow us to bill and collect the accumulated FCPTA amount or whether the new tariff system will undergo other amendments to the effect that it will not fully cover our fuel and other costs on a timely basis or at all, or will not have unintended consequences that we are not presently aware of. Any such development may have a material adverse effect on our business, financial condition, results of operations and cash flows. For further discussion, including in relation to accounting, see Item 4B. Business Overview Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment , Item 4B. Business Overview Sales and Customers Electricity Rates , Item 4B. Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment, Item 5B. Operating and Financial Review and Prospects Overview, Item 5B. Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment and Notes 2, 15 and 36 to the notes to our consolidated annual financial statements.

***The Government may adopt policy measures to substantially restructure the Korean electric power industry or our operational structure, which may have a material adverse effect on our business, operations and profitability.***

From time to time, the Government considers various policy initiatives to foster efficiency in the Korean electric power industry, and at times have adopted policy measures that have substantially altered our business and operations. For example, in January 1999, with the aim of introducing greater competition in the Korean electric power industry and thereby improving its efficiency, the Government announced a restructuring plan for the Korean electric power industry, or the Restructuring Plan. For a detailed description of the Restructuring Plan, see Item 4B. Business Overview Restructuring of the Electric Power Industry in Korea. As part of this initiative, in April 2001 the Government established the Korea Power Exchange to enable the sale and purchase of electricity through a competitive bidding process, established the Korea Electricity Commission to ensure fair competition in the Korean electric power industry, and, in order to promote competition in electricity generation, split off our electricity generation business to form one nuclear generation company and five non-nuclear generation companies to be wholly owned by us. In 2002, the Government introduced a plan to privatize one of our five non-nuclear generation subsidiaries, but this plan was suspended indefinitely in 2003 due to prevailing market conditions and other policy considerations.

In 2003, the Government established a Tripartite Commission consisting of representatives of the Government, leading businesses and labor unions in Korea to deliberate on ways to introduce competition in electricity distribution, such as by forming and privatizing new distribution subsidiaries. In 2004, the Tripartite Commission recommended not pursuing such privatization initiatives but instead creating independent business divisions within us to improve operational efficiency through internal competition. Following the adoption of such recommendation by the Government in 2004 and further studies by Korea Development Institute, in 2006 we created nine strategic business units (which, together with our other business units, were subsequently restructured into 14 such units in February 2012) that came to have separate management structures (although with limits on its autonomy), financial accounting systems and performance evaluation systems, but with a common focus on maximizing profitability.

On August 25, 2010, the Ministry of Trade, Industry and Energy announced the Proposal for the Improvement in the Structure of the Electric Power Industry, whose key initiatives included the following: (i) maintain the current structure of having six generation subsidiaries, (ii) designate the six generation subsidiaries as market-oriented public enterprises under the Public Agency Management Act in order to foster competition among them and autonomous and responsible management by them, (iii) create a supervisory unit to act as a control tower in reducing inefficiencies created by arbitrary division of labor among the six generation subsidiaries and fostering economies of scale among them and require the presidents of the generation subsidiaries to hold regular meetings, (iv) create a nuclear power export business unit to systematically enhance our capabilities to win projects involving the construction and operation of nuclear power plants overseas, (v) further rationalize the electricity tariff by adopting a fuel-cost based tariff system in 2011 and a voltage-based tariff system in a subsequent year, and (vi) create separate accounting systems for electricity generation,

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transmission, distribution and sales with the aim of introducing competition in electricity sales in the intermediate future. Pursuant to this Proposal, in December 2010 the Ministry of Trade, Industry and Energy announced guidelines for a cooperative framework between us and our generation subsidiaries, and in January 2011 the five non-nuclear generation subsidiaries formed a joint cooperation unit and transferred their pumped-storage hydroelectric business units to KHNP. Furthermore, in January 2011 the six generation subsidiaries were officially designated as market-oriented public enterprises, whereupon the President of Korea appoints the president and the statutory auditor of each such subsidiary; the selection of outside directors of each such subsidiary is subject to approval by the minister of the Ministry of Strategy and Finance; the president of each such subsidiary is required to enter into a management contract directly with the minister of the Ministry of Trade, Industry and Energy; and the Public Enterprise Management Evaluation Commission conducts performance evaluation of such subsidiaries. Previously, our president appointed the president and the statutory auditor of each such subsidiary; the selection of outside directors of each such subsidiary was subject to approval by our president; the president of each such subsidiary entered into a management contract with our president; and our evaluation committee conducted performance evaluation of such subsidiaries.

In addition, in order to deal with the shortage of fuel and other resources and also to comply with various environmental standards, the Government has adopted the Renewable Portfolio Standard ( RPS ), under which each generation subsidiary was required to supply 2.0% of the total energy generated from such subsidiary in the form of renewable energy in 2012 and will be required to supply 10.0% by 2022. The current budgeted amount of capital expenditure for implementation of the RPS as currently planned for the period from 2012 to 2022 is approximately Won 45 trillion. We expect that such additional capital expenditure will be covered by a corresponding increase in electricity tariff. However, there is no assurance that the Government will in fact raise the electricity tariff to a level sufficient to fully cover such additional capital expenditures or at all. For further details, see Item 4B. Business Overview Renewable Energy.

Other than as set forth above, we are not aware of any specific plan by the Government to resume the implementation of the Restructuring Plan or otherwise change the current structure of the electric power industry or the operations of us or our generation subsidiaries in the near future. However, for reasons relating to changes in policy considerations, socio-political, economic and market conditions and/or other factors, the Government may resume the implementation of the Restructuring Plan or initiate other steps that may change the structure of the Korean electric power industry or the operations of us or our generation subsidiaries. Any such measures may have a negative effect on our business, results of operation and financial condition. In addition, the Government, which beneficially owns a majority of our shares and exercises significant control over our business and operations, may from time to time pursue policy initiatives with respect to our business and operations, and such initiatives may vary from the interest and objectives of our other shareholders.

***Our capacity expansion plans, which are based on projections on long-term supply and demand of electricity in Korea, may prove to be inadequate.***

We and our generation subsidiaries make plans for expanding or upgrading our generation capacity based on the Basic Plan Relating to the Long-Term Supply and Demand of Electricity, or the Basic Plan, which is generally announced and revised every two years by the Government. In February 2013, the Government announced the sixth Basic Plan relating to the future supply and demand of electricity. The sixth Basic Plan, which is effective for the period from 2013 to 2027, focuses on, among other things, (i) minimizing the need to construct new generation facilities through active consumer demand management, (ii) ensuring that we maintain adequate electricity reserve appropriate to the size of the national economy, and (iii) expanding our generation capacity to promote efficient supply of electricity in consideration of the stability of the national electricity grid network and the specific needs of localities. The Government may announce a supplemental plan for the construction of additional nuclear plants, which was not included in the sixth Basic Plan; such plan may increase the amount of our required capital expenditure. We cannot assure that the sixth Basic Plan, or the plans to be subsequently adopted, will successfully achieve their intended goals, the foremost of which is to formulate a capacity expansion plan that will result in balanced overall electricity supply and demand in Korea at an affordable cost to the end users. If there is a significant variance between the projected electricity supply and



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demand considered in planning our capacity expansions and the actual electricity supply and demand, this may result in inefficient use of our capital, mispricing of electricity and undue financing costs on the part of us and our generation subsidiaries, which may have a material adverse effect on our results of operations, financial condition and cash flows.

From time to time, we may experience temporary power shortages or circumstances bordering on power shortages due to factors beyond our control, such as extreme weather conditions. For example, due to extremely cold weather during winters of recent years, our electricity reserve level fell from time to time to a level lower than the normal level despite emergency measures mandated by the Government, such as reduced daytime railway services and reduced daytime industrial use of electricity during peak hours. In addition, due to the unanticipated late heat wave in mid-September 2011 and the resulting spike in the use of air conditioning, our reserve level fell to a level that resulted in temporary suspensions of electricity supply across several regions of Korea on that day despite emergency measures by the Government, such as direct load control and voluntary conservation, which prevented a full-scale blackout. Circumstances such as these may lead to increased end-user complaints and greater public scrutiny, which may in turn result in our need to modify our capacity expansion plans, and if we were to substantially modify our capacity plans, this may result in additional capital expenditures, which may have a material adverse effect on our results of operations, financial condition and cash flows.

In light of these temporary power shortages, the Government has increasingly expanded its efforts to encourage conservation of electricity, including through a public relations campaign, but there is no assurance such efforts will have the desired effect of substantially reducing the demand for electricity or improving efficient use thereof.

### ***We may require a substantial amount of additional indebtedness to refinance existing debt and for future capital expenditures.***

We anticipate that a substantial amount of additional indebtedness will be required in the coming years in order to refinance existing debt, make capital expenditures for construction of generation plants and other facilities and make acquisitions and investments related to overseas natural resources. In 2010, 2011 and 2012, our capital expenditures (including capitalized interest) for the construction of generation, transmission and distribution facilities amounted to 11,414 billion, 11,984 billion and 13,215 billion, respectively, and our budgeted capital expenditures for 2013, 2014 and 2015 amount to 19,714 billion, 20,376 billion and 18,651 billion, respectively. While we currently do not expect to face any material difficulties in procuring short-term borrowing to meet our liquidity and short-term capital requirements, there is no assurance that we will be able to do so. We expect that a portion of our long-term debt will need to be paid or refinanced through foreign currency-denominated borrowings and capital raising in international capital markets. Such financing may not be available on terms commercially acceptable to us or at all, especially if the global financial markets experience significant turbulence or a substantial reduction in liquidity or due to other factors beyond our control. If we are unable to obtain financing on commercially acceptable terms on a timely basis, or at all, we may be unable to meet our funding requirements or debt repayment obligations, which could have a material adverse impact on our business, results of operations and financial condition.

### ***The movement of Won against the U.S. dollar and other currencies may have a material adverse effect on us.***

The Won has fluctuated significantly against major currencies in recent years, especially as a result of the ongoing global financial instability, especially in Europe. See Item 3A. Selected Financial Data Currency Translations and Exchange Rates. Depreciation of Won against U.S. dollar and other foreign currencies typically results in a material increase in the cost of fuel and equipment purchased by us from overseas since the prices for substantially all of the fuel materials and a significant portion of the equipment we purchase are denominated in currencies other than Won, generally in U.S. dollars. Changes in foreign exchange rates may also impact the cost of servicing our foreign currency-denominated debt. As of December 31, 2012, approximately

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21.4% of our long-term debt (including the current portion but excluding issue discounts and premium) before accounting for swap transactions was denominated in foreign currencies, principally in U.S. dollars. In addition, even if we make payments in Won for certain fuel materials and equipment, some of these fuel materials (for example, all of our requirements for LNG are purchased from Korea Gas Corporation) may originate from other countries and their prices may be affected accordingly by the exchange rates between the Won and foreign currencies, especially the U.S. dollar. Since substantially all of our revenues are denominated in Won, we must generally obtain foreign currencies through foreign-currency denominated financings or from foreign currency exchange markets to make such purchases or service such debt. As a result, any significant depreciation of Won against the U.S. dollar or other major foreign currencies will have a material adverse effect on our profitability and results of operations.

### ***We may not be successful in implementing new business strategies.***

As part of our overall business strategy, we plan to undertake new, or expand existing, projects such as strengthening of our renewable energy generation capabilities under the Renewable Portfolio Standards initiative, adoption of the smart grid projects to improve the operational efficiency of our electricity transmission and distribution network, and expansion in overseas markets, particularly in the construction and operation of nuclear generation units and the exploration and production of natural resources.

Due to their inherent uncertainties, such new and expanded strategic initiatives expose us to a number of risks and challenges, including the following:

new and expanded business activities may require unanticipated capital expenditures and involve additional compliance requirements;

new and expanded business activities may result in less growth or profit from what we currently anticipate, and there can be no assurance that such business activities will become profitable at the level we desire or at all;

certain of our new and expanded businesses, particularly in the areas of renewable energy, require substantial government subsidies to become profitable, and such subsidies may be substantially reduced or entirely discontinued;

we may fail to identify and enter into new business opportunities in a timely fashion, putting us at a disadvantage vis-à-vis competitors, particularly in overseas markets; and

we may need to hire or retrain personnel who are able to supervise and conduct the relevant business activities.

As part of our business strategy, we may also seek, evaluate or engage in potential acquisitions, mergers, joint ventures, strategic alliances, restructurings, combinations, rationalizations, divestments or other similar opportunities. The prospects of these initiatives are uncertain, and there can be no assurance that we will be able to successfully implement or grow new ventures, and these ventures may prove more difficult or costly than what we originally anticipated. In addition, we regularly review the profitability and growth potential of our existing and new business. As a result of such review, we may decide to exit from or to reduce the resources that we allocate to new ventures in the future. There is a risk that these ventures may not achieve profitability or operational efficiencies to the extent originally anticipated, and we may fail to recover investments or expenditures that we have already made. Any of the foregoing may have a material adverse effect on our reputation, business, results of operations, financial condition and cash flows.

### ***We plan to pursue international expansion opportunities that may subject us to different or greater risks than those associated with our domestic operations.***

While our operations have, to date, been primarily based in Korea, we plan to expand, on a selective basis, our overseas operations in the future. In particular, we plan to further diversify the geographic focus of our operations from Asia to the rest of the world, including the resource-rich Middle East, Australia and Africa as well as expand



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our project portfolio, which has to-date involved primarily the construction and operation of conventional thermal generation units, to include the construction and operation of nuclear power plants as well as mining and development of fuel sources in order to increase the level of self-sufficiency in the procurement of fuels.

Overseas operations generally carry risks that are different from those we face in our domestic operations. These risks include:

challenges of complying with multiple foreign laws and regulatory requirements, including tax laws and laws regulating our operations and investments;

volatility of overseas economic conditions, including fluctuations in foreign currency exchange rates;

difficulties in enforcing creditors' rights in foreign jurisdictions;

risk of expropriation and exercise of sovereign immunity where the counterparty is a foreign government;

difficulties in establishing, staffing and managing foreign operations;

differing labor regulations;

political and economic instability, natural calamities, war and terrorism;

lack of familiarity with local markets and competitive conditions;

changes in applicable laws and regulations in Korea that affect foreign operations; and

obstacles to the repatriation of earnings and cash.

Any failure by us to recognize or respond to these differences may adversely affect the success of our operations in those markets, which in turn could materially and adversely affect our business and results of operations.

Furthermore, while we seek to enter into business opportunities in a prudent and selective manner, some of our new international business ventures, such as mining and resource exploration, carry inherent risks that are different from our traditional business of electricity power generation, transmission and distribution. While these new businesses in the aggregate currently do not comprise a material portion of our overall business, as we are relatively inexperienced in these types of businesses, the actual revenues and profitability from, and investments and expenditures into, these business ventures may be substantially different from what we planned or anticipated and have a material adverse impact on our overall business, results of operations, financial condition and cash flows.

***The proliferation of competing systems for independent generation of electricity by and/or sourcing from private power producers would erode our market position and hurt our business, growth prospects, revenues and profitability.***

In 2012, we and our generation subsidiaries owned approximately 84.2% of the total electricity generation capacity in Korea (excluding plants generating electricity for private or emergency use). New entrants to the electricity business will erode our market share and create significant competition, which could have a material adverse impact on our financial conditions and results of operation.

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For example, while preparing for the sixth Basic Plan, which was announced in February 2013, the Ministry of Trade, Industry and Energy accepted applications from private independent power producers, in addition to those from our generation subsidiaries, for construction of additional coal-fired power plants. Previously, private enterprises were not permitted to own and operate coal-fired power plants in Korea. Out of such applications by 15 independent power producers for construction of a total of 40 coal-fired generation units with aggregate generation capacity of 37,100 megawatts, the Government approved applications for the construction of six generation units with aggregate generation capacity of 6,000 megawatts as well as two additional generation

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units with aggregate generation capacity of 2,000 megawatts to provide for the contingency of failed or delayed construction of these six generation units. Construction for the six generation units is scheduled to be completed between 2018 and 2021. While it remains to be seen whether construction of these generation units will be completed as scheduled, if it were to be completed as scheduled or independent power producers are permitted to build additional generation capacity (whether coal-fired or not), our market share in Korea may decrease, which may have a material adverse effect on our results of operations and financial condition.

In addition, in July 2004, the Government adopted the Community Energy System to enable regional districts to source electricity from independent power producers to supply electricity without having to undergo the cost-based pool system used by our generation subsidiaries and most independent power producers to distribute electricity nationwide. A supplier of electricity under the Community Energy System must be authorized by the Korea Electricity Commission and be approved by the minister of the Ministry of Trade, Industry and Energy in accordance with the Electricity Business Act. The purpose of this system is to decentralize electricity supply and thereby reduce transmission costs and improve the efficiency of energy use. These entities do not supply electricity on a national level but are licensed to supply electricity on a limited basis to their respective districts under the Community Energy System. As of March 31, 2013, 14 districts were using this system. The generation capacity installed or under construction of the electricity suppliers in these 14 districts amounted to approximately 1% of the aggregate generation capacity of our generation subsidiaries as of March 31, 2013. Since the introduction of the Community Energy System in 2004, a total of 31 districts have obtained the license to supply electricity through the Community Energy System, but 17 of such districts have reportedly abandoned plans to adopt the Community Energy System, largely due to the relatively high level of capital expenditure required, the rise in fuel costs and the lower-than-expected electricity output per cost. However, if the Community Energy System is widely adopted, it will erode our currently dominant market position in the generation and distribution of electricity in Korea, and may have a material adverse effect on our business, growth, revenues and profitability.

### ***Labor unrest may adversely affect our operations.***

We and each of our generation subsidiaries have separate labor unions. As of December 31, 2012, approximately 68.4% of our and our generation subsidiaries' employees in the aggregate were members of these labor unions. Since the six-week labor strike in 2002 by the union members of our generation subsidiaries in response to the proposed privatization of one of our generation subsidiaries, there has been no material subsequent labor dispute. However, we cannot assure you that there will not be a major labor strike or other disruptions by the labor unions of us and our generation subsidiaries if the Government resumes privatization or other restructuring initiatives or for other reasons, which may adversely affect our business and results of operations.

### ***Planned relocation of the headquarters of us and our generation subsidiaries may reduce our operational efficiency.***

In June 2005, as part of an initiative to foster balanced economic growth in the provinces, the Government announced a plan to relocate the headquarters of select government-invested enterprises, including us and our six generation and certain other subsidiaries, from the Seoul metropolitan area to other provinces in Korea. Currently, our headquarters and those of our generation subsidiaries are within close vicinity of each other in the City of Seoul. Pursuant to the Government's relocation policy, our headquarters are scheduled to be relocated to Naju in Jeolla Province, which is approximately 300 kilometers south of Seoul. Although the relocation was initially scheduled to occur by the end of 2012, due to construction delays, we currently expect that the relocation will occur by the end of 2014. In addition, the headquarters of certain of our subsidiaries are scheduled to be relocated to various other cities in Korea. While we intend to comply with the relocation plan, there can be no assurance that, following such relocation, we will be able to maintain the current level of operational efficiency due to geographic dispersion of our business units.

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***Operation of nuclear power generation facilities inherently involves numerous hazards and risks, any of which could result in a material loss of revenues or increased expenses.***

Through KHNP, we currently operate 23 nuclear-fuel generation units. Operation of nuclear power plants is subject to certain hazards, including environmental hazards such as leaks, ruptures and discharge of toxic and radioactive substances and materials. These hazards can cause personal injuries or loss of life, severe damage to or destruction of property and natural resources, pollution or other environmental damage, clean-up responsibilities, regulatory investigation and penalties and suspension of operations. Nuclear power has a stable and relatively inexpensive cost structure (which is least costly among the fuel types used by our generation subsidiaries) and is the second largest source of Korea's electricity supply, accounting for 29.8% of electricity generated in Korea in 2012. Due to significantly lower unit fuel costs compared to those for conventional power plants, our nuclear power plants are generally operated at full capacity with only routine shutdowns for fuel replacement and maintenance, with limited exceptions. The breakdown, failure or suspension of operation of a nuclear unit could result in a material loss of revenues, an increase in fuel costs related to the use of alternative power sources, additional repair and maintenance costs, greater risk of litigation and increased social and political hostility to the use of nuclear power, any of which could have a material adverse impact on our financial conditions and results of operation.

In response to the damage to the nuclear facilities (including nuclear meltdowns) in Japan as a result of the tsunami and earthquake in March 2011, the Government announced plans to further enhance the safety and security of nuclear power facilities, including by establishing the Nuclear Safety Commission in July 2011 for neutral and independent safety appraisals, subjecting nuclear power plants to additional safety inspections by governmental authorities and civic groups and requiring KHNP to prepare a comprehensive safety improvement plan. As a result of the foregoing, as well as a generally higher level of public and regulatory scrutiny of nuclear power following the recent nuclear incident in Japan, KHNP plans to implement a significant number of measures to improve the safety and efficiency of its generation facilities for target completion by 2015. We expect to incur additional compliance costs and capital expenditures in relation to our improvement measures, which could have a material adverse impact on our financial conditions and results of operation.

***The construction and operation of nuclear-fuel generation units involve difficulties, such as civic opposition from civic groups, which may have an adverse effect on us.***

In recent years, we have encountered increasing social and political opposition to the construction and operation of nuclear generation units. Although we and the Government have undertaken various community programs to address concerns of residents in areas near our nuclear units, civic and community opposition to the construction and operation of nuclear units could result in delayed construction or relocation of planned nuclear generation units, which could have a material adverse impact on our business and results of operation. See Item 4B. Business Overview Power Generation Korea Hydro & Nuclear Power Co., Ltd., Community Programs and Insurance.

On February 9, 2012, our nuclear generation unit Kori-1 experienced a station blackout for approximately 12 minutes during a scheduled maintenance overhaul which began on February 4, 2012 and was scheduled to be completed on March 4, 2012. This incident was reported to the Nuclear Safety and Security Commission on March 12, 2012, which ordered a temporary shut-down of the Kori-1 on March 13, 2012, pending further safety evaluation. In addition, it was recently discovered that certain machinery parts used in our nuclear-fuel generation units had been supplied using forged quality certification documents, resulting in a temporary shutdown of two nuclear-fuel generation units in Yonggwang from November 2012 to January 2013. The Government has initiated a probe in order to investigate the extent of the forgeries and has ordered the Nuclear Safety & Security Commission to perform inspections on all of the nuclear-fuel generation units operated by us. Although we believe that the fraudulently certified parts are not material to the function or safety of our nuclear-fuel generation units, the investigation and unexpected blackouts may raise social and political concerns regarding the safety of our nuclear units, which could have an adverse impact on our financial conditions and results of operation.

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***We are subject to environmental regulations, including in relation to climate change, and our operations could expose us to substantial liabilities.***

We are subject to national, local and overseas environmental laws and regulations, including increasing pressure to reduce emission of carbon dioxide relating to our electricity generation activities as well as our natural resource development endeavors overseas. Our operations could expose us to the risk of substantial liability relating to environmental or health and safety issues, such as those resulting from discharge of pollutants and carbon dioxide into the environment and the handling, storage and disposal of hazardous materials. We may be responsible for the investigation and remediation of environmental conditions at current or former operational sites. We may also be subject to related liabilities (including liabilities for environmental damage, third party property damage or personal injury) resulting from lawsuits brought by governments or private litigants. In the course of our operations, hazardous wastes may be generated, disposed of or treated at third party-owned or -operated sites. If those sites become contaminated, we could also be held responsible for the cost of investigation and remediation of such sites for any related liabilities, as well as for civil or criminal fines or penalties.

We currently operate extensive programs to comply with various environmental regulations, including the Renewable Portfolio Standard program, under which each generation subsidiary was required to supply 2.0% of the total energy generated from such subsidiary in the form of renewable energy in 2012 and will be required to supply 10.0% by 2022, with fines being levied on any unit failing to do so in the prescribed timeline. Satisfaction of the supply target for 2012 by our generation subsidiaries is currently under evaluation, and our generation subsidiaries found to have failed to satisfy the supply target may become subject to fine or other penalty although we are currently unable to predict the type or amount of fine or other penalty that will be imposed. There is no assurance that such fine or other penalty will not be substantial. If substantial, such fine or other penalty may have a material adverse effect on our business, results of operations or financial condition.

Our environmental measures, including the use of environmentally friendly but more expensive parts and equipment and budgeting capital expenditures for the installation of such facilities, may result in increased operating costs and liquidity requirement. The actual cost of installation and operation of such equipment and related liquidity requirement will depend on a variety of factors which may be beyond our control. There is no assurance that we will continue to be in material compliance with legal or social standards or requirements in the future in relation to the environment, including in respect of climate change. See Item 4B. Business Overview Environmental Programs and Business Overview Renewable Energy.

***Our risk management procedures may not prevent losses in debt and foreign currency positions.***

We manage interest rate exposure for our debt instruments by limiting our variable rate debt exposure as a percentage of our total debt and closely monitoring the movements in market interest rates. We also actively manage currency exchange rate exposure for our foreign currency-denominated liabilities by measuring the potential loss therefrom using risk analysis software and entering into derivative contracts to hedge such exposure when the possible loss reaches a certain risk limit. To the extent we have unhedged positions or our hedging and other risk management procedures do not work as planned, our results of operations and financial condition may be adversely affected.

***The amount and scope of coverage of our insurance are limited.***

Substantial liability may result from the operations of our nuclear generation units, the use and handling of nuclear fuel and possible radioactive emissions associated with such nuclear fuel. KHNP carries insurance for its generation units and nuclear fuel transportation, and we believe that the level of insurance is generally adequate and is in compliance with relevant laws and regulations. In addition, KHNP is the beneficiary of Government indemnity which covers a portion of liability in excess of the insurance. However, such insurance is limited in terms of amount and scope of coverage and does not cover all types or amounts of losses which could arise in connection with the ownership and operation of nuclear plants. Accordingly, material adverse financial consequences could result from a serious accident or a natural disaster to the extent it is neither insured nor covered by the government indemnity.



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In addition, our non-nuclear generation subsidiaries carry insurance covering certain risks, including fire, in respect of their key assets, including buildings and equipment located at their respective power plants, construction-in-progress and imported fuel and procurement in transit. Such insurance and indemnity, however, cover only a portion of the assets that the non-nuclear generation subsidiaries own and operate and do not cover all types or amounts of loss that could arise in connection with the ownership and operation of these power plants. In addition, unlike us, our generation subsidiaries are not permitted to self-insure, and accordingly have not self-insured, against risks of their uninsured assets or business. Accordingly, material adverse financial consequences could result from a serious accident to the extent it is uninsured.

In addition, because neither we nor our generation subsidiaries, other than KHNP, carry any insurance against terrorist attacks, an act of terrorism would result in significant financial losses. See Item 4B. Business Overview Insurance.

### ***We may not be able to raise equity capital in the future without the participation of the Government.***

Under applicable laws, the Government is required to directly or indirectly own at least 51.0% of our issued capital stock. As of December 31, 2012, the last day on which our shareholder registry was closed, the Government, directly and through Korea Finance Corporation (a statutory banking institution wholly-owned by the Government), owned 51.1% of our issued capital stock. Accordingly, without changes in the existing Korean law, it may be difficult or impossible for us to undertake, without the participation of the Government, any equity financing in the future (other than sales of treasury stock).

### **Risks Relating to Korea and the Global Economy**

#### ***Unfavorable financial and economic conditions in Korea and globally may have a material adverse impact on us.***

We are incorporated in Korea, where most of our assets are located and most of our income is generated. As a result, we are subject to political, economic, legal and regulatory risks specific to Korea, and our business, results of operation and financial condition are substantially dependent on the Korean consumers' demand for electricity, which are in turn largely dependent on developments relating to the Korean economy. The Korean economy is closely integrated with, and is significantly affected by, developments in the global economy and financial markets.

The ongoing challenges affecting the European, U.S. and global financial sectors, fluctuations in oil and commodity prices and the general weakness of the European, U.S., Chinese and global economy have increased the uncertainty of global economic prospects in general and have adversely affected, and may continue to adversely affect, the Korean economy. Due to the ongoing volatility in the global financial markets, the value of the Won relative to the U.S. dollar has also fluctuated significantly in recent years. Furthermore, as a result of adverse global and Korean economic conditions, there has been continuing volatility in the stock prices of Korean companies. While deterioration of the global economy slowed in the second half of 2009, with some signs of stabilization and improvement beginning in 2010, substantial uncertainties have resurfaced in the form of fiscal and financial sector crisis in several European countries (including Greece, Spain, Italy, Ireland, France and Portugal), as well as threats to the viability of the Euro as a common European currency, a downgrade in the sovereign or other credit ratings of governments and financial institutions in Europe and the United States and signs of cooling of the Chinese and Indian economies, and the overall prospects for the Korean and global economy in 2013 and beyond remain uncertain. While our aggregate financial exposure to the European countries currently being affected by the ongoing fiscal and financial crisis remains less than 1% of our consolidated total assets, any future deterioration of the global economy may have an adverse impact on the Korean economy, which in turn could adversely affect our business, financial condition and results of operations. As the Korean economy is highly dependent on the health and direction of the global economy, the prices of our securities may be adversely affected by investors' reactions to developments in other countries. Factors that determine economic and business cycles of the Korean or global economy are for the most part beyond our control and inherently uncertain. In light of the high level of

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interdependence of the global economy, any of the foregoing developments could have a material adverse effect on the Korean economy and financial markets, and in turn on our business and profitability.

More specifically, factors that could hurt the Korean economy in the future include, among others:

further deterioration of the fiscal and financial crisis in Europe, downgrades in the sovereign or other credit ratings of the governments and financial institutions in Europe and the United States, as well as the slowdown of the Chinese economy, which could have adverse effects on the global, and in turn Korean, credit and financial markets;

inflation levels, volatility in foreign currency reserve levels, commodity prices (including coal, oil, LNG prices), exchange rates (including fluctuation of U.S. dollar and Japanese Yen exchange rates or revaluation of the Renminbi), interest rates, and stock markets and inflows and outflows of foreign capital, either directly, into the stock markets, through derivatives or otherwise;

potential friction with Korea's trading partners arising, in part, from Korea's heavy reliance on exports;

adverse developments in the economies of countries to which Korea exports goods and services (such as China, the United States and Japan), or in emerging market economies in Asia or elsewhere that could result in a loss of confidence in the Korean economy;

the continued emergence of China, to the extent its benefits (such as increased exports to China) are outweighed by its costs (such as competition in export markets or for foreign investment and relocation of the manufacturing base from Korea to China);

social and labor unrest or declining consumer confidence or spending resulting from layoffs, increasing unemployment and lower levels of income;

uncertainty and volatility in real estate prices arising, in part, from the Government's policy-driven tax and other regulatory measures;

rising fiscal deficit as a result of a decrease in tax revenues and a substantial increase in the Government's expenditures for welfare and other social programs;

political uncertainty or increasing strife among or within political parties in Korea, including as a result of the continued polarization of the positions of the ruling conservative party and the progressive opposition;

deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including such deterioration resulting from trade disputes or disagreements in foreign policy;

any other development that has a material adverse effect in the global economy, such as an act of war, a terrorist act or a breakout of an epidemic such as SARS, avian flu or swine flu or natural disasters such as earthquakes and tsunamis and the related disruptions in the relevant economies with global repercussions;

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hostilities involving oil-producing countries in the Middle East and elsewhere and any material disruption in the supply of oil or a material increase in the price of oil resulting from such hostilities; and

an increase in the level of tensions or an outbreak of hostilities in the Korean peninsula.

Any future deterioration of the Korean economy could have an adverse effect on our business, financial condition and results of operation.

***Tensions with North Korea could have an adverse effect on us and the market value of our shares.***

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In

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recent years, there have been heightened security concerns stemming from North Korea's nuclear weapons and long-range missile programs and increased uncertainty regarding North Korea's actions and possible responses from the international community. Recently, on April 13, 2012, North Korea conducted a test of a long-range missile against the protests of many in the international community, including Korea, Japan and the United States. On December 12, 2012, North Korea conducted a rocket launch under the premise of placing a satellite in orbit. This launch has been widely criticized by the international community as a veiled attempt by North Korea to further develop its long-range ballistic missile program. The United Nations Security Council has strongly condemned the tests and the United States has cut off food aid to North Korea. North Korea has responded by issuing a statement that it is free to take necessary retaliatory measures. Most recently, on February 12, 2013, North Korea conducted a nuclear test at its underground test facility in Punggye-ri. The nuclear test has been condemned by the international community and the United National Security Council and the European Union has agreed to a set of new sanctions against North Korea. North Korea has responded to these new sanctions by announcing its withdrawal from the Korean Armistice Agreement and with provocative rhetoric which has increased tensions on the Korean peninsula. After Korea announced on October 7, 2012, that it would extend the range of its ballistic missiles from 185 to 500 miles, a distance which could hit the northeast corner of North Korea from launch sites in central Korea, the National Defense Commission (which is the top military body of North Korea) announced it was ready to wage war on the United States and its allies and threatened to launch nuclear weapons in the event the United States or its allies use nuclear weapons against North Korea.

There recently has been increased uncertainty about the future of North Korea's political leadership and its implications for the economic and political stability of the region. Shortly after the death of Kim Jong-il, a long-standing former ruler of North Korea, in December 2011 his son Kim Jong-eun was named North Korea's Supreme Commander of the Armed Forces. Whether Kim Jong-eun will successfully solidify his political power or whether he will implement policies that will successfully assist North Korea in withstanding the many challenges it faces, however, remains uncertain. In addition, North Korea's economy faces severe challenges. For example, on November 30, 2009, North Korea redenominated its currency at a ratio of 100 to 1 as part of its first currency reform in 17 years as a way to control inflation and reduce the income gap among its citizens. In tandem with the currency redenomination, the North Korean government banned the use or possession of foreign currency by its residents and closed down privately run markets, which led to severe inflation and food shortages. Such developments may further aggravate social and political tensions within North Korea.

Furthermore, there have been recent military conflicts on the Korean peninsula. On March 26, 2010, the Cheonan, a Korean navy ship, sank off the western coast of Korea killing 46 soldiers. An investigation carried out by the Joint Civilian-Military Investigation Group, consisting of investigators from Korea, the United States, Australia, the United Kingdom and Sweden, concluded that the Cheonan was sunk by a North Korean torpedo. Also, on November 23, 2010, the North Korean military fired artillery shells onto the Korean island of Yeonpyeong, killing two Korean soldiers and two civilians which set off an exchange of fire between the two sides. Around the end of 2010, the International Criminal Court tentatively concluded that North Korea's sinking of the Cheonan and shelling of the island of Yeonpyeong constituted a war crime, and launched a preliminary investigation regarding such incidents.

On August 22, 2011, North Korea unilaterally declared that it will legally dispose of all Korean-owned real estate, equipment and raw materials it seized in April 2010 within the Mt. Geumgang resort area (the Geumgang area), concurrent with its seizure and embargo of Korean supplies and assets and its exit order of all employees who were dispatched from Korea (the 2011 Declaration). It is estimated that the value of the assets, including the real estate, owned by the Government, the Korea Tourism Organization and other private Korean companies in the Geumgang area amount to approximately 484.1 billion. Tourism in the Geumgang area has effectively been discontinued since a Korean tourist was shot and killed by a North Korean soldier on July 11, 2008. More recently, on March 27, 2013, North Korea severed the last remaining military hotline with Korea and on April 2, 2013, North Korea announced that it would restart a nuclear reactor located at Yongbyon. In addition, on April 3, 2013 North Korea suspended access to the Kaesong joint industrial zone to South Korean workers and on April 26, 2013 the Government decided to withdraw South Korean workers from the complex. Currently, the

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Government is in the process of considering various other options, including legal and diplomatic measures but it is unclear whether and when the complex will resume operation.

There can be no assurance that the level of tension and instability in the Korean peninsula will not escalate in the future, or that the political regime in North Korea may not suddenly collapse. Any further increase in tension or uncertainty relating to the military or economic stability in the Korean peninsula, including a breakdown of diplomatic negotiations over the North Korean nuclear program, occurrence of military hostilities or heightened concerns about the stability of North Korea's political leadership, could have a material adverse effect on our business, financial condition and results of operation and could lead to a decline in the market value of our common shares and our American depositary shares.

*We are generally subject to Korean corporate governance and disclosure standards, which differ in significant respects from those in other countries.*

Companies in Korea, including us, are subject to corporate governance standards applicable to Korean public companies which differ in many respects from standards applicable in other countries, including the United States. As a reporting company registered with the Securities and Exchange Commission and listed on the New York Stock Exchange, we are, and will continue to be, subject to certain corporate governance standards as mandated by the Sarbanes-Oxley Act of 2002, as amended. However, foreign private issuers, including us, are exempt from certain corporate governance standards required under the Sarbanes-Oxley Act or the rules of the New York Stock Exchange. For a description of significant differences in corporate governance standards, see Item 16G. Corporate Governance. There may also be less publicly available information about Korean companies, such as us, than is regularly made available by public or non-public companies in other countries. Such differences in corporate governance standards and less public information could result in less than satisfactory corporate governance practices or disclosure to investors in certain countries.

*You may not be able to enforce a judgment of a foreign court against us.*

We are a corporation with limited liability organized under the laws of Korea. Substantially all of our directors and officers and other persons named in this annual report reside in Korea, and all or a significant portion of the assets of our directors and officers and other persons named in this annual report and substantially all of our assets are located in Korea. As a result, it may not be possible for holders of the American depositary shares to affect service of process within the United States, or to enforce against them or us in the United States judgments obtained in United States courts based on the civil liability provisions of the federal securities laws of the United States. There is doubt as to the enforceability in Korea, either in original actions or in actions for enforcement of judgments of United States courts, of civil liabilities predicated on the United States federal securities laws.

## **Risks Relating to Our American Depositary Shares**

*There are restrictions on withdrawal and deposit of common shares under the depositary facility.*

Under the deposit agreement, holders of shares of our common stock may deposit those shares with the depositary bank's custodian in Korea and obtain American depositary shares, and holders of American depositary shares may surrender American depositary shares to the depositary bank and receive shares of our common stock. However, under current Korean laws and regulations, the depositary bank is required to obtain our prior consent for the number of shares to be deposited in any given proposed deposit which exceeds the difference between (1) the aggregate number of shares deposited by us for the issuance of American depositary shares (including deposits in connection with the initial and all subsequent offerings of American depositary shares and stock dividends or other distributions related to these American depositary shares) and (2) the number of shares on deposit with the depositary bank at the time of such proposed deposit. We have consented to the deposit of outstanding shares of common stock as long as the number of American depositary shares outstanding at any time does not exceed 80,153,810 shares. As a result, if you surrender American depositary shares and withdraw shares of common stock, you may not be able to deposit the shares again to obtain American depositary shares.

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### ***Ownership of our shares is restricted under Korean law.***

Under the Financial Investment Services and Capital Markets Act, with certain exceptions, a foreign investor may acquire shares of a Korean company without being subject to any single or aggregate foreign investment ceiling. As one such exception, certain designated public corporations, such as us, are subject to a 40.0% ceiling on acquisitions of shares by foreigners in the aggregate. The Financial Services Commission may increase or decrease these percentages if it deems it necessary for the public interest, protection of investors or industrial policy.

In addition to the aggregate foreign investment ceiling, the Financial Investment Services and Capital Markets Act and our Articles of Incorporation set a 3% ceiling on acquisition by a single investor (whether domestic or foreign) of the shares of our common stock. Any person (with certain exceptions) who holds our issued and outstanding shares in excess of such 3% ceiling cannot exercise voting rights with respect to our shares exceeding such limit.

The ceiling on aggregate investment by foreigners applicable to us may be exceeded in certain limited circumstances, including as a result of acquisition of:

shares by a depository issuing depository receipts representing such shares (whether newly issued shares or outstanding shares);

shares by exercise of warrant, conversion right under convertible bonds, exchange right under exchangeable bonds or withdrawal right under depository receipts issued outside of Korea;

shares from the exercise of shareholders' rights; or

shares by gift, inheritance or bequest.

A foreigner who has acquired our shares in excess of any ceiling described above may not exercise his voting rights with respect to our shares exceeding such limit and the Financial Services Commission may take necessary corrective action against him.

### ***Holders of our ADSs will not have preemptive rights in certain circumstances.***

The Korean Commercial Code and our Articles of Incorporation require us, with some exceptions, to offer shareholders the right to subscribe for new shares in proportion to their existing ownership percentage whenever new shares are issued. If we offer any rights to subscribe for additional shares of our common stock or any rights of any other nature, the depository bank, after consultation with us, may make the rights available to you or use reasonable efforts to dispose of the rights on your behalf and make the net proceeds available to you. The depository bank, however, is not required to make available to you any rights to purchase any additional shares unless it deems that doing so is lawful and feasible and:

a registration statement filed by us under the U.S. Securities Act of 1933, as amended, is in effect with respect to those shares; or

the offering and sale of those shares is exempt from or is not subject to the registration requirements of the U.S. Securities Act. We are under no obligation to file any registration statement with the U.S. Securities and Exchange Commission in relation to the registration rights. If a registration statement is required for you to exercise preemptive rights but is not filed by us, you will not be able to exercise your preemptive rights for additional shares and you will suffer dilution of your equity interest in us.

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*The market value of your investment in our ADSs may fluctuate due to the volatility of the Korean securities market.*

Our common stock is listed on the KRX KOSPI Division of the Korea Exchange, which has a smaller market capitalization and is more volatile than the securities markets in the United States and many European countries. The market value of ADSs may fluctuate in response to the fluctuation of the trading price of shares of our common stock on the Stock Market Division of the Korea Exchange. The Stock Market Division of the Korea Exchange has experienced substantial fluctuations in the prices and volumes of sales of listed securities and the Stock Market Division of the Korea Exchange has prescribed a fixed range in which share prices are permitted to move on a daily basis. Like other securities markets, including those in developed markets, the Korean securities market has experienced problems including market manipulation, insider trading and settlement failures. The recurrence of these or similar problems could have a material adverse effect on the market price and liquidity of the securities of Korean companies, including our common stock and ADSs, in both the domestic and the international markets.

The Korean government has the potential ability to exert substantial influence over many aspects of the private sector business community, and in the past has exerted that influence from time to time. For example, the Korean government has promoted mergers to reduce what it considers excess capacity in a particular industry and has also encouraged private companies to publicly offer their securities. Similar actions in the future could have the effect of depressing or boosting the Korean securities market, whether or not intended to do so. Accordingly, actions by the government, or the perception that such actions are taking place, may take place or has ceased, may cause sudden movements in the market prices of the securities of Korean companies in the future, which may affect the market price and liquidity of our common stock and ADSs.

*Your dividend payments and the amount you may realize in connection with a sale of your ADSs will be affected by fluctuations in the exchange rate between the U.S. dollar and the Won.*

Investors who purchase the American depository shares will be required to pay for them in U.S. dollars. Our outstanding shares are listed on the Korea Exchange and are quoted and traded in Won. Cash dividends, if any, in respect of the shares represented by the American depository shares will be paid to the depository bank in Won and then converted by the depository bank into U.S. dollars, subject to certain conditions. Accordingly, fluctuations in the exchange rate between the Won and the U.S. dollar will affect, among other things, the amounts a registered holder or beneficial owner of the American depository shares will receive from the depository bank in respect of dividends, the U.S. dollar value of the proceeds which a holder or owner would receive upon sale in Korea of the shares obtained upon surrender of American depository shares and the secondary market price of the American depository shares.

*If the Government deems that certain emergency circumstances are likely to occur, it may restrict the depository bank from converting and remitting dividends in U.S. dollars.*

If the Government deems that certain emergency circumstances are likely to occur, it may impose restrictions such as requiring foreign investors to obtain prior Government approval for the acquisition of Korean securities or for the repatriation of interest or dividends arising from Korean securities or sales proceeds from disposition of such securities. These emergency circumstances include any or all of the following:

sudden fluctuations in interest rates or exchange rates;

extreme difficulty in stabilizing the balance of payments; and

a substantial disturbance in the Korean financial and capital markets.

The depository bank may not be able to secure such prior approval from the government for the payment of dividends to foreign investors when the Government deems that there are emergency circumstances in the Korean financial markets.

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### **ITEM 4. INFORMATION ON THE COMPANY**

#### **Item 4A. History and Development of the Company**

##### **General Information**

Our legal and corporate name is Korea Electric Power Corporation. We were established by the Government on December 31, 1981 as a statutory juridical corporation in Korea under the Korea Electric Power Corporation ( KEPCO ) Act as the successor to Korea Electric Company. Our registered office is located at 167 Samseong-dong, Gangnam-gu, Seoul, Korea, and our telephone number is 82-2-3456-4216. Our website address is www.kepco.co.kr. Our agent in the United States is Korea Electric Power Corporation, New York Office, located at 7th Floor, 400 Kelby Street, Fort Lee, NJ 07024.

The Korean electric utility industry traces its origin to the establishment of the first electric utility company in Korea in 1898. On July 1, 1961, the industry was reorganized by the merger of Korea Electric Power Company, Seoul Electric Company and South Korea Electric Company, which resulted in the formation of Korea Electric Company. From 1976 to 1981, the Government acquired the private minority shareholdings in Korea Electric Company. After the Government acquired all the remaining shares of Korea Electric Company, Korea Electric Company dissolved, and we were incorporated in 1981 and assumed the assets and liabilities of Korea Electric Company. We ceased to be wholly-owned by the Government in 1989 when the Government sold 21.0% of our common stock. As of December 31, 2012, the last day on which our shareholder registry was closed, the Government maintained 51.1% ownership in aggregate of our common shares by direct holdings by the Government and indirect holdings through Korea Finance Corporation, a statutory banking institution wholly owned by the Government.

Under relevant laws of Korea, the Government is required to own, directly or indirectly, at least 51.0% of our capital. Direct or indirect ownership of more than 50% of our outstanding common stock enables the Government to control the approval of certain corporate matters relating to us that require a shareholders' resolution, including approval of dividends. The rights of the Government and Korea Finance Corporation as holders of our common stock are exercised by the Ministry of Trade, Industry and Energy, based on the Government's ownership of our common stock and a proxy received from Korea Finance Corporation, in consultation with the Ministry of Strategy and Finance.

We operate under the general supervision of the Ministry of Trade, Industry and Energy. The Ministry of Trade, Industry and Energy, in consultation with the Ministry of Strategy and Finance, is responsible for approving, subject to review by the Korea Electricity Commission, the electricity rates we charge our customers. See Item 4B. Business Overview Sales and Customers Electricity Rates. We furnish reports to officials of the Ministry of Trade, Industry and Energy, the Ministry of Strategy and Finance and other Government agencies and regularly consult with such officials on matters relating to our business and affairs. See Item 4B. Business Overview Regulation. Our non-standing directors, who comprise the majority of our board of directors, must be appointed by the Ministry of Strategy and Finance following the review and resolution of the Public Agencies Operating Committee from a pool of candidates recommended by our director nomination committee and must have ample knowledge and experience in business management, and our President must be appointed by the President of the Republic upon the motion of the minister of the Ministry of Trade, Industry and Energy following the nomination by our Director Nomination Committee, the review and resolution of the Public Agencies Operating Committee and an approval at the general meeting of shareholders. See Item 6A.

Directors and Senior Management Board of Directors.

#### **Item 4B. Business Overview**

##### **Introduction**

We are an integrated electric utility company engaged in the transmission and distribution of substantially all of the electricity in Korea. Through our six wholly-owned generation subsidiaries, we also generate



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substantially all of the electricity produced in Korea. As of December 31, 2012, we and our generation subsidiaries owned approximately 84.2% of the total electricity generating capacity in Korea (excluding plants generating electricity primarily for private or emergency use). In 2012, we sold to our customers approximately 466,593 gigawatt-hours of electricity. We purchase electricity principally from our generation subsidiaries and to a lesser extent from independent power producers. Of the 488,903 gigawatt-hours of electricity we purchased in 2012, 30.4% was generated by KHNP, our wholly-owned nuclear and hydroelectric power generation subsidiary, 57.3% was generated by our wholly-owned five non-nuclear generation subsidiaries and 12.3% was generated by independent power producers. Our five non-nuclear generation subsidiaries are KOSEP, KOMIPO, KOWEPO, KOSPO, and EWP, each of which is wholly-owned by us and is incorporated in Korea. We derive substantially all of our revenues and profit from Korea, and substantially all of our assets are located in Korea.

In 2012, we had sales of Won 49,121 billion and net loss of Won 3,167 billion (excluding non-controlling interests) compared to sales of Won 43,175 billion and net loss of Won 3,370 billion (excluding non-controlling interests) in 2011. Our sales increased primarily as a result of a 2.5% increase in kilowatt hours of electricity sold in 2012, which was attributable primarily to the general increase in demand for electricity among consumers in Korea as a result of a slow but steady economic growth in 2012. The increase in the volume of electricity sold was due to a 2.6% increase of electricity sold to the industrial sector, including light power usage, and a 2.1% increase in kilowatt hours of electricity sold to the commercial sector, and a 3.1% increase in kilowatt hours of electricity sold to the residential sector. See Item 5A. Operating Results.

Our revenues are closely tied to demand for electricity in Korea. Demand for electricity in Korea increased at a compounded average growth rate ( CAGR ) of 4.9% per annum from 2008 to 2012, compared to the real gross domestic product, or GDP, which increased at a CAGR of 2.9% during the same period, according to The Bank of Korea. The GDP growth rate was 2.0% for 2012 as compared to 3.6% for 2011. Demand for electricity in Korea increased by 2.5% from 2011 to 2012.

## Strategy

In September 2011, we announced our new corporate strategy titled "Global Top Green & Smart Energy Pioneer KEPCO". Under this strategy, we seek to become a leading global energy enterprise through enhanced global competitiveness (for example, by selectively expanding our overseas investments) and strengthening our contribution to the global environmental campaigns through continued development of green and smart power-related technologies. We also aim to adapt to the growing uncertainties in global economy by selectively pursuing new business opportunities and through development of innovative technologies. More specifically, we aim to achieve the following:

*Become a global leader in green technology.* With the increasing demand for, and embrace of, environmentally friendly, or green, energy worldwide in substitution of the conventional thermal energy, we believe that green energy represents an important business potential as well as a worthy corporate purpose befitting our status as a provider of public utility. In particular, our green growth initiatives will focus on the following:

- (i) *Development of eco-friendly power technologies* In order to lead low-carbon green growth in response to climate change, we are continuing to develop eco-friendly green technology throughout the power supply and consumption value chain. The basic objectives are to reduce carbon emissions during the generation phase, reduce power loss during transmission and encourage efficient power consumption. To this end, we have invested heavily in research and development of eco-friendly green technologies and plan to develop and commercialize them, some examples being power generation through coal gasification.
- (ii) *Improvement in efficiency in our electricity transmission and distribution* We are currently developing, or seek to develop, an intelligent power transmission and distribution network, or smart grids, based on advanced information technology, in order to promote a more efficient

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allocation and use of electricity by consumers, a superconducting technology that will improve efficiency in the transmission of electricity over such network and localized high-voltage direct current technology that will reduce electricity loss over the course of transmission and distribution.

- (iii) *Participation in the development of green energy infrastructure* We are currently developing, or seek to develop, charging facilities for electric vehicles and standard models for a residential unit that can be powered solely by electricity.

*Capture and expand business opportunities.* We seek to capture business opportunities presented by our leadership in green technology and transmission and distribution technology by developing commercial applications thereof, including by way of developing related information and communication technologies and diversifying our consulting business.

*Expand overseas business.* The primary focus of our overseas business diversification is twofold: (i) leveraging our experience and knowhow gained from our core business of electricity generation in Korea, including nuclear power generation, to capture business opportunities overseas so as to expand our growth potential, and (ii) direct participation in mining and other resource development projects overseas, by way of acquisition or equity investment, in order to facilitate and increase self-sufficiency in fuel procurement. We also plan to expand our geographic focus from Southeast Asia to various other regions in the world, including the resource-rich Middle East, Africa and Australia.

*Advance innovation and operational efficiency.* Promoting innovation and operational efficiency has been and will continue to be an important part of our business strategy. Specifically, we aim to foster further strategic cooperation among our affiliates and adopt innovative management systems that will enhance operational efficiency and cost control.

**Recent Developments*****Increase in Electricity Tariff Rates***

Effective August 6, 2012, the Government increased the electricity rates that we charge to the end-users by an average of 4.9% as further set forth in the following table:

Type of Usage*	Commercial			Industrial			Educational	Agricultural	Street Lighting	Overnight Usage	
	Residential	Low-voltage	High-voltage	Average	Low-voltage	High-voltage					Average
% increase	2.7	3.9	4.9	4.4	3.9	6.0	6.0	3.0	3.0	4.9	4.9

Effective January 14, 2013, the Government further increased the electricity rates that we charge to the end-users by an average of 4.0% as further set forth in the following table:

Type of Usage	Commercial			Industrial			Educational	Agricultural	Street Lighting	Overnight Usage	
	Residential	Low-voltage	High-voltage	Average	Low-voltage	High-voltage					Average
% increase	2.0	2.7	6.3	4.6	3.5	4.4	4.4	3.5	3.0	5.0	5.0

We cannot assure you that such tariff increase will be sufficient to fully offset the adverse impact on our results of operations from the current or future movements in fuel costs.

***Correction of Accounting for Fuel Cost Pass-through Adjustment***

As of July 1, 2011, a new electricity tariff system approved by the Government took effect featuring a fuel cost pass-through adjustment ( FCPTA ). This system was intended to allow us to pass through fluctuations in fuel costs ultimately to the customers. The FCPTA amount is

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determined based on a prior three-months moving average of international fuel prices and other factors, which is reflected two months later. On July 29, 2011, out of inflationary and other policy considerations, the Government issued a hold-order suspending us from billing or collecting the FCPTA amount from customers.

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Our accounting policy was to recognize unbilled fuel cost adjustments as assets under the IFRS Conceptual Framework when we concluded that it is probable that future economic benefits would flow to us. We had concluded that we controlled a resource as a result of past events from which future economic benefits were expected to flow to us. The Regulation for Electricity Service, which regulates the FCPTA system, provides a legal resource or right to bill where the costs we incur will result in future cash flows. The operation of the FCPTA system creates a right to charge rates in amounts that would permit us to recover the related costs, such amounts being subject to government approval. In addition, we relied on the authority of the Ministry of Trade, Industry and Energy, which regulates and approves the electricity tariff we charge to our customers, including the FCPTA system. As of December 31, 2011, we determined that it was probable that economic benefits associated with the unbilled fuel cost adjustments would be realizable based on the authority of the Ministry of Trade, Industry and Energy in setting and enforcing electricity rates for customers. Therefore, we concluded that as of December 31, 2011 it was probable that our unbilled FCPTA amount would be collected.

We previously recognized revenue and a receivable for the FCPTA amounts subject to the hold order in the amount of Won 357,085 million at December 31, 2011. However, we came to realize that our FCPTA rate regulatory scheme closely resembles a cost-of service scheme, and have therefore determined that the appropriate accounting for the unbilled FCPTA amounts is to reduce cost of sales by the unbilled FCPTA amounts and recognize a related non-financial asset by the same amount, which is more consistent with accounting policies for rate regulated assets of other standard setting bodies. In accordance with IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*, we used judgment in developing and applying an accounting policy that results in information that is relevant and reliable. In making that judgment, management considered pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices. We have concluded that the aforementioned error is immaterial, and corrected the accounting for our unbilled FCPTA amounts in our consolidated financial statements as of and for the year ended December 31, 2011 included in Item 18. Financial Statements.

During the fourth quarter of 2012, we had further consultations with the Ministry of Trade, Industry and Energy as to the outlook for the lifting the hold-order. Furthermore, on January 11, 2013, the Ministry of Trade, Industry and Energy informed us that the FCPTA system needed to be reassessed in light of the current circumstances such as the prolonged unbilled period since the announcement of the FCPTA system. We have therefore concluded that, in consideration of the prolonged unbilled period and recent consultations with, and information from, the Ministry, we would not be able to bill and collect the unbilled FCPTA amounts for the foreseeable future. As a result, we wrote off the entire unbilled FCPTA amounts of Won 1,877 billion recognized through December 31, 2012, including the unbilled FCPTA amounts as of December 31, 2011. As a result, there were no FCPTA amounts remaining in the consolidated statement of financial position as of December 31, 2012.

Furthermore, we will cease recording a regulatory asset prospectively related to the FCPTA amounts unless and until the likelihood of recovery once again satisfies the probable threshold contained in the IFRS Conceptual Framework or enacted IFRS at such time.

See Item 4B. Business Overview Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment , Item 4B. Business Overview Sales and Customers Electricity Rates , Item 4B. Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment, Item 5B. Operating and Financial Review and Prospects Overview, Item 5B. Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment and Notes 2, 15 and 36 to the notes to our consolidated annual financial statements.

***Permitted Entry of Private Enterprises in the Coal-Fired Power Generation Business***

While preparing for the sixth Basic Plan, which was announced in February 2013, the Ministry of Trade, Industry and Energy accepted applications from private independent power producers, in addition to those from our generation subsidiaries, for construction of additional coal-fired power plants. Previously, private enterprises were not permitted to own and operate coal-fired power plants in Korea. Out of such applications by 15 independent power producers for construction of a total of 40 coal-fired generation units with aggregate

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generation capacity of 37,100 megawatts, the Government approved applications for the construction of six generation units with aggregate generation capacity of 6,000 megawatts as well as two additional generation units with aggregate generation capacity of 2,000 megawatts to provide for the contingency of failed or delayed construction of these six generation units. Construction for the six generation units is scheduled to be completed between 2018 and 2021. While it remains to be seen whether construction of these generation units will be completed as scheduled, if it were to be completed as scheduled or independent power producers are permitted to build additional generation capacity (whether coal-fired or not), our market share in Korea may decrease, which may have a material adverse effect on our results of operations and financial condition.

### ***Implementation of the Advanced Metering Infrastructure***

In July 2012, the Government implemented a master plan to build out a smart grid, which includes the Advanced Metering Infrastructure (AMI) road map. In accordance with such plan, we will install smart meters and related communication networks and operating systems for 22 million households as part of the smart grid initiative in an effort to enhance efficiency in the power electricity industry and alleviate growing energy shortage concerns. Smart meters refer to digital meters that record, on a real-time basis, electricity consumption within a household and the effective tariff rate at the time of electricity usage so that consumers will have a price-based incentive to enhance efficiency in their electricity usage. On the other hand, the smart grid refers to the next-generation network for electricity distribution that integrates information technology into the existing power grid with the aim of enabling two-way real time exchange of information between electricity suppliers and consumers for optimal efficiency in electricity use. The smart grid project is scheduled to be completed in 2030, and the AMI project is currently scheduled to be completed in 2020. We expect that the smart grid initiative would significantly increase efficient energy consumption by providing real-time data to customers which would in turn help to reduce greenhouse gas emission and decrease Korea's reliance on foreign energy sources. As of December 31, 2012, we have installed 3.8 million smart meter units, and plan to install an additional 3.2 million units in 2013. The AMI project is expected to cost an additional Won 1.7 trillion by 2020.

### **Government Ownership and Our Interactions with the Government**

The KEPCO Act requires that the Government own at least 51.0% of our capital stock. Direct or indirect ownership of more than 50.0% of our outstanding common stock enables the Government to control the approval of certain corporate matters which require a shareholders' resolution, including approval of dividends. The rights of the Government and Korea Finance Corporation as holders of our common stock are exercised by the Ministry of Trade, Industry and Energy in consultation with the Ministry of Strategy and Finance. The Government currently has no plan to cease to own, directly or indirectly, at least 51.0% of our outstanding common stock.

We play an important role in the implementation of the Government's national energy policy, which is established in consultation with us, among other parties. As an entity formed to serve public policy goals of the Government, we seek to maintain a fair level of profitability and strengthen our capital base in order to support the growth of our business in the long term.

The Government, through its various policy initiatives for the Korean energy industry as well as direct and indirect supervision of us and our industry, plays an important role in our business and operations. Most importantly, the electricity tariff rates we charge to our customers are regulated by the Government taking into account, among others, our needs to recover the costs of operations, make capital investments and provide a fair return to our security holders, as well as the Government's overall policy considerations, such as inflation. See Item 4B. Business Overview Sales and Customers Electricity Rates.

In addition, pursuant to the Basic Plan determined by the Government, we and our generation subsidiaries have made, and plan to make, substantial expenditures for the construction of generation plants and other facilities to meet increased demand for electric power. See Item 5B. Liquidity and Capital Resources Capital Requirements.

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### **Restructuring of the Electric Power Industry in Korea**

On January 21, 1999, the Ministry of Trade, Industry and Energy published the Restructuring Plan. The overall objectives of the Restructuring Plan consisted of: (i) introducing competition and thereby increasing efficiency in the Korean electric power industry, (ii) ensuring a long-term, inexpensive and stable electricity supply, and (iii) promoting consumer convenience through the expansion of consumer choice.

The following provides further details relating to the Restructuring Plan.

#### ***Phase I***

During Phase I, which served as a preparatory stage for Phase II and lasted from the announcement of the Restructuring Plan in January 1999 until April 2001, we undertook steps to split our generation business units off into one wholly-owned nuclear generation subsidiary (namely, KHNP) and five non-nuclear wholly-owned subsidiaries (namely, KOMIPO, KOSEP, KOWEPO, KOSPO and EWP), each with its own management structure, assets and liabilities. These steps were completed upon the approval of the split-off at our shareholders' meeting in April 2001.

The Government's principal objectives in the split-off of the generation units into separate subsidiaries were to: (i) introduce competition and thereby increase efficiency in the electricity generation industry in Korea, and (ii) ensure a stable supply of electricity in Korea.

Following the implementation of Phase I, we retained, until the adoption of the Community Energy System in July 2004 as further discussed in "Transmission and Distribution" below, our monopoly position with respect to the transmission and distribution of electricity in Korea.

While our ownership percentage of the non-nuclear and non-hydroelectric generation subsidiaries will depend on the further adjustments to the Restructuring Plan to be adopted by the Government, we plan to retain 100.0% ownership of both KHNP and our transmission and distribution business.

#### ***Phase II***

At the outset of Phase II in April 2001, the Government introduced a cost-based competitive bidding pool system under which we purchase power from our generation subsidiaries and other independent power producers for transmission and distribution to customers. For a further description of this system, see "Purchase of Electricity - Cost-based Pool System" below.

In order to support the logistics of the cost-based pool system, the Government established the Korea Power Exchange in April 2001 pursuant to the Electricity Business Law. The primary function of the Korea Power Exchange is to deal with the sale of electricity and implement regulations governing the electricity market to allow for electricity distribution through a competitive bidding process. The Government also established the Korea Electricity Commission in April 2001 to regulate the Korean electric power industry and ensure fair competition among industry participants. To facilitate this goal, the Korea Power Exchange established the Electricity Market Rules relating to the operation of the bidding pool system. To amend the Electricity Market Rules, the Korea Power Exchange must have the proposed amendment reviewed by the Korea Electricity Commission and then obtain the approval of the Ministry of Trade, Industry and Energy.

The Korea Electricity Commission's main functions include implementation of standards and measures necessary for electricity market operation and review of matters relating to licensing participants in the Korean electric power industry. The Korea Electricity Commission also acts as an arbitrator in tariff-related disputes among participants in the Korean electric power industry and investigates illegal or deceptive activities of the industry participants.

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### ***Privatization of Non-nuclear Generation Subsidiaries***

In April 2002, the Ministry of Trade, Industry and Energy released the basic privatization plan for five of our generation subsidiaries other than KHNP. Pursuant to this plan, we commenced the process of selling our equity interest in KOSEP in 2002. According to the original plan, this process was, in principle, to take the form of a sale of management control, potentially supplemented by an initial public offering as a way of broadening the investor base. In November 2003, KOSEP submitted its application to the Korea Exchange for a preliminary screening review, which was approved in December 2003. However, in June 2004, KOSEP made a request to the Korea Exchange to delay its stock listing due to unfavorable stock market conditions at that time. We may resume the stock listing process for KOSEP in due course, after taking into consideration the overall stock market conditions and other pertinent matters. The aggregate foreign ownership of our generation subsidiaries is limited to 30.0% of total power generation capacity in Korea. In consultation with us, the Government will determine the size of the ownership interest to be sold and the timing of such sale, with a view to encouraging competition and assuring adequate electricity supply and debt service capability.

We believe the Government currently has no specific plans to resume the public offering of KOSEP or commence the same for any of our other generation subsidiaries in the near future. However, we cannot assure that our generation subsidiaries will not become part of Government-led privatization initiatives in the future for reasons relating to a change in Government policy, economic and market conditions and/or other factors.

### ***Suspension of the Plan to Form and Privatize Distribution Subsidiaries***

In 2003, the Government established a Tripartite Commission consisting of representatives of the Government, leading businesses and labor unions in Korea to deliberate on ways to introduce competition in electricity distribution, such as by forming and privatizing new distribution subsidiaries. In 2004, the Tripartite Commission recommended not pursuing such privatization initiatives but instead creating independent business divisions within us to improve operational efficiency through internal competition. Following the adoption of such recommendation by the Government in 2004 and further studies by Korea Development Institute, in 2006 we created nine strategic business units (which, together with our other business units, were subsequently restructured into 14 such units in February 2012) that came to have separate management structures (although with limits on its autonomy), financial accounting systems and performance evaluation systems, but with a common focus on maximizing profitability.

### ***Initiatives to Improve the Structure of Electricity Generation***

On August 25, 2010, based on deliberations with various interested parties, the Ministry of Trade, Industry and Energy announced the Proposal for the Improvement in the Structure of the Electric Power Industry, whose key initiatives include the following: (i) maintain the current structure of having six generation subsidiaries, (ii) designate the six generation subsidiaries as market-oriented public enterprises under the Public Agency Management Act in order to foster competition among them and autonomous and responsible management by them, (iii) create a supervisory unit to act as a control tower in reducing inefficiencies created by arbitrary division of labor among the six generation subsidiaries and fostering economies of scale among them and require the presidents of the generation subsidiaries to hold regular meetings, (iv) create a nuclear power export business unit to systematically enhance our capabilities to win projects involving the construction and operation of nuclear power plants overseas, (v) further rationalize the electricity tariff by adopting a fuel-cost based tariff system in 2011 and a voltage-based tariff system in a subsequent year, and (vi) create separate accounting systems for electricity generation, transmission, distribution and sales with the aim of introducing competition in electricity sales in the intermediate future.

Pursuant to this Proposal, in December 2010 the Ministry of Trade, Industry and Energy announced guidelines for a cooperative framework between us and our generation subsidiaries, and in January 2011 the five non-nuclear generation subsidiaries formed a joint cooperation unit and transferred their pumped-storage

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hydroelectric business units to KHNP. Furthermore, in January 2011 the six generation subsidiaries were officially designated as market-oriented public enterprises, whereupon the President of Korea appoint the president and the statutory auditor of each such subsidiary; the selection of outside directors of each such subsidiary is subject to approval by the minister of the Ministry of Strategy and Finance; the president of each such subsidiary is required to enter into a management contract directly with the minister of the Ministry of Trade, Industry and Energy; and the Public Enterprise Management Evaluation Commission conducts performance evaluation of such subsidiaries. Previously, our president appointed the president and the statutory auditor of each such subsidiary; the selection of outside directors of each such subsidiary was subject to approval by our president; the president of each such subsidiary entered into a management contract with our president; and our evaluation committee conducted performance evaluation of such subsidiaries.

### **Purchase of Electricity**

#### *Cost-based Pool System*

Since April 2001, the purchase and sale of electricity in Korea is required to be made through the Korea Power Exchange, which is a statutory not-for-profit organization established under the Electricity Business Act with responsibilities for setting the price of electricity, handling the trading and collecting relevant data for the electricity market in Korea. The suppliers of electricity in Korea consist of our six generation subsidiaries, which were spun off from us in April 2001, and independent power producers, which numbered 439 as of December 31, 2012. We distribute electricity purchased through the Korea Power Exchange to the end users.

#### *Our Relationship with the Korea Power Exchange*

We have certain relationships with the Korea Power Exchange as follows: (i) we and our six generation subsidiaries are member corporations of the Korea Power Exchange and collectively own 100.0% of its share capital, (ii) three of the 10 members of the board of directors of the Korea Power Exchange are currently our or our subsidiaries employees, and (iii) one of our employees is currently a member in three of the key committees of the Korea Power Exchange that are responsible for evaluating the costs of producing electricity, making rules for the Korea Power Exchange and gathering and disclosing information relating to the Korean electricity market.

Notwithstanding the foregoing relationships, however, we do not have control over the Korea Power Exchange or its policies since, among others, (i) the Korea Power Exchange, its personnel, policies, operations and finances are closely supervised and controlled by the Government, namely through the Ministry of Trade, Industry and Energy, and are subject to a host of laws and regulations, including, among others, the Electricity Business Act and the Public Agencies Management Act, as well as the Articles of Incorporation of the Korea Power Exchange, (ii) we are entitled to elect no more than one-third of the Korea Power Exchange directors and our representatives represent only a minority of its board of directors and committees (with the other members being comprised of representatives of the Ministry of Trade, Industry and Energy, employees of the Korea Power Exchange, businesspersons and/or scholars), and (iii) the role of our representatives in the policy making process for the Korea Power Exchange is primarily advisory based on their technical expertise derived from their employment at us or our generation subsidiaries. Consistent with this view, the Finance Supervisory Service issued a ruling on April 12, 2005 that stated that we are not deemed to have significant influence or control over the decision-making process of the Korea Power Exchange relating to its business or financial affairs.

#### *Pricing Factors*

The price of electricity in the Korean electricity market is determined principally based on the cost of generating electricity using a system known as the cost-based pool system. Under the cost-based pool system, the price of electricity has two principal components, namely the marginal price (representing in principle the variable cost of generating electricity) and the capacity price (representing in principle the fixed cost of generating electricity).



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*Marginal Price*

The primary purpose of the marginal price is to compensate the generation companies for fuel costs, which represents the principal component of the variable costs of generating electricity. The concept of marginal price under the cost-based pool system has undergone several changes in recent years in large part due to the sharp fluctuations in fuel prices.

Under the system marginal price regime adopted on May 1, 2008 and currently in effect, the marginal price of electricity at which our generation subsidiaries sell electricity to us is determined using the following formula:

$$\text{Variable cost} + [\text{System marginal price} - \text{Variable cost}] * \text{Adjusted coefficient}$$

The system marginal price represents, in effect, the marginal price of electricity at a given hour at which the projected demand for electricity and the projected supply of electricity for such hour intersect, as determined by the merit order system, which is a system used by the Korea Power Exchange to allocate which generation units will supply electricity for which hour and at what price. To elaborate, the projected demand for electricity for a given hour is determined by the Korea Power Exchange based on a forecast made one day prior to trading, and such forecast takes into account, among others, historical statistics relating to demand for electricity nationwide by day and by hour, seasonality and peak-hour versus non-peak hour demand analysis. The projected supply of electricity at a given hour is determined as the aggregate of the available capacity of all generation units that have submitted bids to supply electricity for such hour. These bids are submitted to the Korea Power Exchange one day prior to trading.

Under the merit order system, the generation unit with the lowest variable cost of producing electricity among all the generation units that have submitted a bid for a given hour is first awarded a purchase order for electricity up to the available capacity of such unit as indicated in its bid. The generation unit with the next lowest variable cost is then awarded a purchase order up to its available capacity in its bid, and so forth, until the projected demand for electricity for such hour is met. We refer to the variable cost of the generation unit that is the last to receive the purchase order for such hour as the system marginal price, which also represents the highest price at which electricity can be supplied at a given hour based on the demand and supply for such hour. Generation units whose variable costs exceed the system marginal price for a given hour do not receive purchase orders to supply electricity for such hour. The variable cost of each generation unit is determined by the Cost Evaluation Committee (comprised of representatives from the Ministry of Trade, Industry and Energy, the Korea Power Exchange, generation companies, scholars and researchers as well as us) on a monthly basis and reflected in the following month based on the fuel costs as of two months prior to such determination. The final allocation of electricity supply, however, is further adjusted on the basis of other factors, including the proximity of a generation unit to the geographical area to which power is being supplied, network and fuel constraints and the amount of power loss.

The purpose of the merit order system is to encourage generating units to reduce its electricity generation costs by making its generation process more efficient, sourcing fuels from most cost-effective sources or adopting other cost savings programs. The additional adjustment mechanism is designed to improve the overall cost-efficiency in the distribution and transmission of electricity to the end-users by adjusting for losses arising from the distribution and transmission process.

Under the merit order system, the electricity purchase allocation, the system marginal price and the final allocation adjustment are automatically determined based on an objective formula. The adjusted coefficient, the capacity price and the variable costs are determined in advance of trading by the Cost Evaluation Committee. Accordingly, a supplier of electricity cannot exercise control over the merit order system or its operations to such supplier's strategic advantage.

The adjusted coefficient applies in principle to all generation units that use the same type of fuel. However, the adjusted coefficient does not apply to independent power producers using LNG or oil as fuel. The adjusted

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coefficient is determined by the Cost Evaluation Committee in principle on an annual basis, although in exceptional cases driven by external factors such as fuel costs and electricity tariff rates, the adjusted coefficient may be adjusted on a quarterly basis.

### *Capacity Price*

In addition to payment in respect of the variable cost of generating electricity, generation units receive payment in the form of capacity price, the purpose of which is to compensate them for the costs of constructing generation facilities and to provide incentives for new construction. The capacity price is determined annually by the Cost Evaluation Committee based on the construction costs and maintenance costs of a standard generation unit and is paid to each generation company for the amount of available capacity indicated in the bids submitted the day before trading. From time to time, the capacity price is adjusted in ways to soften the impact of changes in the marginal price over time based on the expected rate of return for our generational subsidiaries. Currently, the capacity price is Won 7.46/kWh and since January 1, 2012 has applied equally to all generation units, regardless of fuel types used.

Effective as of January 1, 2007, a regionally differentiated capacity price system was introduced by setting a standard capacity reserve margin in the range of 12.0% to 20.0% in order to prevent excessive capacity build-up as well as induce optimal capacity investment at the regional level. The capacity reserve margin is the ratio of peak demand to the total available capacity. Under this system, generation units in a region where available capacity is insufficient to meet demand for electricity as evidenced by a failure to meet the standard capacity reserve margin receive increased capacity price. Conversely, generation units in a region where available capacity exceeds demand for electricity as evidenced by satisfaction of the standard capacity reserve margin receive reduced capacity price. Since 2006, the capacity price received by generation units has been subject to hourly and seasonal adjustments in order to incentivize our generation subsidiaries to operate their generation facilities at full capacity during periods of highest demand. For example, the capacity price paid differs depending on whether the relevant hour is a peak hour, a shoulder-peak hour or an off-peak hours (it being highest for the peak hour and lowest for the off-peak hour) and the capacity price paid is highest during the months of January, July and August when electricity usage is highest due to weather conditions. The same capacity pricing mechanism applies to all generation units regardless of fuel types used.

Following the suspension of the plan to form separate distribution subsidiaries through privatization (see Restructuring of the Electric Power Industry in Korea Suspension of the Plan to Form and Privatize Distribution Subsidiaries ), there was a discussion of replacing the current cost-based pool system with a more market-oriented system known as a two-way bidding pool system. Under the two-way bidding pool system, a pool of generating companies on the supply side and a pool of retail distributors on the demand side would each make a bid based on which the electricity price will be determined, which would contrast with the current system where we have a virtual monopoly of the demand side as the purchaser and distributor of substantially all of electricity in Korea. However, we believe that due to the indefinite suspension of the restructuring plan, the two-way bidding pool system is unlikely to be adopted in the near future absent any unexpected change in government policy.

**Table of Contents****Power Trading Results**

The results of power trading, as effected through the Korea Power Exchange, for our generation subsidiaries for the year ended December 31, 2012 are as follows:

	Items	Volume (Gigawatt hours)	Percentage of Total Volume (%)	Sales to KEPCO (in billions of Won)	Percentage of Total Sales (%)	Unit Price (Won/kWh)
Generation Companies	KHNP	148,416	31.5	6,733	15.8	45.4
	KOSEP	60,098	12.7	4,533	10.6	75.4
	KOMIPO	50,005	10.6	5,413	12.7	108.2
	KOWEPO	54,094	11.5	5,936	13.9	109.7
	KOSPO	61,041	12.9	6,937	16.3	113.7
	EWP	54,857	11.6	5,836	13.7	106.4
	Others <sup>(1)</sup>	42,992	9.2	7,199	17.0	167.5
	Total	471,503	100.0	42,587	100.0	90.3
Energy Sources	Nuclear	143,453	30.4	5,682	13.3	39.6
	Bituminous coal	184,485	39.1	12,238	28.7	66.3
	Anthracite coal	8,015	1.7	833	2.0	103.9
	Oil	14,516	3.1	3,673	8.6	253.0
	LNG	3,763	0.8	791	1.9	210.1
	Combined-cycle	101,355	21.5	16,888	39.7	166.6
	Hydro	3,346	0.7	605	1.4	181.0
	Pumped-storage	3,631	0.8	809	1.9	222.9
	Others	8,939	1.9	1,068	2.5	119.4
		Total	471,503	100.0	42,587	100.0
Load	Base load	332,456	70.5	18,200	42.7	57.7
	Non-base load	139,047	29.5	24,387	57.3	175.4
	Total	471,503	100.0	42,587	100.0	90.3

Note:

- (1) Others represent independent power producers that trade electricity through the cost-based pool system of power trading (excluding independent power producers that supply electricity under power purchase agreements with us).

**Power Purchased from Independent Power Producers Under Power Purchase Agreements**

In 2012, we purchased an aggregate of 17,400 gigawatt hours of electricity generated by independent power producers under existing power purchase agreements. These purchases were made outside of the cost-based pool system of power trading. These independent power producers had an aggregate generating capacity of 4,650 megawatts as of December 31, 2012.

**Power Generation**

As of December 31, 2012, we and our generation subsidiaries had a total of 563 generation units, including nuclear, thermal, hydroelectric and internal combustion units, representing total installed generating capacity of 68,848 megawatts. Our thermal units produce electricity using

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steam turbine generators fired by coal, oil and LNG. Our internal combustion units use oil or diesel-fired gas turbines and our combined-cycle units are primarily LNG-fired. We also purchase power from several generation plants not owned by our generation subsidiaries.

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The table below sets forth as of and for the year ended December 31, 2012 the number of units, installed capacity and the average capacity factor for each type of generating facilities owned by our generation subsidiaries.

	Number of Units	Installed Capacity <sup>(1)</sup> (Megawatts)	Average Capacity Factor <sup>(2)</sup> (Percent)
Nuclear	23	20,716	82.3
Thermal:			
Coal	51	24,534	91.7
Oil	16	3,950	38.9
LNG	4	888	40.2
Total thermal	71	29,372	83.1
Internal combustion	206	367	35.4
Combined-cycle	109	12,936	65.1
Hydro	69	5,330	10.4
Wind	31	70	20.1
Solar	50	51	12.4
Fuel cell	4	6	78.1
Total	563	68,848	72.4

*Notes:*

- (1) Installed capacity represents the level of output that may be sustained continuously without significant risk of damage to plant and equipment.
- (2) Average capacity factor represents the total number of kilowatt hours of electricity generated in the indicated period divided by the total number of kilowatt hours that would have been generated if the generation units were continuously operated at installed capacity, expressed as a percentage.

The expected useful life of a unit, assuming no substantial renovation, is approximately as follows: nuclear, over 40 years; thermal, over 30 years, respectively; internal combustion, over 25 years; and hydroelectric, over 55 years. Substantial renovation can extend the useful life of thermal units by up to 20 years.

We seek to achieve efficient use of fuels and diversification of generating capacity by fuel type. In the past, we relied principally upon oil-fired thermal generation units for electricity generation. Since the oil shock in 1974, however, Korea's power development plans have emphasized the construction of nuclear generation units. While nuclear units are more expensive to construct than non-nuclear units of comparable capacity, nuclear fuel is less expensive than fossil fuels in terms of electricity output per unit cost. However, efficient operation of nuclear units requires that such plants be run continuously at relatively constant energy output levels. As it is impractical to store large quantities of electrical energy, we seek to maintain nuclear power production capacity at approximately the level at which demand for electricity is continuously stable. During those times when actual demand exceeds the usual level of electricity supply from nuclear power, we rely on units fired by fossil fuels and hydroelectric units, which can be started and shut down more quickly and efficiently than nuclear units, to meet the excess demand. Bituminous coal is currently the least expensive thermal fuel per kilowatt-hour of electricity produced, and therefore we seek to maximize the use of bituminous coal for generation needs in excess of the stable demand level, except for meeting short-term surges in demand which require rapid start-up and shutdown. Thermal units fired by LNG, hydroelectric units and internal combustion units are the most efficient types of units for rapid start-ups and shutdowns, and therefore we use such units principally to meet short-term surges in demand. Anthracite coal is a less efficient fuel source than bituminous coal in terms of electricity output per unit cost.

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Our generation subsidiaries have constructed and recommissioned thermal and internal combustion units in order to help meet power demand. Subject to market conditions, our generation subsidiaries plan to continue to

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add additional thermal and internal combustion units. These units generally take less time to complete construction than nuclear units.

The high average age of our oil-fired thermal units is attributable to our reliance on oil-fired thermal units as the primary means of electricity generation until mid-1970s. Since then, we have diversified our fuel sources and constructed relatively few oil-fired thermal units compared to units of other fuel types.

The table below sets forth, for the periods indicated, the amount of electricity generated by facilities linked to our grid system and the amount of power used or lost in connection with transmission and distribution.

	2008	2009	2010	2011	2012	% of 2012 Gross Generation <sup>(1)</sup>
	(in gigawatt hours, except percentages)					
Electricity generated by generation subsidiaries:						
Nuclear	150,958	147,771	148,596	154,723	150,327	29.8
Thermal:						
Coal	174,156	193,803	198,287	199,516	198,715	39.4
Oil	7,981	11,970	10,874	9,456	14,188	2.8
LNG	1,518	762	2,288	2,233	3,256	0.6
<b>Total thermal</b>	<b>183,655</b>	<b>206,535</b>	<b>211,449</b>	<b>211,205</b>	<b>216,159</b>	<b>42.8</b>
Internal combustion	503	697	731	821	692	0.1
Combined-cycle	55,909	47,580	70,081	71,668	75,733	15.0
Hydro	3,836	4,091	4,393	4,815	5,051	1.0
Wind	53	82	91	117	128	0.02
Solar and fuel cells	15	24	44	60	68	0.01
<b>Total generation</b>	<b>394,929</b>	<b>406,780</b>	<b>435,384</b>	<b>443,409</b>	<b>448,158</b>	<b>88.8</b>
Electricity generated from others:						
Thermal	25,699	25,274	37,197	42,240	54,720	10.8
Hydro and other renewable	1,727	1,550	2,079	11,244	2,023	0.4
<b>Total generation (others)</b>	<b>27,426</b>	<b>26,824</b>	<b>39,276</b>	<b>53,484</b>	<b>56,743</b>	<b>11.2</b>
Gross generation	422,355	433,604	474,660	496,893	504,863	100
Auxiliary use <sup>(2)</sup>	17,374	18,258	19,372	19,689	15,740	2.9
Pumped-storage <sup>(3)</sup>	3,243	3,713	3,663	4,257	4,789	0.9
<b>Total net generation<sup>(4)</sup></b>	<b>401,726</b>	<b>411,631</b>	<b>451,433</b>	<b>472,947</b>	<b>484,334</b>	<b>96.1</b>
Transmission and distribution losses <sup>(5)</sup>	16,106	16,770	18,034	17,430	17,291	3.6

Notes:

(1) Unless otherwise indicated, percentages are based on gross generation.

(2) Auxiliary use represents electricity consumed by generation units in the course of generation.

(3)

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Pumped-storage represents electricity consumed during low demand periods in order to store water which is utilized to generate hydroelectric power during peak demand periods.

- (4) Total net generation is gross generation minus auxiliary and pumped-storage use.
- (5) Total transmission and distribution losses divided by total net generation.



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The table below sets forth our total capacity at the end of, and peak and average loads during, the indicated periods.

	2008	2009	2010 (Megawatts)	2011	2012
Total capacity	70,353	73,310	76,078	76,649	81,806
Peak load	62,794	66,797	71,308	73,137	75,987
Average load	48,082	49,498	54,185	56,723	57,601

***Korea Hydro & Nuclear Power Co., Ltd.***

We commenced nuclear power generation activities in 1978 when our first nuclear generation unit, Kori-1, began commercial operation. On April 2, 2001, we transferred all of our nuclear and hydroelectric power generation assets and liabilities to KHNP.

KHNP owns and operates 23 nuclear generation units at four power plant complexes in Korea, located in Kori, Wolsong, Yonggwang and Ulchin, 50 hydroelectric generation units including 16 pumped storage hydro generation units as well as five solar generation units and one wind generation unit as of December 31, 2012.

The table below sets forth the number of units and installed capacity as of December 31, 2012 and the average capacity factor by types of generation units in 2012.

	Number of Units	Installed Capacity <sup>(1)</sup> (Megawatts)	Average Capacity Factor <sup>(2)</sup> (Percent)
Nuclear	23	20,716	82.3
Hydroelectric	50	5,303	10.7
Wind	1	0.8	6.0
Solar	5	16	13.3
Total	79	26,035.8	

*Notes:*

- (1) Installed capacity represents the level of output that may be sustained continuously without significant risk of damage to plant and equipment.
- (2) Average capacity factor represents the total number of kilowatt hours of electricity generated in the indicated period divided by the total number of kilowatt hours that would have been generated if the generation units were continuously operated at installed capacity, expressed as a percentage.

Shin-Kori-2 and Shin-Wolsong-1, each with a 1,000 megawatt capacity, commenced commercial operation in July 2012. We are currently building five additional nuclear generation units, consisting of one unit with a 1,000 megawatt capacity and four units each with a 1,400 megawatt capacity at the Shin-Kori and Shin-Ulchin sites, respectively. We expect to complete these units between 2013 and 2018. In addition, we plan to build four additional nuclear units, each with a 1,400 megawatt capacity, and two additional nuclear units, each with a 1,500 megawatt capacity at the Shin-Kori and Shin-Ulchin sites between 2019 and 2024.

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*Nuclear*

The table below sets forth certain information with respect to the nuclear generation units of KHNP as of December 31, 2012.

Unit	Reactor Type <sup>(1)</sup> (Megawatts)	Reactor Design <sup>(2)</sup>	Turbine and Generation <sup>(3)</sup>	Commencement of Operations	Installed Capacity
Kori-1	PWR	W	GEC, Hitachi, D	1978	587
Kori-2	PWR	W	GEC	1983	650
Kori-3	PWR	W	GEC, Hitachi	1985	950
Kori-4	PWR	W	GEC, Hitachi	1986	950
Shin-Kori-1	PWR	D, KOPEC, W	D, GE	2011	1,000
Shin-Kori-2	PWR	D, KOPEC, W	D, GE	2012	1,000
Wolsong-1	PHWR	AECL	P	1983	679
Wolsong-2	PHWR	AECL, H, K	H, GE	1997	700
Wolsong-3	PHWR	AECL, H	H, GE	1998	700
Wolsong-4	PHWR	AECL, H	H, GE	1999	700
Shin-Wolsong-1	PWR	D, KOPEC, W	D, GE	2012	1,000
Yonggwang-1	PWR	W	W, D	1986	950
Yonggwang-2	PWR	W	W, D	1987	950
Yonggwang-3	PWR	H, CE, K	H, GE	1995	1,000
Yonggwang-4	PWR	H, CE, K	H, GE	1996	1,000
Yonggwang-5	PWR	D, CE, W, KOPEC	D, GE	2002	1,000
Yonggwang-6	PWR	D, CE, W, KOPEC	D, GE	2002	1,000
Ulchin-1	PWR	F	A	1988	950
Ulchin-2	PWR	F	A	1989	950
Ulchin-3	PWR	H, CE, K	H, GE	1998	1,000
Ulchin-4	PWR	H, CE, K	H, GE	1999	1,000
Ulchin-5	PWR	D, KOPEC, W	D, GE	2004	1,000
Ulchin-6	PWR	D, KOPEC, W	D, GE	2005	1,000
Total nuclear					20,716

*Notes:*

- (1) PWR means pressurized light water reactor; PHWR means pressurized heavy water reactor.
- (2) W means Westinghouse Electric Company (U.S.A.); AECL means Atomic Energy Canada Limited (Canada); F means Framatome (France); H means Hanjung; CE means Combustion Engineering (U.S.A.); D means Doosan Heavy Industries; K means Korea Atomic Energy Research Institute.
- (3) GEC means General Electric Company (UK); P means Parsons (Canada and UK); W means Westinghouse Electric Company (U.S.A.); A means Alstom (France); H means Hanjung; GE means General Electric (U.S.A.); D means Doosan Heavy Industries; Hitachi means Hitachi Ltd. (Japan).

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The table below sets forth the average capacity factor and average fuel cost per kilowatt for 2012 with respect to each nuclear generation unit of KHNP.

Unit	Average Capacity Factor (Percent)	Average Fuel Cost Per kWh (Won)
Kori-1	51.0	5.8
Kori-2	84.5	5.5
Kori-3	78.1	5.1
Kori-4	100.1	5.0
Shin-Kori-1	81.2	5.3
Shin-Kori-2	98.5	7.2
Wolsong-1	81.0	7.7
Wolsong-2	94.4	7.5
Wolsong-3	90.7	7.8
Wolsong-4	100.2	7.7
Shin-Wolsong-1	95.7	5.9
Yonggwang-1	92.9	5.8
Yonggwang-2	101.7	4.3
Yonggwang-3	80.1	5.9
Yonggwang-4	88.8	4.6
Yonggwang-5	72.1	5.4
Yonggwang-6	83.1	4.8
Ulchin-1	80.1	5.2
Ulchin-2	98.7	5.0
Ulchin-3	69.4	5.5
Ulchin-4	0.0	0.0
Ulchin-5	100.4	5.0
Ulchin-6	88.2	4.8
Total nuclear	82.3	5.6

Under extended-cycle operations, nuclear units can be run continuously for periods longer than the conventional 12-month period between scheduled shutdowns for refueling and maintenance. Since 1987, we have adopted the mode of extended-cycle operations for all of our pressurized light water reactor units and plan to use it for our newly constructed units. The average duration of shutdown for routine fuel replacement and maintenance was 52.6 days, except for Uljin unit-4 which was shut down for long-term maintenance.

KHNP's nuclear units experienced an average of 0.39 unplanned shutdowns per unit in 2012. In the ordinary course of operations, KHNP's nuclear units routinely experience damage and wear and tear, which are repaired during routine shutdown periods or during unplanned temporary suspensions of operations. No significant damage has occurred in any of KHNP's nuclear reactors, and no significant nuclear exposure or release incidents have occurred at any of KHNP's nuclear facilities since the first nuclear plant commenced operation in 1978. Beginning in November 2012, two nuclear units at Yonggwang were shut down for approximately two months pending investigation of allegations that certain parts were supplied using of fraudulent quality assurance documents. See Item 3D. Risk Factors Risks Relating to KEPCO Operation of nuclear power generation facilities inherently involves numerous hazards and risks, any of which could result in a material loss of revenues or increased expenses.

*Hydroelectric*

Effective January 1, 2011, pursuant to the Government's Proposal for Improvements in the Structure of the Electric Power Industry announced on August 25, 2010, the five non-nuclear generation companies transferred

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all of the assets and liabilities relating to their pumped-storage and five other hydroelectric business units to KHNP. The table below sets forth certain information, including the installed capacity as of December 31, 2012 and the average capacity factor in 2012.

Location of Unit	Number of Units	Classification	Year Built	Installed Capacity (Megawatts)	Average Capacity Factor (%)
Hwacheon	4	Dam waterway	1944	108.0	17.5
Chuncheon	2	Dam	1965	62.3	21.2
Euiam	2	Dam	1967	45.0	34.4
Cheongpyung	4	Dam	1943	139.6	23.6
Paldang	4	Dam	1973	120.0	42.9
Seomjingang	3	Basin deviation	1945	34.8	46.3
Boseonggang	2	Basin deviation	1937	4.5	63.9
Kwoesan	2	Dam	1957	2.8	29.7
Anheung	3	Dam waterway	1978	0.5	47.0
Kangreung	2	Basin deviation	1991	82.0	0.0
Topyeong	1	Dam	2011	0.05	29.2
Muju <sup>(1)</sup>	1	Dam	2003	0.4	28.0
Sancheong <sup>(1)</sup>	1	Dam	2001	1.0	36.0
Yangyang <sup>(1)</sup>	2	Dam	2005	1.4	16.2
Yecheon <sup>(1)</sup>	1	Dam	2011	0.9	21.1
Cheongpeoung <sup>(1)</sup>	2	Pumped Storage	1980	400	4.3
Samrangjin <sup>(1)</sup>	2	Pumped Storage	1985	600	8.0
Muju <sup>(1)</sup>	2	Pumped Storage	1995	600	8.9
Sancheong <sup>(1)</sup>	2	Pumped Storage	2001	700	9.2
Yangyang <sup>(1)</sup>	4	Pumped Storage	2006	1,000	7.9
Cheongsong <sup>(1)</sup>	2	Pumped Storage	2006	600	10.7
Yecheon <sup>(1)</sup>	2	Pumped Storage	2011	800	11.3
<b>Total</b>	<b>50</b>			<b>5,303</b>	<b>10.7</b>

Note:

(1) Indicates facilities that have been transferred from our five non-nuclear generation companies to KHNP as of January 1, 2011.

*Solar/Wind*

The table below sets forth certain information, including the installed capacity as of December 31, 2012 and the average capacity factor in 2012, regarding each solar and wind power unit of KHNP. Yecheon-units 1 and 2 began commercial operation in July 2012 and December 2012, respectively. KHNP added a 11-megawatt capacity unit to the Younggwang Solar Park, for which unit commercial operation began in November 2012.

Location of Unit	Classification	Year Built	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)
Younggwang	Solar	2008	13.9	13.1
Kori	Wind	2008	0.8	6.0
Yecheon-1	Solar	2012	1.4	14.4

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Yecheon-2	Solar	2012	0.6	13.2
Total			16.7	

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K-Water (formerly Korea Water Resources Corporation), which is a Government-owned entity, assumes full control of multi-purpose dams, while KHNP maintains the dams used for power generation. Existing hydroelectric power units have exploited most of the water resources in the Republic available for commercially viable hydroelectric power generation. Consequently, we expect that no new major hydroelectric power plants will be built in the foreseeable future. Due to the ease of its start-up and shut-down mechanism, hydroelectric power generation is reserved for peak demand periods.

***Korea South-East Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2012 and the average capacity factor and average fuel cost per kilowatt in 2012 based upon the net amount of electricity generated, of KOSEP.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Samchunpo #1, 2, 3, 4, 5, 6	20.8	3,248	92.3	49.1
Yong Hung #1, 2, 3, 4	5.8	3,373	92.5	48.3
<b>Anthracite:</b>				
Yongdong #1, 2	35.4	326	92.1	77.3
<b>Oil-fired:</b>				
Yosu #1, 2	35.6	330	82.2	74.0
Total thermal	20.7	7,277	89.8	51.1
<b>Combined cycle and internal Combustion:</b>				
Bundang gas turbine #1,2,3,4,5,6,7,8; steam turbine #1, 2	18.5	924	56.3	171.6
<b>Total</b>	<b>19.7</b>	<b>8,201</b>	<b>87.5</b>	<b>60.6</b>

**Table of Contents*****Korea Midland Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2012 and the average capacity factor and average fuel cost per kilowatt in 2012 based upon the net amount of electricity generated, of KOMIPO.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Boryeong #1, 2, 3, 4, 5, 6, 7, 8	17.9	4,000	88.6	63.5
<b>Anthracite:</b>				
Seocheon #1, 2	29.4	400	86.5	120.6
<b>Oil-fired:</b>				
Jeju #2, 3	12.4	150	68.4	289.2
<b>LNG-fired:</b>				
Seoul #4, 5	43.0	388	48.9	239.0
Incheon #1, 2	40.3	500	36.3	226.3
<b>Total thermal</b>	<b>21.4</b>	<b>5,438</b>	<b>80.3</b>	<b>95.3</b>
<b>Combined-cycle and internal combustion:</b>				
Boryeong gas turbine #1, 2, 3, 4, 5, 6; steam turbine #1, 2, 3,	13.8	1,350	53.0	169.7
Incheon gas turbine #1, 2, 3, 4; steam turbine #1, 2	3.8	1,012	79.4	150.1
Jeju Gas Turbine #3	35.1	55	0.5	5,124.9
<b>Jeju Internal Combustion</b>				
Engine #1,2	5.5	80	67.1	261.5
<b>Total</b>	<b>9.0</b>	<b>2,947</b>	<b>63.6</b>	<b>163.6</b>
<b>Wind-powered:</b>				
Yangyang #1, 2	6.5	3	13.5	184.6
<b>Hydroelectric:</b>				
Boryeong	3.8	7.5	26.7	62.8
<b>Photovoltaic power &amp; Fuel Cell generation:</b>				
Boryeong (Photo) site	4.7	0.6	12.8	342.2
Seocheon (Photo) site	4.9	1.2	14.2	413.8
Jeju (Photo) site	0.8	1.1	12.2	171.6
Seoul(Photo) site	1.4	1.3	14.6	23.7
Yeosu(Photo) site	0.8	2.2	14.6	73.7
Incheon(Poto) site	1.0	0.3	14.6	189.9
Boryeong (fuel Cell) site	4.3	0.3	16.0	275.6
<b>Total Photovoltaic &amp; Fuel Cell generation</b>	<b>2.1</b>	<b>7.1</b>	<b>71.5</b>	<b>189.3</b>
<b>Total</b>	<b>17.7</b>	<b>7,953</b>	<b>74.7</b>	<b>108.2</b>





**Table of Contents*****Korea Western Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2012 and the average capacity factor and average fuel cost per kilowatt in 2012 based upon the net amount of electricity generated, of KOWEPO.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Taeon #1, 2, 3, 4, 5, 6, 7, 8	12.4	4,000	93.2	49.2
<b>Oil-fired:</b>				
Pyeongtaek #1, 2, 3, 4	31.1	1,400	29.3	204.1
<b>Total thermal</b>	<b>17.2</b>	<b>5,400</b>	<b>76.6</b>	<b>65.2</b>
<b>Combined cycle:</b>				
Pyeongtaek	20.5	480	36.3	172.3
West Incheon	20.5	1,800	79.7	142.6
Gunsan	2.6	718.4	88.8	135.9
<b>Total combined-cycle</b>	<b>16.2</b>	<b>2,998.4</b>	<b>74.9</b>	<b>143.0</b>
<b>Hydroelectric:</b>				
Taeon	5.3	2.2	22.8	
<b>Total hydroelectric</b>	<b>5.3</b>	<b>2.2</b>	<b>22.8</b>	
<b>Solar:</b>				
Taeon	7.4	0.1	12.4	
Taeon2	0.9	0.6	12.8	
Gunsan	2.5	0.3	14.0	
Samryangjin	5.1	3.0	14.6	
Sejong City	0.5	5.0	12.8	
<b>Total solar</b>	<b>2.2</b>	<b>9.0</b>	<b>14.0</b>	
<b>Total</b>	<b>16.8</b>	<b>8,409.5</b>	<b>76.0</b>	<b>93.1</b>

**Table of Contents*****Korea Southern Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2012 and the average capacity factor and average fuel cost per kilowatt in 2012 based upon the net amount of electricity generated, of KOSPO.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Hadong #1, 2, 3, 4, 5, 6, 7, 8	12	4,000	100.8	49.2
<b>Oil-fired:</b>				
Youngnam #1, 2	41.5	400	36.5	235.5
Nam Jeju #3, 4	6.5	200	78.2	244.9
<b>Total thermal</b>	<b>14.3</b>	<b>4,600</b>	<b>94.3</b>	<b>62.1</b>
<b>Combined cycle:</b>				
Shin Incheon #9, 10, 11, 12	16.7	1,800	78.2	141.5
Busan #1, 2, 3, 4	9.5	1,800	85.9	137.3
Yeongwol #1	2.3	848	58.8	144.7
Hallim	16.5	105	13.1	278.8
<b>Total combined cycle</b>	<b>11.1</b>	<b>4,553</b>	<b>75.8</b>	<b>140.8</b>
<b>Internal combustion:</b>				
Nam Jeju	22.3	40	14.2	223.9
<b>Total internal combustion</b>	<b>22.3</b>	<b>40</b>	<b>14.2</b>	<b>223.9</b>
<b>Wind power:</b>				
Hankyung	6.9	21	23.9	0.8
Seongsan	3.3	20	26.1	0.6
<b>Total wind power</b>	<b>5.1</b>	<b>41</b>	<b>25.0</b>	<b>0.7</b>
Solar	2.2	6	13.5	0.1
<b>Total</b>	<b>12.7</b>	<b>9,240</b>	<b>84.7</b>	<b>96.3</b>

**Table of Contents*****Korea East-West Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2012 and the average capacity factor and average fuel cost per kilowatt in 2012 based upon the net amount of electricity generated, of EWP.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Dangjin #1, 2, 3, 4, 5, 6,7,8	9.5	4,000	95.6	63.3
Honam #1, 2	39.8	500	80.8	84.4
<b>Anthracite:</b>				
Donghae #1, 2	13.8	400	88.2	101.0
<b>Oil-fired:</b>				
Ulsan #1, 2, 3, 4, 5, 6	36.7	1,800	40.3	236.3
Total thermal	24.89	6,700	76.2	67.8
<b>Combined cycle:</b>				
Ulsan gas turbine #1, 2, 3, 4, 5, 6; steam turbine #1, 2, 3	15.9	1,200	66	162.1
Ilsan gas turbine #1, 2, 3, 4, 5, 6; steam turbine #1, 2	17.3	900	50.8	198.4
Total combined-cycle and internal combustion	16.6	2,100	58.3	175.4
Dangjin (Mini hydro)	3.0	5.0	64.0	84.4
Total Mini hydro	3.0	5.0	64.0	84.4
<b>Photovoltaic:</b>				
Dangjin (Photovoltaic)	2.0	1.0	14.4	157.6
Ulsan (Photovoltaic)	1.0	0.5	14.2	161.7
Kwangyang (Photovoltaic)	1.1	2.3	12.2	125.8
Dangjin Waste Treatment Facility (Photovoltaic)	1.0	1.3	12.1	113.7
Donghae (Photovoltaic)	6.0	1.0	12.8	732.5
Total Photovoltaic	2.2	6.1	13.1	231.62
<b>Fuel Cell:</b>				
Ilsan #1 (Fuel Cell)	3.1	2.4	64.3	271.7
Ilsan # 2 (Fuel Cell)	1.1	2.8	87.7	226.6
Total Fuel Cell	2.1	5.2	76.9	244.0
Total	9.8	8,816.3	74.5	107.4

**Table of Contents****Power Plant Remodeling and Recommissioning**

Our generation subsidiaries supplement power generation capacity through remodeling or recommissioning of thermal units. Recommissioning includes installation of anti-pollution devices, modification of control systems and overall rehabilitation of existing equipment.

Power Plant	Capacity	Completed (Year)	Extension	Company	
Taean #1-8	4,000MW	FGD <sup>(1)</sup> : 1998 to 2007	Anti-pollution	KOWEPO	
	(500MW×8)	SCR <sup>(2)</sup> : 2005 to 2007			
		EP <sup>(3)</sup> : 1995 to 2007			
		LNCS <sup>(4)</sup> :1995 to 2007			
		EP <sup>(3)</sup> upgrade (#5, 2009)			
		EP <sup>(3)</sup> upgrade (#6, 2010)			
		EP <sup>(3)</sup> upgrade (#4, 2011)			
		EP <sup>(3)</sup> upgrade (#1, 2012)			
Pyeongtaek #1-4	1,400 MW	FGD <sup>(1)</sup> : 2005	Anti-pollution	KOWEPO	
	(350×4)	SCR <sup>(2)</sup> : 2006 to 2007			
		EP <sup>(3)</sup> : 1992			
		EP <sup>(3)</sup> upgrade (#1, 2009)			
		EP <sup>(3)</sup> upgrade (#2, 2010)			
Seoincheon CC	1,800 MW	LNCS <sup>(4)</sup> : 1992	Anti-pollution	KOWEPO	
	(gas turbines 150	Gas turbine upgrade			Efficiency improvement
	MW ×8)	(2003 to 2006)			
	(steam turbines 75				
	MW ×8)				
Honam #1	250 MW	2010	10 years	EWP	
Honam #2	250 MW	2010	10 years	EWP	
Gunsan CC	718.4 MW	LNCS <sup>(4)</sup> : 2010	Anti-pollution	KOWEPO	
	(gas turbines 233.3				
	MW ×2)				
	(steam turbines 251.8				
	MW ×1)				
Boryeong #1-8	4,000 MW	FGD <sup>(1)</sup> : 1996 to 2009	Anti-pollution	KOMIPO	

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	(500×8)	SCR <sup>(2)</sup> : 2006 to 2009	10 years	
		LNCS <sup>(4)</sup> : 1993 to 2009	Performance-	
		EP <sup>(3)</sup> : 1984 to 2009	improvement	
		2009 (#1,2)		
		Control System upgrade		
		(#6, 2011, #3,5, 2012)		
Incheon #1-2	500 MW	SCR <sup>(2)</sup> : 2002 to 2005	Anti-pollution	KOMIPO
	(250×2)	LNCS <sup>(3)</sup> : 2002 to 2005		
Seoul #4,5	387.5 MW	SCR <sup>(2)</sup> : 2001 to 2002	Anti-pollution	KOMIPO
	(137.5×1)			
	(250×1)			
Seocheon #1,2	400 MW	FGD <sup>(1)</sup> : 1998, SCR : 2006	Anti-pollution	KOMIPO
	(200×2)	LNCS <sup>(4)</sup> : 2004 to 2005		
		EP <sup>(3)</sup> : 1982 to 1983		
Incheon #1,2	500 MW	1996(#1)	10 years	KOMIPO
	(250×2)	2002(#2)		

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Power Plant	Capacity	Completed (Year)	Extension	Company
Incheon CC #2	508.9 MW (gas turbines 164 MW × 2) (steam turbines 181 MW × 1)	SCR : 2012	Anti-pollution	KOMIPO
Jeju T/P #2~3	150 MW (75 × 2)	SCR <sup>(2)</sup> : 2010	Anti-pollution	KOMIPO
Jeju D/P #1~2	80 MW (40 × 2)	EP <sup>(3)</sup> : 2000 SCR <sup>(2)</sup> : 2005 to 2009	Anti-pollution	KOMIPO
Yonghung #5-6	1,750 MW (870 × 2)	FGD <sup>(1)</sup> : 2005 to 2009 2014	30 years	KOSEP
Hadong #1-8	4,000 MW (500 × 8)	FGD <sup>(1)</sup> : 1998 to 2009 EP <sup>(3)</sup> : 1997 to 2009 LNCS <sup>(3)</sup> :1997 to 2009	Anti-pollution	KOSPO
Shin-Incheon CC	1,800 MW (gas turbines 150 × 8) (steam turbines 150 × 4)	SCR <sup>(2)</sup> : 2006 to 2009 LNCS <sup>(4)</sup> : 1996	Anti-pollution	KOSPO
Busan CC	1,800 MW (gas turbines 150 × 8) (steam turbines 150 × 4)	LNCS <sup>(4)</sup> : 2003 to 2004	Anti-pollution	KOSPO
Youngnam #1-2	400 MW (200 × 2)	FGD <sup>(1)</sup> : 1999 SCR <sup>(2)</sup> : 2002 EP <sup>(3)</sup> : 1988 to 1990	Anti-pollution	KOSPO
Namjeju T/P #3-4	200 MW (100 × 2)	LNCS <sup>(4)</sup> : 2002- FGD <sup>(1)</sup> : 2006 to 2007 SCR <sup>(2)</sup> : 2006 to 2007	Anti-pollution	KOSPO
Namjeju D/P #1-4	40 MW (10 × 4)	EP <sup>(3)</sup> : 2006 to 2007 SCR <sup>(2)</sup> : 1999 to 2000	Anti-pollution	KOSPO
Yeongwol CC	848MW	EP <sup>(3)</sup> : 1990 to 1991 LNCS <sup>(4)</sup> : 2010	Anti-pollution	KOSPO

(gas turbines 183 × 3)

(steam turbines 299 × 1)

*Notes:*

- (1) FGD means a flue gas desulphurization system.
- (2) SCR means a selective catalytic reduction system.
- (3) EP means an electrostatic precipitation system.
- (4) LNCS means a low nitrodioxide (NO<sub>2</sub>) combustion system.

**Transmission and Distribution**

We currently transmit and distribute substantially all of the electricity in Korea.

In July 2004, the Government adopted the Community Energy System to enable regional districts to source electricity from independent power producers to supply electricity without having to undergo the cost-based pool system used by our generation subsidiaries and most independent power producers to distribute electricity nationwide. A supplier of electricity under the Community Energy System must be authorized by the Korea Electricity Commission and be approved by the minister of the Ministry of Trade, Industry and Energy in accordance with the Electricity Business Act. The purpose of this system is to decentralize electricity supply and thereby reduce transmission costs and improve the efficiency of energy use. These entities do not supply

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electricity on a national level but are licensed to supply electricity on a limited basis to their respective districts under the Community Energy System. As of March 31, 2013, 14 districts were using this system. The generation capacity installed or under construction of the electricity suppliers in these 14 districts amounted to approximately 1% of the aggregate generation capacity of our generation subsidiaries as of March 31, 2013. Since the introduction of the Community Energy System in 2004, a total of 31 districts have obtained the license to supply electricity through the Community Energy System, but 17 of such districts have reportedly abandoned plans to adopt the Community Energy System, largely due to the relatively high level of capital expenditure required, the rise in fuel costs and the lower-than-expected electricity output per cost. However, if the Community Energy System is widely adopted, it will erode our currently dominant market position in the generation and distribution of electricity in Korea, and may have a material adverse effect on our business, growth, revenues and profitability.

The table below sets forth as of December 31, 2010, 2011 and 2012 and March 31, 2013, the number of districts with government permits to participate in the Community Energy Supply, the number of apartments in such districts and generating capacity to be installed.

As of the date specified below	Number of Districts with Permit to Participate	Number of Apartments (in thousands)	Generating Capacity (Megawatts)
December 31, 2010 <sup>(1)</sup>	31	320	1,474
December 31, 2011 <sup>(1)</sup>	31	320	1,474
December 31, 2012 <sup>(2)</sup>	15	130	608
March 31, 2013 <sup>(3)</sup>	14	110	488

*Note:*

- (1) Includes 17 districts with a permit to participate in the Community Energy System, which have subsequently announced to-date that they will not adopt such system. The number of apartments and generating capacity represented by such districts are approximately 210 thousand units and 986 megawatts, respectively.
  - (2) As of December 31, 2012, 16 districts with permits had announced that they would not adopt the Community Energy System.
  - (3) As of March 31, 2013, one additional district announced that it will not adopt the system, resulting in 14 districts with permits.
- As of December 31, 2012, our transmission system consisted of 31,622 circuit kilometers of lines of 765 kilovolts and others including high voltage direct current lines, and we had 768 substations with an aggregate installed transformer capacity of 271,247 megavolt-amperes.

As of December 31, 2012, our distribution system consisted of 104,082 megavolt-amperes of transformer capacity and 8,583,423 units of support with a total line length of 442,641 circuit kilometers.

In recent years, we have made substantial investments in our transmission and distribution systems to increase coverage and improve efficiency. Our current projects principally focus on increasing capabilities of the existing lines and reducing our transmission and distribution loss, which was 3.6% in 2012. In light of the increased damage to large-scale transmission and distribution facilities, we plan to reinforce stability of our transmission and distribution facilities through stricter design and material specifications. In addition, we also plan to expand underground transmission and distribution facilities to meet customer demand for more environment-friendly facilities. In order to reduce the interruption time in power distribution, which is an indicator of the quality of electricity transmission, we are also continuing to invest in upgrading our evaluation technologies, automation of electricity transmission and development of new transmission technologies.



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In particular, as part of our overall business strategy, we are currently developing, or seek to develop, an intelligent power transmission and distribution network, or smart grids, based on advanced information technology, in order to promote a more efficient allocation and use of electricity by consumers, a superconducting technology that will improve efficiency in the transmission of electricity over such network and localized high-voltage direct current technology that will reduce electricity loss over the course of transmission and distribution. See Strategy. In July 2012, the Government implemented a master plan to build out a smart grid, which include the Advanced Metering Infrastructure (AMI) road map as further described in Overview Recent Developments Implementation of the Advanced Metering Infrastructure . In accordance with such plan, we will install smart meters and related communication networks and operating systems for 22 million households as part of the smart grid initiative in an effort to reduce nationwide electricity consumption and alleviate growing energy shortage concerns. The smart grid project is scheduled to be completed in 2030, and the AMI project is currently scheduled to be completed in 2020. We expect that the smart grid initiative would significantly increase efficient energy consumption by providing real-time data to customers which would in turn help to reduce greenhouse gas emission and decrease Korea's reliance on foreign energy sources. As of December 31, 2012, we have installed 3.8 million smart meter units, and plan to install an additional 3.2 million units in 2013. The AMI project is expected to cost an additional Won 1.7 trillion by 2020.

Some of the facilities we own and use in our distribution system use rights of way and other concessions granted by municipal and local authorities in areas where our facilities are located. These concessions are generally renewed upon expiration.

**Fuel**

*Nuclear*

Uranium, the principal fuel source for nuclear power, accounted for 34.1%, 34.9% and 33.6% of our fuel requirements for electricity generation in 2010, 2011 and 2012, respectively.

All uranium ore concentrates are imported from, and conversion and enrichment of such concentrates are provided by, sources outside Korea and are paid for with currencies other than Won, primarily in U.S. dollars.

In order to ensure stable supply, KHNP enters into long-term and medium-term contracts with various suppliers and supplements such supplies with purchases in spot markets. In 2012, KHNP purchased 100%, or approximately 4,432 tons, of its uranium concentrate requirement under long-term supply contracts with suppliers in Australia, Canada, France, Germany, Russia, Kazakhstan, the United States and Niger. Under the long-term supply contracts, the purchase prices of uranium concentrates are adjusted annually based on base prices and spot market prices prevailing at the time of actual delivery. The conversion and enrichment services of uranium concentrates are provided by suppliers in Canada, France, Germany, Japan, Russia, the United Kingdom and the United States. A Korean supplier typically provides fabrication of fuel assemblies. Except for certain fixed contract prices, contract prices for processing of uranium are adjusted annually in accordance with the general rate of inflation. KHNP intends to obtain its uranium requirements in the future, in part, through purchases under medium- to long-term contracts and, in part, through spot market purchases.

*Coal*

Bituminous coal accounted for 43.6%, 43.1% and 42.2% of our fuel requirements for electricity generation in 2010, 2011 and 2012, respectively, and anthracite coal accounted for 1.9%, 1.9% and 2.0% of our fuel requirements for electricity generation in 2010, 2011 and 2012, respectively.

In 2012, our generation subsidiaries purchased approximately 78.6 million tons of bituminous coal, of which approximately 43.6%, 33.4%, 5.7%, 5.2% and 12.1% were imported from Indonesia, Australia, the United States, Russia, and others, respectively. Approximately 80.3% of the bituminous coal requirements of our generation

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subsidiaries in 2012 were purchased under long-term contracts with the remaining 19.7% purchased in the spot market. Some of our long-term contracts relate to specific generating plants and extend through the end of the projected useful lives of such plants, subject in some cases to periodic renewal. Pursuant to the terms of our long-term supply contracts, prices are adjusted annually based on market conditions. The average cost of bituminous coal per ton purchased under such contracts amounted to Won 107,413, Won 116,073 and Won 113,705 in 2010, 2011 and 2012, respectively. Due to price increases as well as increased shipping cost for bituminous coal, our generation subsidiaries may not be able to secure their respective bituminous coal supply at prices comparable to those of prior periods. See Item 3D. Risk Factors Risks Relating to KEPCO Increases in fuel prices will adversely affect our results of operations and profitability, as we may not be able to pass on the increased cost to consumers at a sufficient level or on a timely basis.

In 2012, our generation subsidiaries purchased approximately 1.3 million tons of anthracite coal. The prices for anthracite coal under such contracts are set by the Government. The average cost of anthracite coal per ton purchased under such contracts was Won 130,836, Won 136,471 and Won 141,669 in 2010, 2011 and 2012, respectively.

***Oil***

Oil accounted for 2.7%, 2.4% and 3.5% of our fuel requirements for electricity generation in 2010, 2011 and 2012, respectively.

In 2012, our generation subsidiaries purchased approximately 16.7 million barrels of fuel oil, of which 42.6% was purchased from domestic refiners and the remainder from foreign sources, in each case, through competitive open bidding. Purchase prices are based on the spot market price in Singapore. The average cost per barrel was Won 98,023, Won 128,395 and Won 139,204 in 2010, 2011 and 2012, respectively.

***LNG***

LNG accounted for 16.6%, 16.7% and 17.6% of our fuel requirements for electricity generation in 2010, 2011 and 2012, respectively. In 2012, we purchased approximately 11.3 million tons of LNG from Korea Gas Corporation, a Government-controlled entity in which we currently own a 24.5% equity interest. Under the terms of the LNG contract with Korea Gas Corporation, our annual minimum purchase quantity is determined by our negotiations with Korea Gas Corporation, subject to the Government's approval, and may be adjusted through negotiations between the parties. Under this contract, all of our five non-nuclear generation subsidiaries were jointly and severally obligated to purchase a total of 10.3 million tons of LNG in 2012, subject to an automatic price adjustment based on a pre-determined formula if the actual purchased amount exceeds or falls short of the contracted amount. In addition, the annual purchase quantity of LNG to be purchased from Korea Gas Corporation will exclude any amount of LNG purchased from a source other than Korea Gas Corporation. We believe the quantities of LNG provided under such contract will be adequate to meet the needs of our generation subsidiaries for LNG for the next several years. The LNG supply contract between our generation subsidiaries and Korea Gas Corporation generally have a term of 20 years.

The annual purchase price for LNG is determined by our negotiations with Korea Gas Corporation, subject to approval by the Ministry of Trade, Industry and Energy. Korea Gas Corporation imports LNG primarily from Indonesia, Malaysia, Brunei, Qatar, Oman, Australia, Egypt and Nigeria and supplies LNG to us and other Korean gas companies. The average cost per ton of LNG under our contract with Korea Gas Corporation was Won 778,866, Won 888,808 and Won 1,020,528 in 2010, 2011 and 2012, respectively.

***Hydroelectric***

As of December 31, 2012, hydroelectric units represented approximately 1.1% of our total installed generating capacity.

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The availability of water for hydroelectric power depends on rainfall and competing uses for available water supplies, including residential, commercial, industrial and agricultural consumption. Pumped storage enables us to increase the available supply of water for use during periods of peak electricity demand.

As of January 1, 2011, assets and liabilities relating to the pumped storage units of the five non-nuclear generation subsidiaries were recognized and transferred to KHNP pursuant to the Government's Proposal for Improvements in the Korean Electric Power Industry.

**Sales and Customers**

Our sales depend principally on the level of demand for electricity in Korea and the rates we charge for the electricity we sell to the end-users.

Demand for electricity in Korea grew at a compounded average rate of 4.9% per annum for the five years ended December 31, 2012. According to The Bank of Korea, the compounded growth rate for real gross domestic product, or GDP, was approximately 2.9% for the same period. The GDP growth rate was approximately 6.2% in 2010, approximately 3.6% in 2011 and approximately 2.0% in 2012.

The table below sets forth, for the periods indicated, the annual rate of growth in Korea's gross domestic product, or GDP, and the annual rate of growth in electricity demand (measured by total annual electricity consumption) on a year-on-year basis.

	2008	2009	2010	2011	2012
Growth in GDP (at 2008 constant prices)	2.3%	0.3%	6.2%	3.6%	2.0%
Growth in electricity consumption	4.5%	2.4%	10.1%	4.8%	2.5%

Electricity demand in Korea varies within each year for a variety of reasons other than the general growth in GDP demand. Electricity demand tends to be higher during daylight hours due to heightened commercial and industrial activities and electrical appliance use. Due to the use of air conditioning during the summer and heating during the winter, electricity demand is higher during these two seasons than the spring or the fall. Variation in weather conditions may also cause significant variation in electricity demand.

We do not use any marketing channels, including any special sales methods, to sell electricity to our customers, other than to install electricity meters on-site and take monthly readings of such meters, based upon which invoices are sent to our customers.

***Demand by the Type of Usage***

The table below sets forth the consumption of electric power, and growth of such consumption on a year-on-year basis, by the type of usage (in gigawatt hours) for the periods indicated.

	2008 (GWh)	YoY growth (%)	2009 (GWh)	YoY growth (%)	2010 (GWh)	YoY growth (%)	2011 (GWh)	YoY growth (%)	2012 (GWh)	YoY growth (%)	% of Total 2012
Residential	57,878	3.9	59,426	2.7	63,200	6.3	63,524	0.5	65,484	3.1	14.0
Commercial	86,827	5.6	89,619	3.2	97,410	8.7	99,504	2.1	101,593	2.1	21.8
Educational	5,783	9.0	6,465	11.8	7,453	15.3	7,568	1.5	7,860	3.9	1.7
Industrial	203,475	4.4	207,216	1.8	232,672	12.3	251,491	8.1	258,102	2.6	55.3
Agricultural	8,869	8.0	9,671	9.0	10,654	10.2	11,232	5.4	12,776	13.8	2.7
Street lighting	2,847	1.9	2,954	3.8	3,081	4.3	3,145	2.1	3,158	0.4	0.7
Overnight Power	19,391	(0.4)	19,122	(1.4)	19,690	3.0	18,606	(5.5)	17,620	(5.3)	3.8
Total	385,070	4.5	394,475	2.4	434,160	10.1	455,070	4.8	466,593	2.5	100.0



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The industrial sector represents the largest segment of electricity consumption in Korea. Demand from the industrial sector was 258,102 gigawatt hours in 2012, representing a 2.6% increase from 2011, largely due to the continued export-led growth of the Korean economy. Demand from the commercial sector has increased in recent years, largely due to increased commercial activities in Korea and the rapid expansion of the service sector of the Korean economy, which has resulted in increased office building construction, office automation and use of air conditioners. Growth in the commercial sector is also attributable to the construction industry and the expansion of the leisure and distribution industries. Demand from the commercial sector was 101,593 gigawatt hours in 2012, representing a 2.1% increase from 2011, largely as a result of the increased commercial activities in Korea, which was partially offset by weakened consumer sentiment in light of the enhanced uncertainties in the global economy.

In 2012, we distributed electricity to approximately 20 million households, which represent substantially all of the households in Korea. Demand from the residential sector is largely dependent on population growth and increased use of air conditioners and other electrical appliances. Demand from the residential sector was 65,484 gigawatt hours in 2012, representing a 3.1% increase compared to 2011 due to increased usage of heating and air conditioning.

***Demand Management***

Our ability to provide an adequate supply of electricity is principally measured by the facility capacity reserve margin and the supply reserve margin. The facility capacity reserve margin represents the difference between the peak usage during a year and the installed capacity at the time of such peak usage, expressed as a percentage of such installed capacity. The supply reserve margin represents the difference between the peak usage in a year and the average available capacity at the time of such peak usage, expressed as a percentage of such peak usage. The following table sets forth our facility reserve margin and supply reserve margin for the periods indicated.

	2008	2009	2010	2011	2012
Facility reserve margin	12.0%	9.8%	6.7%	4.8%	7.7%
Supply reserve margin	9.1%	7.9%	6.2%	5.5%	5.2%

While the facility reserve margin increased from 2011 to 2012 due to an increase in our generation capacity, the supply reserve margin decreased in 2012 compared to 2011 because of an increase in overhaul periods for our base-load generators and an increase in demand for electricity as a result of economic recovery and extreme weather conditions in 2012.

While we seek to meet the growing demand for electricity in Korea primarily by continuing to expand our generating capacity through the addition of new generating facilities, we also implement several measures to curtail electricity consumption, especially during peak periods. We apply time-of-use rate schedules and seasonality tariff, which are structured so that higher tariffs are charged at the time and months of peak demand, to select types of customers, and we also apply a progressive rate structure for the residential use of electricity. We have several demand management programs to control demand and induce power conservation during the peak hours and seasons such as providing incentives for reducing power consumption during peak hours.

***Electricity Rates***

The Electricity Business Law and the Price Stabilization Act of 1975, each as amended, prescribe the procedures for the approval and establishment of rates charged for the electricity we sell. We submit our proposals for revisions of rates or changes in the rate structure to the Ministry of Trade, Industry and Energy. The Ministry of Trade, Industry and Energy then reviews these proposals and, upon consultation with the Electricity Rates Expert Committee of the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance, makes the final decision. Under the Electricity Business Law, the Korea Electricity Commission must review our proposals prior to the Ministry of Trade, Industry and Energy's final decision.

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Under the Electricity Business Law and the Price Stabilization Act, electricity rates are established at levels that would enable us to recover our operating costs attributable to our basic electricity generation, transmission and distribution operations as well as receive a fair investment return on capital used in those operations. For the purposes of rate approval, operating costs are defined as the sum of our operating expenses (which principally consists of cost of sales and selling and administrative expenses) and our adjusted income taxes.

Fair investment return represents an amount equal to the rate base multiplied by the rate of return. The rate base is equal to the sum of:

net utility plant in service (which is equal to utility plant minus accumulated depreciation minus revaluation reserve);

working capital for two months (equal to one-sixth of our annual operating expenses other than depreciation expenses and any other non-cash expenses);

our equity interests in generation subsidiaries; and

the portion of construction-in-progress which is charged from our retained earnings.

The amounts used for the variables in the rates are those projected by us for the periods to be covered by the rate approval. There is no provision for prior period adjustments to compensate us.

For the purpose of determining the fair rate of return, the rate base is divided into two components in proportion to our total shareholders' equity and our total debt. The rate of return permitted in relation to the debt component of the rate base is set at a level designed to approximate the weighted average interest cost on all types of borrowing for the periods covered by the rate approval. The rate of return permitted in relation to the equity component of the rate base is set by applying the capital asset pricing model which takes account of the risk-free rate, the return on the Korea Stock Price Index, KOSPI, a Korean equity market index, and the correlation of the stock price of our company with KOSPI. In 2011, the approved rate of return on the debt component of the rate base was 3.9% while the approved rate of return on the equity component of the rate base was 7.3%. As a result of such approved rates of returns, the fair rate of return in 2011 was determined to be 5.9%. The fair rate of return for 2012 has not yet been determined.

The Electricity Business Law and the Price Stabilization Act do not specify a basis for determining the reasonableness of our operating expenses or any other items (other than the level of the fair investment return) for the purposes of the rate calculation. However, the Government exercises substantial control over our budgeting and other financial and operating decisions.

In addition to the calculations described above, a variety of other factors are considered in setting overall tariff levels. These other factors include consumer welfare, our projected capital requirements, the effect of electricity tariff on inflation in Korea and the effect of tariff on demand for electricity.

From time to time, our actual rate of return on invested capital may differ significantly from the rate of return on invested capital assumed for the purposes of electricity tariff approvals, for reasons, among others, related to movements in fuel prices, exchange rates and demand for electricity that differ from what is assumed for determining our fair rate of return. For example, between 1987 and 1990, the actual rate of return was above the fair rate of return due to declining fuel costs and rising demand for electricity at a rate not anticipated for purposes of determining our fair rate of return. Similarly, depreciation of the Won against the U.S. dollar accounted for our actual rates of return being lower than the fair rate of return for the period from 1996 to 2000. For the period since 2006, our actual rates of return have been lower than the fair rate of return largely due to a general increase in fuel costs and additional facility investment costs incurred, the effects of which were not offset by timely increases in our tariff rates. Partly in response to the variance between our actual rates of return and the fair rates of return, the Government from time to time adjusts the electricity tariff rates, but there typically is a significant time lag for the tariff adjustment as such adjustment requires a series of deliberative

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processes and administrative procedures and the Government also has to consider other policy considerations, such as the inflationary effect of overall tariff increases and the efficiency of energy use from sector-specific tariff increases. Furthermore, there is no assurance that the tariff adjustments will have the desired effect at a level anticipated or at all, or that they will not have unintended adverse consequences.

Recent adjustments to the electricity tariff rates by the Government involve the following, which were made principally in response to the rising fuel prices which hurt our profitability as well as to encourage a more efficient use of electricity by the different sectors:

effective August 1, 2010, a 3.5% overall increase in our average tariff rate, consisting of increases in the residential, educational, industrial, street lighting and overnight power usage tariff rates by 2.0%, 5.9%, 5.8%, 5.9% and 8.0%, while making no changes to the commercial and agricultural tariff.

effective August 1, 2011, a 4.9% overall increase in our average tariff rate, consisting of increases in the industrial, commercial, residential, educational, street lighting and overnight power usage tariff rates by 6.1%, 4.4%, 2.0%, 6.3%, 6.3% and 8.0%, while making no changes to the agricultural tariff.

effective December 5, 2011, a 4.5% overall increase in our average tariff rate, consisting of increases in the industrial, commercial, educational and street lighting tariff rates by 6.5%, 4.5%, 4.5% and 6.5%, while making no changes to the residential, agricultural and overnight power usage tariff.

effective August 6, 2012, a 4.9% overall increase in our average tariff rate, consisting of increases in the residential, commercial, educational, industrial, street lighting, agricultural and overnight power usage tariff rates by 2.7%, 4.4%, 3.0%, 6.0%, 4.9%, 3.0% and 4.9%, respectively.

effective January 14, 2013, a 4.0% overall increase in our average tariff rate, consisting of increases in the residential, commercial, educational, industrial, street lighting, agricultural and overnight power usage tariff rates by 2.0%, 4.6%, 3.5%, 4.4%, 5.0%, 3.0% and 5.0%, respectively.

The tariff rates we charge for electricity vary among the different classes of consumers, which principally consist of industrial, commercial, residential, educational and agricultural consumers. The tariff also varies depending upon the voltage used, the season, the time of day, the rate option selected by the user and, in the residential sector, the amount of electricity used per household, as well as other factors. For example, we adjust for seasonal tariff variations by applying higher rates when demand tends to rise such as during the months of July and August (when the demand tends to rise due to increased use of air conditioning) and November, December, January and February (when demand tends to rise due to increased use of heating), which reflects the policy of the Korean government to cope with the rise in electricity demand during peak seasons by encouraging a more efficient use of electricity by customers.

Our current tariff schedule, which became effective as of January 14, 2013, is summarized below by the type of usage:

*Industrial.* The basic charge varies from Won 5,270 per kilowatt to Won 8,050 per kilowatt depending on the type of contract, the voltage used and the rate option. The energy usage charge varies from Won 51 per kilowatt hour to Won 192.5 per kilowatt hour depending on the type of contract, the voltage used, the season, the time of day and the rate option.

*Commercial.* The basic charge varies from Won 5,990 per kilowatt to Won 8,050 per kilowatt depending on the type of contract, the voltage used and the rate option. The energy usage charge varies from Won 51.5 per kilowatt hour to Won 189.4 per kilowatt hour depending on the type of contract, the voltage used, the season, the time of day and the rate option.

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*Residential.* Residential tariff includes a basic charge ranging from Won 400 for electricity usage of less than 100 kilowatt hours to Won 12,230 for electricity usage in excess of 500 kilowatt hours. Residential tariff also includes an energy usage charge ranging from Won 59.1 to Won 690.8 per kilowatt hour for electricity usage depending on the amount of usage and voltage.



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*Educational.* The basic charge varies from Won 5,740 per kilowatt to Won 6,980 per kilowatt depending on the voltage used and the rate option. The energy usage charge varies from Won 43.8 per kilowatt hour to Won 160.4 per kilowatt hour depending on the voltage used, the season and the rate option.

*Agricultural.* The basic charge varies from Won 350 per kilowatt to Won 1,150 per kilowatt depending on the type of usage. The energy usage charge varies from Won 21.2 per kilowatt-hour to Won 39.1 per kilowatt hour depending on the type of usage.

*Street-lighting.* The basic charge is Won 5,970 per kilowatt and the energy usage charge is Won 81.5 per kilowatt hour. For electricity capacity of less than 1 kilowatt or for places where the installation of the electricity meter is difficult, a fixed rate of Won 35.6 per watt applies, with the minimum charge per month of Won 1,160.

***Fuel Cost Pass-through Adjustment to the Tariff System***

Further to the announcement by the Ministry of Trade, Industry and Energy in February 2010, a new electricity tariff system went into effect on July 1, 2011. This system is designed to overhaul the prior system for determining electricity tariff chargeable to customers by more closely aligning the tariff levels to the movements in fuel prices, with the aim of providing more timely pricing signals to the market regarding the expected changes in electricity tariff levels and encouraging more efficient use of electricity by customers. Previously, the electricity tariff consisted of two components: (i) base rate and (ii) usage rate based on the cost of electricity and the amount of electricity consumed by the end-users. Under the new tariff system, the electricity tariff is also to have a third component of fuel cost pass-through adjustment ( FCPTA ) rate, which is to be added to or subtracted from the sum of the base rate and the usage rate on a monthly basis based on the three-month average movements of coal, LNG and oil prices, which is reflected as FCPTA two months later. The new tariff system is intended to provide greater financial stability and ensure a minimum return on investment to electricity suppliers, such as us. However, due to inflationary and other policy considerations relating to protecting the consumers from sudden and substantial rises in electricity tariff, the Ministry of Trade, Industry and Energy issued a hold order on July 29, 2011 suspending our billing and collecting of the FCPTA amount. The hold order remains in effect to-date. In addition, on January 11, 2013, we were informed by the Ministry of Trade, Industry and Energy that the fuel cost-based tariff adjustment system would need to be reassessed in light of the prolonged unbilled period after the announcement of such system.

There is no assurance as to when the Government will lift the hold order and allow us to bill and collect the accumulated FCPTA amount or whether the new tariff system will undergo other amendments to the effect that it will not fully cover our fuel and other costs on a timely basis or at all, or will not have unintended consequences that we are not presently aware of. Any such development may have a material adverse effect on our business, financial condition, results of operations and cash flows. See Item 4B. Business Overview Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment , Item 4B. Business Overview Sales and Customers Electricity Rates , Item 4B. Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment, Item 5B. Operating and Financial Review and Prospects Overview , Item 5B. Operating and Financial Review and Prospects Critical Accounting Policy Fuel Cost Pass-through Adjustment and Notes 2, 15 and 36 to the notes to our consolidated annual financial statements.

**Power Development Strategy**

We and our generation subsidiaries make plans for expanding or upgrading our generation capacity based on the Basic Plan Relating to the Long-Term Supply and Demand of Electricity, or the Basic Plan, which is announced and revised generally every two years by the Government.

In February 2013, the Government announced the sixth Basic Plan relating to the future supply and demand of electricity. The sixth Basic Plan, which is effective for the period from 2013 to 2027, focuses on, among other

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things, (i) minimizing the need to construct new generation facilities through active consumer demand management, (ii) ensuring that we maintain adequate electricity reserve appropriate to the size of the national economy, and (iii) expanding our generation capacity to promote efficient supply of electricity in consideration of the stability of the national electricity grid network and the specific needs of localities. The Government may announce a supplemental plan for the construction of additional nuclear plants, which was not included in the Sixth Plan; such plan may increase the amount of our required capital expenditure. We cannot assure that the sixth Basic Plan, or the plans subsequently adopted, will successfully achieve their intended goals, the foremost of which is to formulate a capacity expansion plan that will result in balanced overall electricity supply and demand in Korea at an affordable cost to the end users. If there is a significant variance between the actual capacity expansions by us and our generation subsidiaries based on the projected electricity supply and demand and the actual supply and demand, this may result in inefficient use of our capital, mispricing of electricity and undue financing costs on the part of us and our generation subsidiaries, which may have a material adverse effect on our results of operations, financial condition and cash flows.

**Capital Investment Program**

The table below sets forth, for each of the years ended December 31, 2010, 2011 and 2012, the amounts of capital expenditures (including capitalized interest) for the construction of generation, transmission and distribution facilities.

2010	2011 (In billions of Won)	2012
11,414	11,984	13,215

In accordance with the sixth Basic Plan, our generation subsidiaries currently intend to add new installed capacity of 54,743 megawatts during the period from 2013 to 2027 by newly constructing 11 nuclear units, 27 coal-fired units, and 23 LNG-combined units. As currently contemplated in accordance with the sixth Basic Plan and subject to any further plan to be announced by the Government in relation to the construction of additional nuclear generation capacity which was not included in the Sixth Plan, the total capacity of all generating facilities at the end of 2027 is expected to be 130,853 megawatts, with nuclear power plants accounting for 27.4% of the total capacity. Coal-fired plants, LNG combined plants, oil-fired plants and hydroelectric and other plants are expected to account for 34.7%, 24.3%, 0.9% and 12.7%, of the total capacity, respectively. The table below sets forth the currently estimated installed capacity for new or expanded generation units to be completed by our generation subsidiaries according to the sixth Basic Plan in each year from 2013 to 2015.

Year	Number of Units	Type of Units	Total Installed Capacity (Megawatts)
2013	2	Nuclear power	2,400
	4	LNG-combined	2,175
2014	1	Nuclear power	1,400
	2	Coal-fired	1,540
	8	LNG-combined	6,066
2015	2	Coal-fired	2,020
	4	LNG-combined	3,132

From 2016 and 2027, our generation subsidiaries currently plan to complete eight nuclear units with an aggregate installed capacity of 11,400 megawatts (subject to any further plan to be announced by the Government in relation to the construction of additional nuclear generation capacity which was not included in the sixth Basic Plan), 23 coal-fired units with an aggregate installed capacity of 19,700 megawatts and 7 LNG-combined units with an aggregate installed capacity of 4,910 megawatts.

As part of our capital investment program, we also intend to add new transmission lines and substations, continue to replace overhead lines with underground cables and improve the existing transmission and distribution systems.

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The actual number and capacity of generation units and transmission and distribution facilities we construct and the timing of such construction are subject to change depending upon a variety of factors, including, among others, changes in the Basic Plan, demand growth projections, availability and cost of financing, changes in fuel prices and availability of fuel, ability to acquire necessary plant sites, environmental considerations and community opposition.

The table below sets forth, for the years from 2013 to 2016, the budgeted amounts of capital expenditures (including capitalized interest) for the construction of generation, transmission and distribution facilities pursuant to our capital investment program. The budgeted amounts may vary from the actual amounts of capital expenditures for a variety of reasons, including, among others, the implementation of the sixth Basic Plan, changes in the number of units to be constructed, the actual timing of such construction, changes in rates of exchange between the Won and foreign currencies and changes in interest rates.

	2013	2014	2015	2016	Total
	(in billions of Korean won)				
<b>Generation<sup>(1)</sup>:</b>					
Nuclear	5,432	5,526	6,272	6,843	24,073
Thermal	6,335	5,877	3,806	3,752	19,770
Sub-total	11,767	11,403	10,078	10,595	43,843
<b>Transmission and Distribution:</b>					
Transmission	2,222	2,840	2,550	1,595	9,207
Distribution	2,267	2,422	2,502	2,078	9,269
Sub-total	4,489	5,262	5,052	3,673	18,476
Others <sup>(2)</sup>	3,458	3,711	3,521	2,864	13,554
Total	19,714	20,376	18,651	17,132	75,873

*Note:*

(1) The budgeted amounts for our generation facilities are based on the fifth Basic Plan, as the corresponding budgeted amounts under the sixth Basic Plan are not yet available.

(2) Principally consists of investments in renewable energy generation, among others.

We have financed, and plan to finance in the future, our capital investment programs primarily through net cash provided by our operating activities and financing in the form of debt securities and loans from domestic financial institutions, and to a lesser extent, borrowings from overseas financial institutions. In addition, in anticipation of potential liquidity shortage, we maintain several credit facilities with domestic financial institutions in the aggregate amounts of Won 3,816 billion and US\$2,185 million, the full amount of which was available as of December 31, 2012. We, KHNP and KOWEPO also maintain global medium-term note programs in the aggregate amount of US\$10 billion, of which approximately US\$5.8 billion remains currently available for future drawdown. See also Item 5B. Liquidity and Capital Resources Capital Resources.

**Environmental Programs**

The Environmental Policy Basic Act, the Air Quality Preservation Act, the Water Quality Preservation Act, the Marine Pollution Prevention Act and the Waste Management Act, collectively referred in this report as the Environmental Acts, are the major laws of Korea that regulate atmospheric emissions, waste water, noise and other emissions from our facilities, including power generators and transmission and distribution units. Our existing facilities are currently in material compliance with the requirements of these environmental laws and international agreements, such as the United Nations Framework Convention on Climate Change, the Montreal Protocol on Substances that Deplete the

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Ozone Layer, the Stockholm Convention on Persistent Organic Pollutants and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. In order to foster coordination among us and our generation subsidiaries in respect of climate

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change and development of renewable energy sources, we formed the Committee on Climate Change and the Committee on Renewable Energy in 2005. In 2011 the Ministry of Public Administration and Safety issued guidelines for reduction in nationwide greenhouse gas emissions and energy conservation, pursuant to which we are intensifying our efforts to reduce the levels of carbon emission in order to help meet the national target for greenhouse gas emission reduction.

In 2005, we became the first public company in Korea to join the United Nations Global Compact, an international voluntary initiative designed to hold a forum for corporations, United Nations agencies, labor and civic groups to promote reforms in economic, environmental and social policy. As part of our involvement with such initiative, since September 2005, we have issued an annual report named the Sustainability Report to disclose our activities from the perspectives of economy, environment and society, in accordance with the reporting guidelines of the Global Reporting Initiative, the official collaborating center of the United Nations Environment Program that works in cooperation with United Nations Secretary General. In November 2010, our report on the Communication on Progress was reviewed favorably by the United Nations Global Compact and was subsequently posted on its website in recognition of our strong commitment to compliance with the principles of United Nations Global Compact. In 2008 and 2009, our sustainability report was selected as a notable report on Communication on Progress by the United Nations Global Compact.

Atmospheric emissions from generating plants burning fossil fuels include, among others, sulfur dioxide, nitrogen oxide and particulates. The Environmental Acts establish emissions standards relating to, among other things, sulfur dioxide, nitrogen oxide and particulates. Such standards have become more stringent from January 1999 to reduce the amount of permitted emissions.

The table below sets forth the number of emission control equipment installed at coal-fired power plants by our generation subsidiaries as of December 31, 2012.

	KOSEP	KOMIPO	KOWEPO	KOSPO	EWP
Flue Gas Desulphurization System	11	12	12	12	13
Selective Non-Catalytic Reduction System					3
Selective Catalytic Reduction System	13	18	12	15	13
Electrostatic Precipitation System	17	14	12	14	18
Low NO <sub>2</sub> Combustion System	16	28	26	30	30
Total	57	72	62	71	77

The table below sets forth the amount of annual emission from all generating facilities of our generation subsidiaries for the periods indicated. The amount of CO<sub>2</sub> emissions may increase in 2013 due to the construction of additional coal thermal power plants but is expected to decrease thereafter, principally due to an increased use of nuclear power and renewable energy.

Year	Sox (g/MWh)	NOx (g/MWh)	Dust (g/MWh)	CO <sub>2</sub> (kg/MWh)
2010	159	295	8	463
2011	148	284	8	464
2012	165	297	8	471

In order to comply with the current and expected environmental standards and address related legal and social concerns, we intend to continue to install additional equipment, make related capital expenditures and undertake several environmentally friendly measures to foster community goodwill. For example, in October 2004, we and our generation subsidiaries reached an agreement with the Ministry of Environment and civic organizations to completely remove polychlorinated biphenyl, or PCB, a toxin, from the insulating oil of our transformers by 2015. In addition, when constructing certain large new transmission and distribution facilities, we assess and disclose their environmental impact at the planning stage of such construction, as well as consult

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with local residents, environmental groups and technical experts to generate community support for such projects. We exercise additional caution in cases where such facilities are constructed near ecologically sensitive areas such as wetlands or preservation areas. We also make reasonable efforts to minimize any negative environmental impact, for example, by using more environmentally-friendly technology and hardware. In addition, we also undertake measures to minimize losses during the transmission and distribution process by making our power distribution network more energy-efficient in terms of loss of power, as well as to lower consumption of energy, water and other natural resources. In addition, we and our subsidiaries have acquired the ISO 14000 certification which is an environmental management system widely adopted internationally and have made it a high priority to make our electricity generation and distribution more environmentally friendly.

Our environmental measures, including the use of environmentally friendly but more expensive parts and equipment and budgeting capital expenditures for the installation of such facilities, may result in increased operating costs and liquidity requirement. The actual cost of installation and operation of such equipment and related liquidity requirement will depend on a variety of factors which may be beyond our control. There is no assurance that we will continue to be in material compliance with legal or social standards or requirements in the future in relation to the environment.

As part of our long-term strategic initiatives, we plan to take other measures designed to promote the generation and use of environmentally friendly, or green, energy. See Item 4B. Business Overview Strategy.

Some of our generation facilities are powered by renewable energy sources, such as solar energy, wind power and hydraulic power. While such facilities are currently insignificant as a proportion of our total generating capacity or generation volume of our generation subsidiaries, we expect that the portion will increase in the future, especially since we are required to comply with the Renewable Portfolio standard policy as described below.

The following table sets forth the generating capacity and generation volume in 2012 of our generation facilities that are powered by renewable energy sources.

	Generating Capacity (megawatts)	Generation Volume (gigawatt-hours)
Hydraulic Power	1,261	4,815
Wind Power	70	117
Solar Energy and fuel cells	58	60
Subtotal	1,389	4,992
As percentage of total <sup>(1)</sup>	2.0%	1.1%

*Note:*

(1) As a percentage of the total generating capacity or total generation volume, as applicable, of all of our generation subsidiaries. In order to deal with shortage of fuel and other resources and also to comply with various environmental standards, in 2012 the Government has adopted the Renewable Portfolio Standard ( RPS ) policy, under which each generation subsidiary was required to supply 2.0% of the total energy generated from such subsidiary in the form of renewable energy in 2012 and will be required to supply 10.0% by 2022, with fines being levied on any unit failing to do so in the prescribed timeline. Satisfaction of the supply target for 2012 by our generation subsidiaries is currently under evaluation, and our generation subsidiaries found to have failed to satisfy the supply target may become subject to fine or other penalty although we are currently unable to predict the type or amount of fine or other penalty that will be imposed. There is no assurance that such fine or other penalty will not be substantial. If substantial, such fine or other penalty may have a material adverse effect on our business, results of operations or financial condition. The current budgeted amount of capital expenditure for implementation of the RPS as currently planned for the period from 2012 to 2022 is approximately Won 45 trillion. We expect that such additional capital expenditure will be covered by a corresponding increase in



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electricity tariff. However, there is no assurance that the Government will in fact raise the electricity tariff at a level sufficient to fully cover such additional capital expenditures or at all.

In July 2005, nine government-invested utilities companies, including us, entered into a Renewable Portfolio Agreement ( RPA ) with the Government in order to expand the generation and distribution of renewable energy. This agreement contemplates two phases of capacity build-up for the generation and distribution of renewable energy. During Phase I, which lasted from 2006 to 2008, we made capital expenditures of Won 520.1 billion to construct renewable energy generation capacity of 184 megawatts. During Phase II, lasting from 2009 to 2011, we and our generation subsidiaries made capital expenditures of Won 920.7 billion to construct renewable energy facilities with an aggregate generation capacity of 366 megawatts. Following the completion of Phase II, the RPA arrangement was subsumed under the RPS policy.

We have financed, and plan to finance in the future, our capital investment programs primarily through net cash provided by our operating activities and financing in the form of debt securities and loans from domestic financial institutions, and to a lesser extent, from overseas financial institutions. In addition, in anticipation of potential liquidity shortage, we maintain several credit facilities with domestic financial institutions in the aggregate amounts of Won 3,816 billion and US\$2,185 million, the full amount of which was available as of December 31, 2012. We, KHNP and KOWEPO also maintain global medium-term note programs in the aggregate amount of US\$10 billion, of which approximately US\$5.8 billion remains currently available for future drawdown. See Item 5B. Liquidity and Capital Resources Capital Resources.

### **Community Programs**

Building goodwill with local communities is important to us in light of concerns among the local residents and civic groups in Korea regarding construction and operation of generation units, particularly nuclear generation units. The Act for Supporting the Communities Surrounding Power Plants requires that the generation companies and the affected local governments carry out various activities up to a certain amount annually to address neighboring community concerns. Pursuant to this Act, we and our generation subsidiaries, in conjunction with the affected local and municipal governments, undertake various programs, including scholarships and financial assistance to low-income residents.

Under the Act for Supporting the Communities Surrounding Power Plants, activities required to be undertaken under the Act are funded partly by the Electric Power Industry Basis Fund (see Sales and Customers Electricity Rates ) and partly by KHNP as part of its budget. KHNP is required to make annual contributions to the affected local communities in an amount equal to Won 0.25 per kilowatt of electricity generated by its nuclear generation units during the one-year period before the immediately preceding fiscal year and Won 5 million per thousand kW of hydroelectric generation capacity. In addition, under Korean tax law, KHNP is required to pay local tax levied on its nuclear generation units in an amount equal to Won 0.50 per kilowatt of their generation volume in the affected areas and Won 2 per 10 cube meters of water used for hydroelectric generation.

Prior to the construction of a generation unit, our generation subsidiaries perform an environmental impact assessment which is designed to evaluate public hazards, damage to the environment and concerns of local residents. A report reflecting this evaluation and proposing measures to address the problems identified must be submitted to and approved by the Ministry of Trade, Industry and Energy following agreement with related administrative bodies, including the Ministry of Environment prior to the construction of the unit. Our generation subsidiaries are then required to implement the measures reflected in the approved report. Despite these activities, civic community groups may still oppose the construction and operation of generation units (including nuclear units), and such opposition could adversely impact our construction plans for generation units (including nuclear units) and have a material adverse effect on our business, results of operations and cash flow.



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### **Nuclear Safety**

KHNP takes nuclear safety as its top priority and continues to focus on ensuring the safe and reliable operation of nuclear power plants. KHNP also focuses on enhancing corporate ethics and transparency in the operation of its plants.

KHNP has a corporate code of ethics and is firmly committed to enhancing nuclear safety, developing new technologies and improving transparency. KHNP has also established the Statement of Safety Policy for Nuclear Power Plants to ensure the highest level of nuclear safety. Furthermore, KHNP invests approximately 5% of its total annual sales into research and development for the enhancement of nuclear safety and operational performance.

KHNP implements comprehensive programs to monitor, ensure and improve safety of nuclear power plants. In order to enhance nuclear safety through risk-informed assessment, KHNP conducts probabilistic safety assessments for all its nuclear power plants. In order to systematically verify nuclear safety and identify the potential areas for safety improvements, KHNP performs periodic safety reviews on a 10-year frequency basis for all its operating units. These reviews have been completed for Kori units 1, 2, 3 and 4, Yonggwang units 1, 2, 3 and 4, Ulchin units 1, 2, 3 and 4 and Wolsong units 1, 2, 3 and 4. Reviews for Younggwang units 5 and 6 are in progress. In order to enhance nuclear safety and plant performance, KHNP has established a maintenance effectiveness monitoring program based on the maintenance rules issued by the United States Nuclear Regulatory Commission, which covers all of KHNP's nuclear power plants in commercial operation.

KHNP has developed the Risk Monitoring System for operating nuclear power plants, which it implements in all of its nuclear power plants. The Risk Monitoring System is intended to help ensure nuclear plant safety. In addition, KHNP has developed and implemented the Severe Accident Management Guidelines in order to manage severe accidents for all of its nuclear power plants.

KHNP conducts various activities to enhance nuclear safety such as quality assurance audits, reviews by the KHNP Nuclear Review Board and reviews by the KHNP operational safety review team, which consists of former employees of KHNP and experts from academia and internal research institutes. KHNP maintains a close relationship with international nuclear organizations in order to enhance nuclear safety. In particular, KHNP invites international safety review teams such as the World Association of Nuclear Operators ( WANO ) Peer Review Team, the International Atomic Energy Agency ( IAEA ) and the Expert Mission Team to its nuclear plants for purposes of meeting international standards for independent review of its facilities. KHNP actively exchanges relevant operational information and technical expertise with its peers in other countries. For example, in June 2012, Kori 1 hosted the IAEA Expert Mission Team, and Shin-Kori 3 conducted the WANO Pre-Startup Peer Review in October 2012. The recommendations and findings from this event were shared with KHNP's other nuclear plants to implement improvements at such plants. However, KHNP's safety programs, even if implemented to the best of its abilities, do not necessarily assure the safety of its nuclear plants in all aspects. For example, beginning in November 2012, two nuclear units at Yonggwang were shut down for approximately two months pending investigation of allegations that certain parts were supplied using fraudulent quality certification documents. The Nuclear Safety & Security Commission established a committee comprised of government experts, civic groups and academics to evaluate parts supplied at all operating plants as well as the procurement and quality control procedures. KHNP has completed replacing all fraudulently certified parts and is implementing measures to prevent recurrence of such mishap. These measures include consolidating all procurement functions into a single organization within its headquarters and strengthening sanctions against suppliers fabricating false certification. Suppliers found to have falsified quality assurance documents in the above case were reported to the Prosecutor's Office for further investigation.

The average level of radiation dose per unit amounted to a relatively low level of 0.46 man-Sv in 2012, which was substantially lower than the global average in 2012 of 0.76 man-Sv/year as reported in the WANO performance indicator report.

In response to the damage to the nuclear facilities (including nuclear meltdowns) in Japan as a result of the tsunami and earthquake in March 2011, the Government conducted additional safety inspections for nuclear

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power plants by a group of experts from governmental authorities, civic groups and academia. As a result of such inspections, the Government required KHNP to perform 46 comprehensive safety improvement measures. The Government also established the Nuclear Safety & Security Commission in October 2011 for neutral and independent safety appraisals. KHNP developed 10 additional measures through benchmarking overseas cases and the internal analysis of current operations. KHNP plans to implement these measures, which are expected to be completed by 2015, at total expected cost of approximately Won 1.1 trillion. In 2012, KHNP completed 24 of such measures.

Low and intermediate level waste, or LILW, and spent fuels are stored in temporary storage facilities at each nuclear site of KHNP. The temporary LILW storage facilities at the nuclear sites will be sufficient to accommodate all LILWs produced up to 2014. We expect that Korea Radioactive Waste Management Corporation ( KRMC ) will complete the construction of a LILW disposal facility in the city of Gyeongju by June 2014, and starting from December 2010, LILW stored in temporary storage facilities at Ulchin and Wolsong was transferred to a disposal facility in the city of Gyeongju.

In order to increase the storage capacity of temporary storage facilities for spent fuels, KHNP has been pursuing various projects, such as installing high-density racks in spent fuel pools, building dry storage facilities and transporting the spent fuels to other nuclear units within a nuclear site. Through these activities, we expect that the storage capacity for spent fuels in all nuclear sites will be sufficient to accommodate all the spent fuels produced by 2016. The policy for spent fuel management options is currently under development.

The Radioactive Waste Management Act ( RWMA ) was enacted effective on January 1, 2009 in an effort to centralize the disposal of spent fuel and low and intermediate level radioactive waste and enhance the security and efficiency of related management processes. The RWMA designates KRMC to manage the disposal of spent fuels and low and intermediate level radioactive waste. Pursuant to the RWMA, the Government has established the Radioactive Waste Management Fund. The management expense for LILW is paid when LILW is transferred to KRMC, and the charge for spent fuel is paid based on the quantity of spent fuel generated every quarter. Management costs related to LILW and charges for spent fuel to be borne by KHNP are reviewed by the Ministry of Trade, Industry and Energy every two years. In December 2012, such costs and charges were readjusted upwards by a committee composed of government officials, KHNP, Korea Radioactive Waste Management Corporation and experts in finance and accounting. This may result in an increase in future expenses to be borne by KHNP in relation to radioactive waste.

All of KHNP's nuclear plants are in compliance with Korean law and regulations and the safety standards of the IAEA in all material respects.

Since the submission of our annual report on Form 20-F in April 2012, other than as set forth herein there have been no significant safety-related events or accidents in KHNP's nuclear power plants that would have a material adverse effect on us.

**Decommissioning**

Decommissioning of a nuclear power unit is the process whereby the unit is shut down at the end of its life, the fuel is removed and the unit is eventually dismantled. KHNP implements a dismantling policy under which dismantling would take place five to ten years after the unit's permanent shutdown. Kori unit-1, the first nuclear power plant in Korea, commenced its operation in 1978 and reached the end of its intended life in June 2007. KHNP obtained an approval to extend the Kori operation for another 10 years, and the unit resumed its operations in January 2008. Wolsong unit-1, the second nuclear power plant in Korea, reached the end of its original design life in November 2012. Applications for continued operation of Wolsong unit-1 were submitted to the Ministry of Education, Science and Technology in December 2009 and are currently being reviewed by the Nuclear Safety and Security Commission. Wolsong unit-1 underwent facility improvement in July 2011 after which it operated normally at 100% capacity until the end of its design life in November 2012. While it does not carry a cash reserve for its decommissioning liability, KHNP retains financial responsibility for decommissioning

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its units. KHNP has accumulated the decommissioning cost as a liability since 1983. The decommissioning costs of nuclear facilities were estimated based on the study by the related committee and defined by the Radioactive-Waste Management Act, which requires KHNP to credit annual appropriations separately. The decommissioning costs are reviewed by the Ministry of Trade, Industry and Energy every two years. In December 2012, estimated decommissioning costs were readjusted upwards in consideration of overseas cases of decommissioning, inflation rate assumptions, changes in the operating environment and other criteria. As a result, KHNP was required to accrue additional provisions due to increased future decommissioning costs.

For the accounting treatment of decommissioning costs, see Item 5A. Operating Results Critical Accounting Policies Decommissioning Costs.

**Overseas Activities**

We are actively engaged in a number of overseas activities. We believe that such activities help us to facilitate procurement of requisite fuels and diversify our revenue streams by leveraging the operational experience of us and our subsidiaries gathered from providing a full range of services, such as power plant construction, and specialized engineering and maintenance services in Korea, as well as to establish strategic relationships with a number of countries that are or may become providers of fuels.

The table set below summarizes the overseas projects that we are currently pursuing based on binding agreements.

Country	Project Period	Project Description
<b>Generation Projects:</b>		
UAE	December 2009 to May 2020	Construction, operation and support for four 1,400-megawatt nuclear power generation units
Shanxi, China	April 2007 to April 2056	5,907-megawatt coal-fired power plants (BOO) <sup>(4)</sup> and coal mine projects
Gansu, China	September 2005 to April 2029	99-megawatt wind power plants (BOO) <sup>(4)</sup>
Inner Mongolia, China	May 2007 to December 2035	990-megawatt wind power plants (BOO) <sup>(4)</sup>
Liaoning, China	April 2010 to April 2031	226-megawatt wind power plant (BOO) <sup>(4)</sup>
Jordan	May 2009 to December 2035	373-megawatt combined-cycle power plant in Al Qatrana (BOO) <sup>(4)</sup>
Ilijan, Philippines	March 1999 to June 2022	1,200-megawatt combined-cycle power plant project (BOT) <sup>(1)</sup>
Naga, Philippines	Since February 2006	242.5-megawatt power plant (O&M/M&A) <sup>(2)</sup>
Cebu, Philippines	June 2011 to May 2036	200-megawatt CFBC <sup>(3)</sup> coal-fired power plant (BOO) <sup>(4)</sup>
Saudi Arabia	July 2009 to March 2033	1,204-megawatt oil-fired power plant (BOO) <sup>(4)</sup>
UAE	March 2011 to March 2039	1,600-megawatt combined-cycle gas power plant project (BOO) <sup>(4)</sup>
Mexico	January 2011 to May 2038	433-megawatt combined-cycle power plant project (BOO) <sup>(4)</sup>
Jordan	February 2014 to February 2039	573-megawatt diesel engine power plant in Almanakher (BOO) <sup>(4)</sup>

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<b>Country</b>	<b>Project Period</b>	<b>Project Description</b>
Jordan	January 2013 to January 2035	Construction and operation of a wind farm in Fujejj (BOO) <sup>(4)</sup>
India	January 2012 to December 2048	Purchase of a minority equity interest of Pioneer Gas Power of India for construction, operation and maintenance of a combined-cycle power plant
Thailand	2011 to 2037	Purchase of minority equity interest in Navanakorn Electric Co. (BOO) <sup>(4)</sup>
Thailand	September 2012 to 2033	8-megawatt solar power plant (BOO) <sup>(4)</sup>
United States	2013 to 2065	Construction and operation of a solar power plant in Nevada (BOO) <sup>(4)</sup>
United States	Since December 2012	Construction and operation of wind farms
<b>Exploration and Production Projects:</b>		
Indonesia	Since July 2009	Purchase of equity interest of PT Adaro Energy Tbk
Indonesia	Since July 2010	Purchase of equity interest of PT Bayan Resources Tbk
Australia	Since January 2008	Moolarben thermal coal mine development
Australia	Since November 2007	Share subscription of Cockatoo Coal Limited, a coal development company
Australia	Since July 2010	Bylong thermal coal mine development
Canada	Since June 2009	Share subscription of Denison Mines, a uranium development company
Canada	From December 2007	Uranium exploration project in the Cree East
Canada	January 2008 to May 2013	Uranium exploration project in the Waterbury Lake
Niger	Since December 2009	Share subscription of ANCE, a uranium development company
United States	Since February 2012	Acquisition of minority interest in Strathmore Minerals Corp. in relation to a uranium development project in Wyoming
Nigeria	Since March 2006	Exploration of oil and gas for two offshore blocks
Nigeria	Since October 2008	Development of downstream projects in Nigeria
Nigeria	Since 2007	Acquisition of majority interest in Egbin Power Plc, a power plant owner and operator in Nigeria
France	June 2009 to 2015	Construction and operation of a uranium enrichment plant

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<b>Country</b>	<b>Project Period</b>	<b>Project Description</b>
<b>Transmission and Distribution projects:</b>		
Dominican Republic	May 2011 to May 2013	Rehabilitation of electricity distribution networks
India	September 2011 to 2013	11kV feeder separation program for separation of non-agricultural and agricultural consumers, replacement of bare low tension line with aerial bunched cable and meterization of unmetered consumers in rural areas
Kazakhstan	February 2011 to 2013	Modernization of 17 substations in Actub, Kazakhstan
Kazakhstan	March 2011 to 2013	Construction of 325 km of 220kV transmission lines in Moniak, Kazakhstan

*Notes:*

- (1) Represents build, operate and transfer projects.
- (2) Represents rehabilitation, operation, maintenance and management projects
- (3) Represents circulating fluidized bed combustion projects.
- (4) Represents build, own and operate projects.

While strategically important, we believe that our overseas activities, as currently being conducted, are not in the aggregate significant in terms of scope or amount compared to our domestic activities. In addition, a number of the overseas contracts currently being pursued are based on non-binding memoranda of understanding and the details of such projects may significantly change during the course of negotiating the definitive agreements.

A further description of the material overseas activities by us and our subsidiaries is provided below.

**Generation projects***United Arab Emirates*

On December 27, 2009, following an international open bidding process, we entered into a prime contract with the Emirates Nuclear Energy Corporation (the ENEC), a state-owned nuclear energy provider of the United Arab Emirates (UAE), to design, build and help operate four civil nuclear power generation units to be located in Barakah, a region approximately 270 kilometers from Abu Dhabi, for the UAE's peaceful nuclear energy program. The contract amount for the project is US\$18.6 billion, with the term of the contract to last from December 27, 2009 to May 1, 2020. Under the contract, we and the subcontractors, some of which are our subsidiaries, are to perform various duties in connection with the project, including, among others, (i) designing and constructing four nuclear power generation units (each with a capacity of 1,400 megawatts), (ii) supplying nuclear fuel for three fuel cycles including initial loading (with each cycle currently projected to last for approximately 18 months), and (iii) providing technical support, training and education to the plant operation personnel. The target completion dates for the four units are set for May 2017, May 2018, May 2019 and May 2020. In addition, in order to foster a long-term strategic partnership and stable management of the units post-construction, we currently plan to make an equity investment in a project company established by ENEC. Details of such investment, including its size and structure, remain subject to further negotiation at this time, and we plan to make further disclosures regarding such investment in due course and as appropriate.

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On October 18, 2010, a consortium led by us was selected by Abu Dhabi Water & Electricity Authority ( ADWEA ), a state-run utilities provider in the United Arab Emirates, as the preferred bidder in an international bidding for the construction and operation of the combined-cycle natural gas-fired electricity generation facilities in Shuweihat, UAE with an expected aggregate generation capacity of 1,600 megawatts. On February 15, 2011, the consortium entered into a formal contract with ADWEA for the construction and operation of the generation facilities. This project involves three years of construction starting from March 2011, and 25 years of operation following its completion in March 2014. The total project cost is currently estimated to be US\$1.5 billion, of which approximately 20% will be financed through equity investments by the consortium members and the remaining 80% through project financing. Equity interests in the consortium are owned by ADWEA (60.0%), Sumitomo (20.4%) and us (19.6%). The total amount of our equity investment in the project is expected to be approximately US\$55.7 million, and we are participating in this project through a special purpose vehicle.

*China*

In April 2007, we formed a limited partnership with Shanxi International Electricity Group and Deutsche Bank in China to develop and operate power projects and coal mines in Shanxi province, China, which was approved by the Chinese government. As of December 31, 2012, total capital investment in these projects amounted to US\$ 1.3 billion. We are expected to participate in the operation of the project for a period of 50 years ending 2056. As of December 31, 2012, the total installed capacity was 5,907 megawatts and our equity ownership in the partnership was 34%.

In September 2005 and April 2006, we and China Datang Corporation of the People's Republic of China formed joint ventures to build four wind-powered generation projects in China, consisting of one project in Gansu province with total capacity of 49.3 megawatts and three projects in Inner Mongolia with total capacity of 139.4 megawatts. Since then, one project with capacity of 49.5 megawatts has been added in Gansu and thirteen projects with total capacity with 851.4 megawatts have been added in Inner Mongolia. In Liaoning province, we have developed five projects under an understanding with the government of Chaoyang City. In November 17, 2011, one project with total capacity of 45 megawatts was added to Inner Mongolia and one project with total capacity of 48 megawatts was added to Liaoning. The joint ventures were capitalized with RMB 271 million for the Gansu projects, RMB 3,297 million for the Inner Mongolia projects and RMB 678 million for the Liaoning projects. One-third of the investment was funded with equity contribution and the remaining two-thirds with debt. We and China Datang Corporation hold 40% and 60% of equity interests, respectively, in each of the aforementioned joint ventures and we are participating in the projects through our wholly-owned subsidiaries. Of the 25 wind power generation projects in the aforementioned areas in China, 20 projects with a total capacity of 919 megawatts are currently in operation. The other five projects are still in the preparation stage. The projects in operation are currently generating additional revenue from the clean development mechanism (CDM) business.

*Jordan*

In July 2008, a consortium consisting of us and Xenel was selected as the preferred bidder to build, own and operate a gas-fired power plant with installed capacity of 373 megawatts in Al Qatrana, near Amman, Jordan. Construction of the power plant began in May 2009 and was completed in December 2011. The total cost of construction was approximately US\$460 million. Operation of the power plant will be for a period of 25 years lasting until 2035. We and Xenel established a joint venture to oversee the project, with us and Xenel holding an 80:20 equity interest, respectively. We expect our total investment in the project to be approximately US\$96 million. We believe that this project will help us expand our business in the Middle East and position us as a competitive power producer in the global market.

On January 30, 2012, a consortium consisting of us, Mitsubishi Corporation and Wartsila Development & Financial Services was selected by National Electric Power Corporation, a state-run electricity provider in Jordan, to construct and operate a diesel engine power project in Almanakher with an expected total generation capacity of 573 megawatts. In August 2012 we established a special-purpose vehicle for the purpose of carrying

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out the project and on September 24, 2012, the consortium entered into a power purchase agreement with the National Electric Power Company. This project is comprised of three phases, each of which is expected to be completed by February 2014, July 2014 and September 2014, respectively. The project is expected to require a construction period of two years followed by an operational period of 25 years. The total project cost will be funded primarily through debt financing and the remaining will be financed through equity investments by the consortium members. We hold a 60% equity interest in the consortium.

On January 14, 2013, we were selected by Ministry of Energy and Mineral Resources of Jordan as a independent power producer to build, own and operate a wind farm with installed capacity of 90 megawatts in Fujeij, which is located on plateau 150km south of Amman, Jordan. This is the first of a series of projects to take place in Jordan, and we expect to build wind turbines with total capacity amounting up to 1,800 megawatts by 2020. The project involves 20 months of construction and 20 years of operation. Under the contract with Jordan's Ministry of Energy and Mineral Resources, we began construction in 2012 and expect to complete construction by 2015. The total project cost is approximately US \$187 million, of which approximately 42% will be financed through equity investments solely from us, and we will be the 100% equity holder of the project and the remaining 58% through debt. With this project, we expect to diversify our business portfolio in the Middle East from the existing nuclear and thermal power plants to renewable energy.

### *Philippines*

We are currently engaged in three major power projects in the Philippines: (i) a build, operate and transfer of a 1,200-megawatt combined-cycle power plant project in Ilijan, construction of which began in November 1997 and was completed in June 2002, and operation by us until 2022 (the project cost of the Ilijan project was US\$721 million, for which project finance on a limited recourse basis was provided), and (ii) ownership of a 39.6% equity interest in SPC Power Corporation, an independent power producer operating a 200.8-megawatt Naga power complex in Cebu, the Philippines, in which we initially acquired a 40.0% equity interest in February 2006 pursuant to a rehabilitation, operation, maintenance and management (ROMM) agreement, which was completed in March 25, 2012 followed by an approximately one year operation and maintenance period thereafter and (iii) a build, operate and own of a 200-megawatt CFBC coal power plant in Cebu for which construction began in February 2008 and was completed in May 2011, followed by operation thereof until 2036. The project cost of the Cebu project was US\$451 million, for which project finance on a limited recourse basis was provided. On October 24, 2011, the operation and maintenance service contract for the Malaya 650-megawatt oil-fired power plants expired.

### *Saudi Arabia*

On December 1, 2008, we formed a consortium with ACWA Power International of Saudi Arabia and submitted a bid for the 1,204 megawatt oil-fired power project in Rabigh, Saudi Arabia. In March 2009, we were selected as the preferred bidder against competitors that included Suez of Belgium, IP of Britain and Oger of Saudi Arabia and in July 11, 2009, we entered into a power purchase agreement with Saudi Electricity Company. Construction of the project was completed in April 2013, and we will participate in the operation of the plant for 20 years with an estimated project cost of US\$2.5 billion. We currently hold a 40.0% equity interest in the joint venture entity, Rabigh Electricity Company, which will oversee the project. On July 11, 2009, we entered into a power purchase agreement with Saudi Electricity Company.

### *Mexico*

On August 2, 2010, a consortium led by us was selected as the preferred bidder in an international auction for the construction and operation of the Norte II gas-fueled combined-cycle electricity generation facility in Chihuahua, Mexico, as ordered by the Comision Federal de Electricidad (CFE) of Mexico. This facility is expected to have a generation capacity of 433 megawatts, and the project will be undertaken on a build, own and operate basis. The total size of the project, which commenced in September 2010 and is expected to end in May 2038, is expected to be approximately US\$430 million. We hold a 56% interest in the consortium, whose

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other members are Samsung C&T (with a 34% interest) and Techint, a Mexico company (with a 10% interest). The consortium established a special purpose vehicle, KST Electric Power Company ( KST ), to act as the operating entity, and on September 7, 2010, KST entered into a power purchase agreement with CFE to construct and operate a combined-cycle power plant at Chihuahua in Mexico. In October 2010 KST was licensed by the Mexican government as an independent power producer, which allows it to produce and sell electricity to CFE during the specified contract period. Approximately 22.5% of the total project costs will be financed through equity investments by the consortium and the remaining 77.5% through project financing. Construction for the project, which began in January 2011, is expected to be completed by the end of 2013, followed by an operation period of 25 years. Our wholly-owned subsidiary, KEPCO Energy Service Company, will manage the project.

### *United States*

On October 31, 2011, a consortium consisting of our wholly-owned generation subsidiary, KOMIPO, and POSCO Engineering Co., was selected by the City of Boulder as the winning bidder in an auction for the construction and operation of a US\$1 billion solar power plant project in Nevada, the United States with generation capacity of 300-megawatts. The total size of the project is expected to be approximately US\$300 million, and KOMIPO expects to invest approximately US\$90 million and hold a 30% interest in the project. Construction of the project is expected to commence in September 2013 and be completed by December 2014, to be followed by 50 years of operation from 2015 to 2065.

In September 2012, our wholly-owned generation subsidiary, KOSEP completed construction of wind farm projects in Oklahoma, KODE Novus 1 LLC and KODE Novus 2 LLS. The two wind farm projects have a generation capacities of 80 megawatts and 40 megawatts, respectively, and KOSEP will operate the project for 20 years following the completion of construction in December 2012. The total project cost is expected to be US\$27.8 million, and KOSEP will hold 50% and 49% equity interest in each wind farm project, respectively.

### *India*

In March 2012, our wholly-owned generation subsidiary, KOWEPO, purchased a 40 % equity interest in Pioneer Gas Power for a purchase price of approximately US\$35 million to construct a 388-megawatt combined-cycle power plant in Maharashtra, India. The total size of the project, which commenced in January 2012, is expected to be approximately US\$250 million and we expect the power facility to begin commercial operation in 2014. KOWEPO will be responsible for operation and maintenance of the project.

### *Thailand*

On December 23, 2011, our wholly-owned generation subsidiary, KOMIPO, agreed to purchase a 29% equity interest in Navanakorn Electric Co., a Thailand power company, to jointly develop a combined-cycle power plant project in Thailand with generation capacity of 111 megawatts. The total project cost is currently estimated to be US\$187 million, and KOMIPO expects to invest approximately US\$15.6 million into this project. This project is expected to involve two years of construction starting from 2011 and 25 years of operation beginning in 2013.

On September 10, 2012, our wholly-owned generation subsidiary, KOMIPO, entered into an agreement with Toyo-Thai Corp. PCL to build and operate a 8 megawatt solar power plant in Ang Thong. The total project cost is currently estimated to be US\$26 million, and KOMIPO expects to invest approximately US\$0.9 million into this project for an equity interest of 10%. This project is expected to involve one year of construction starting from 2012 and 20 years of operation following the completion of construction in 2013.



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***Exploration and Production Projects******Indonesia***

On July 23, 2009, we, together with KOSEP, purchased a 1.5% equity interest in PT Adaro Energy Tbk ( Adaro ) for an aggregate purchase price of US\$47 million. Adaro is the second largest coal producer in Indonesia and the fifth largest coal exporter in the world, and has produced a total of 47 million tons of coal in 2012. As part of this investment, we are entitled to an annual coal procurement of 3 million tons per year. On August 19, 2010, we purchased a 20% equity interest in PT Bayan Resources Tbk ( Bayan ), an Indonesian mining company, for a purchase price of US\$518 million. Bayan is engaged in open cut mining of various coal qualities from mines located primarily in East and South Kalimantan, and has produced 16 million tons of coal in 2012. In addition, because Bayan owns the largest coal terminal and the only floating transfer-station in Indonesia, we believe that the acquisition will improve our access to much-needed transportation infrastructure within Indonesia. As part of this investment, we are entitled to an annual coal procurement of 2 million tons per year between 2012 and 2014 and 7 million tons per year beginning in 2015. We expect that both of our investments in Indonesia will help us secure a more stable supply of coal for power generation and help us hedge against fluctuations in fuel prices.

***Australia***

On January 2, 2008, a consortium consisting of Korea Resources Corporation, Hanwha Corporation, us and four of our wholly owned generation subsidiaries, namely, KOSEP, KOMIPO, KOWEPO and KOSPO, entered into an agreement with Felix Resources Limited, an Australian coal mining company, to develop the Moolarben coal mine located in Western Coal Fields, New South Wales, Australia. Under the terms of agreement, the consortium purchased 10% equity interest in the Moolarben project from Felix, of which we and our four generation subsidiaries own an aggregate of 5%, 80% equity interest of the project is held by Felix which was acquired by Yancoal Australia in December 2009. In 2012 Moolarben produced 5.5 million tons of coal, of which we and our four generation subsidiaries imported 2.5 million tons in 2012. We and our four generation subsidiaries have a coal off-take agreement for a total of 2.5 million tons of coal per annum.

On November 7, 2007, we and EWP entered into a share subscription agreement with Cockatoo Coal Limited ( Cockatoo ), a coal exploration and mining company located in Australia. We and EWP currently hold a 4.9% aggregate equity interest in Cockatoo after having made a total investment of A\$21.8 million. Cockatoo has several coal exploration projects in Queensland and New South Wales and one production project in Bowen Basin, Queensland, Australia.

On July 5, 2010, Kepco Australia Pty Ltd., our wholly-owned subsidiary, entered into an agreement with Anglo American Metallurgical Coal Assets Eastern Australia Ltd. to acquire 100% of the equity interest in Anglo Coal (Bylong) Pty Ltd., a wholly-owned subsidiary of Anglo, for a purchase price of A\$402 million. Bylong owns a bituminous coal mine in New South Wales, Australia. From this acquisition, we expect to secure an average of 5.1 million tons of bituminous coal per year from this mine during the period from 2016 to 2052. We and Cockatoo are currently undergoing a feasibility study for this project to explore and develop coal that is of export quality.

***Canada***

On June 15, 2009, we, together with KHNP, entered into a definitive agreement with Denison Mines Corporation ( Denison ) under which we currently hold a 14.9% equity interest in Denison Mines and remain the largest shareholder thereof. Under the terms of the agreement, we are entitled to procure up to approximately 20.0% of Denison's current annual uranium production, during the period from 2010 to 2015. For the period from 2016, we will also be entitled to procure up to 20.0% of Denison's annual uranium production provided that we beneficially own 10.0% or more of Denison's share capital. We procured 5.3 metric tons of uranium in 2012 and expect such amounts to increase in the near future. On July 2, 2012, we and KHNP acquired a 9.4% equity

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interest in Energy Fuel Inc. ( *EFI* ), a Denver-based uranium producer, from Denison. Such acquisition of shares was accomplished as a part of Denison's restructuring of its assets based in the United States, and *EFI* will assume the off-take contract between us and Denison. Following the off-take contract, we and *KHNP* will secure 1.6 tons of uranium per year until 2015, and will renegotiate the procurement amounts beginning in 2016.

On December 14, 2007, a consortium consisting of four Korean companies, namely us, Korea Resources Corporation, Hanwha Corporation and SK Innovation Co., Ltd., entered into an agreement with CanAlaska Uranium, Ltd., a uranium exploration company located in Canada ( *CanAlaska* ), to carry out a joint uranium exploration project to search for uranium deposits across mines in the Cree East area, Saskatchewan, Canada. Under the terms of the agreement, the consortium and *CanAlaska* each hold a 50.0% equity interest in the four-year project. The estimated capital expenditure for the project is C\$19 million, all of which is to be borne by the consortium through cash contributions over the term of the project. We have invested C\$4.75 million for which we have received a 12.5% equity interest in the project at the end of 2010. If additional capital expenditure is required, the amount in excess of C\$19 million is to be shared equally between *CanAlaska* and the consortium.

On January 30, 2008, a consortium consisting of us, *KHNP*, Korea Nuclear Fuel Co., Ltd., Hanwha Corporation and Gravis Capital Corp., a Canadian company, entered into an agreement with Fission Energy Corp., a uranium exploration company located in Canada, to carry out a joint uranium exploration project in Waterbury Lake, Saskatchewan, Canada. Under the terms of the agreement, each of the consortium and Fission Energy Corp. holds a 50% equity interest in the three-year project. The estimated capital expenditure for the project is C\$15 million, all of which is to be borne by the consortium through cash contributions over the term of the project. Under the terms of the agreement, the consortium is required to purchase a 50% equity interest in the project held by Fission Energy Corp. upon the final payment of cash contributions by the consortium during the term of the project. We have a 20% equity interest in the project and are expected to make estimated cash contributions of C\$6 million. During the three-year exploration period, which ended in April 2010, we discovered a high grade uranium mineralization after drilling 20 sites out of 97 sites. On August 16, 2010, the consortium entered into an additional agreement consisting of a limited partnership agreement, a shareholders agreement and an operating service agreement with Fission Energy Corp. and extended the exploration period to May 2013 in order to enlarge known mineralization and to produce a resource estimate. On April 12, 2011, Fission Energy Corp. exercised a Back-In Option under the limited partnership agreement dated August 16, 2010, and provided to the consortium consideration of C\$6 million. As a result of the exercise of the Back-In Option, the Fission Energy Corp.'s equity interest increased by 10% and the consortium's equity interest was reduced by 10%. Currently, Fission Energy Corp. and the consortium hold a 60% and 40% equity interest, respectively, in the special purpose entity established to operate this project, of which we hold a 16% equity interest. Subsequent to the exercise of the Back-In Option, the consortium and Fission Energy Corp. are required to make estimated cash contributions for the project on the basis of their respective equity interest.

*Niger*

On December 30, 2009, we and *KHNP*, our wholly-owned nuclear generation subsidiary, entered into a definitive agreement with Areva NC Expansion ( *ANCE* ) to purchase 1.0 million shares, or 15.0%, of the share capital of *ANCE* at an aggregate purchase price of EUR 170 million. We are entitled to procure up to approximately 10.0% of *Imouraren SA*'s annual uranium production in Niger, which is estimated to be 770 metric tons based on *ANCE*'s annual production plan during the period between 2015 and 2046. *Imouraren SA* is an *ANCE*-invested mine operating company. We and *KHNP* currently hold a 13.5% equity interest in *ANCE*.

*United States*

On February 1, 2012, we signed an agreement with Strathmore Minerals Corp. ( *Strathmore* ) to acquire approximately 14 million common shares of *Strathmore* for a purchase price of US\$8 million. As a result of this acquisition, we hold approximately 11.8% of the equity interests of *Strathmore*. Under this agreement, we have

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the right to purchase a portion of any future annual uranium production from Strathmore's properties in Gas Hills, Wyoming. The proceeds from our investment will be used for a Phase I exploration and development program. Upon completion of Phase I, we have the right to participate in the Phase II development based on an option to purchase up to a total 40% interest in the Gas Hills Properties for an additional investment of US\$32 million. With this investment, we will be able to off-take, for the duration of the project operation, 40% of approximately 400 tons of uranium that are currently expected to be produced from these properties.

*Nigeria*

In August 2005, a consortium consisting of us, Korea National Oil Corporation, a Government-controlled enterprise, and Daewoo Shipbuilding & Marine Engineering won a bid from the federal government of Nigeria for exploration and production of oil in two off-shore blocks. This consortium holds 60.0% of the equity interest in the special purpose vehicle established to carry out the project regarding these two blocks and we hold 8.8% of the interest in the consortium. In March 2006, the consortium entered into production sharing contracts with Nigerian National Petroleum Corporation in connection with this project. Under these contracts, if the consortium is successful in finding oil, it will be entitled to operate the related facilities for 20 years. However, in January 2009, the government of Nigeria unilaterally decided to void allocation of the oil blocks granted to the consortium based on a claim that the consortium failed to pay full amount of the consideration. Korea National Oil Corporation has filed a suit in the Nigerian court challenging this assertion. On August 20, 2009, the Federal High Court in Nigeria ruled that the Nigerian government illegally cancelled offshore exploration rights with respect to the deep sea oil exploration projects and banned the Nigerian government from further interfering with the consortium. The Nigerian government subsequently appealed the ruling. On April 26, 2012, the Nigerian Court of Appeal made a ruling on the appeal, stating that the Nigerian government has taken illegal steps in notifying us of its decision to cancel the consortium's exploration rights, but specified that the Federal High Court did not have proper jurisdiction to rule on this matter and further that additional agreements relating to discounts on the contract price were invalid. We are currently assessing the implications of this ruling on our Nigerian projects and our options in relation thereto. In the meanwhile, our projects in Nigeria remain on hold.

Another consortium consisting of us, KNOC and POSCO Engineering & Construction commenced the development of the downstream projects in Nigeria in 2006. While an agreement in-principle was entered into with the Nigerian authorities regarding the project development in October 2008, due to the court proceedings discussed above, these projects are currently on hold.

In October 2007, we invested US\$9.1 million in KEPCO Energy Resource Nigeria Ltd., or KERNL, a joint venture with Energy Resource Ltd., a Nigerian company. We currently own 30.0% of KERNL's equity capital. In May 2007, KERNL entered into a share purchase agreement with the Nigerian government for the purchase of 51.0% of the equity capital of Egbin Power Plc in Nigeria, which owns and operates the Egbin power plant, for a consideration of approximately US\$280 million. The acquisition remains to be completed.

*France*

On June 30, 2009, KHNP acquired a 2.5% equity interest in Societe D. Enrichissement Du Tricastin ( SET Holding ), which was established by Areva for the purpose of constructing and operating a uranium enrichment plant in Tricastin, France. KHNP has invested approximately 129 million Euros for the 2.5% equity interest, and COGAC SAS and a group led by Japan France Enrichment Investing and Kansai Electric Power Co. have acquired a 5% and 4.5% equity interest, respectively, in SET Holding. The maximum production capability of the uranium enrichment plant is eight million Separative Work Unit or, SWU. We believe that this investment will help us secure a more stable and economical supply of enriched uranium.

On August 2011, a consortium consisting of our wholly owned generation subsidiary KOSPO entered into an agreement with PT. Kedap Sayaaq to acquire a 10% equity interest in LongDaliq mines located in western Kalimantan, Indonesia. KOSPO is expected to acquire the equity interest within one year after procurement begins, and will secure up to three million tons of coal per year through a coal off-take agreement.

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On June 2012 our wholly owned generation subsidiary KOSPO entered into an agreement with Amber Energy Company, which is the operator of Decker and Black Cutte mines located in Brisbane, Australia. KOSPO is expected to convert convertible bonds to equity interest within one year period from the initial public offering, and will secure up to two million tons of coal per year through a coal off-take agreement.

### ***Transmission and Distribution Projects***

#### ***Dominican Republic***

In May 2011, we entered into an agreement with Corporación Dominicana de Empresas Eléctricas Estatales ( CDEEE ) to improve power distribution networks in three local districts in Dominican Republic. We will construct 1,294km of distribution lines and 12,644 electricity poles as part of the rehabilitation project. Total project cost is expected to be US\$46 million, and we will be in charge of design, procurement and construction. We expect to complete construction of such lines and poles by May 2013.

#### ***India***

In September 2011, a joint venture company established by us and Megha Engineering & Infrastructures Ltd. ( Megha ) entered into an agreement with M.P. Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore ( Paschim ) and M.P. Poorv Kshetra Vidyut Vitaran Co. Ltd., Jabalpur ( Poorv ), each a state-controlled electricity provider in India, to improve the overall power distribution network in Madhya Pradesh, India through a feeder separation program, including improvements of transmission lines and installation of power meters in seven rural areas. The joint venture company will be responsible for five of the projects in conjunction with Megha. In addition, we will be separately responsible for the remaining two projects. The total project cost is estimated to be US\$100 million, of which US\$32 million will be invested in the projects conducted by us and the remaining US\$68 million in the projects conducted in conjunction with Megha. Construction for the project began in September 2011 and is expected to be completed in 2013.

#### ***Kazakhstan***

On February 23, 2011, a consortium led by us, Hyundai Engineering & Construction and Hyundai Corporation won a power transmission and variation project from Kazakhstan Electricity Grid Operating Company ( KEGOC ), a Kazakhstan state-run company. This US\$100 million project will be conducted on an engineering, procurement and construction (EPC) basis, in connection with which are modernizing 17 substations in Actub, Kazakhstan. The project is expected to be completed by the end of 2013. We and Hyundai Corporation also won an additional US\$46 million project from KEGOC in March 1, 2011 to construct power transmission facilities in Moniak, Kazakhstan. The Moniak project, which involves the construction of 220kV transmission lines with a total length of 325km, was completed in November 2012.

#### ***North Korea***

##### ***Kaesong Complex***

Since 2005, we have provided electricity to the industrial complex located in Kaesong, North Korea, which was established pursuant to an agreement made during the summit meeting of the two Koreas in June 2000. The Kaesong complex is the largest economic project between the two Koreas and is designed to combine the Republic's capital and entrepreneurial expertise with the availability of land and labor of North Korea. In March 2005, we built a 22.9 kilovolt distribution line from Munsan substation in Paju, Gyeonggi Province to the Kaesong complex and became the first to supply electricity to pilot zones such as ShinWon Ebenezer. In April 2006, we started to construct a 154 kilovolt, 16 kilometer transmission line connecting Munsan substation to the Kaesong complex as well as Pyunghwa substation in the complex and began operations in May 2007.

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As of December 31, 2012, we supplied electricity to 248 units, including administrative agencies, support facilities and resident corporations, using a tariff structure identical to that of South Korea. No assurance can be given that we will not experience any material losses from this project as a result of, among other things, a project suspension or failure of the project as a result of a breakdown or escalation of hostilities in the relationship between the Republic and North Korea. See Item 3D. Risk Factors Risks Relating to Korea and the Global Economy Tensions with North Korea could have an adverse effect on us and the market value of our shares.

### *The Light Water Reactor Project*

The Korean Peninsula Development Organization, or KEDO, was chartered in March 1995 as an international consortium stipulated by the Agreed Framework, which was signed by the United States and North Korea in October 1994. KEDO signed an agreement with North Korea in December 1995 to construct two light water reactors in North Korea in return for certain nuclear nonproliferation steps to be taken by North Korea. KEDO designated us as its prime contractor to build two units of pressurized light water reactors with total capacity of 2,000 megawatts. We entered into a fixed price turnkey contract with KEDO, which became effective on February 3, 2000. However, when North Korea did not meet the conditions required for the continuation of the project, KEDO suspended the project in December 2003. Following the suspension, KEDO notified us of the termination of the project and the related turnkey contract between KEDO and us. On December 12, 2006, we entered into a transfer agreement with KEDO. According to the transfer agreement, we assumed substantially all of KEDO's rights and obligations related to the light water reactor outside of North Korea. In exchange, we waived the right to claim any expenses incurred and any potential claims by subcontractors to KEDO. Pursuant to the terms of the transfer agreement, we are required to report to KEDO the disposal or reuse of the transferred equipment. The gains from the transfer agreement will be shared with KEDO through further negotiations between the two parties.

We decided to dispose of transferred equipment in 2010, the majority of which we sold through an international open bidding process and negotiated agreements in 2011. In January 2012, we disposed of the remaining transferred equipment through a sales contract with KHNP for the remaining Nuclear Steam Supply System equipment. In March 2012, we submitted to KEDO the Final Report on Resale for the transferred equipment under the terms of the transfer agreement. In January 2013, KEDO gave us a final notice that all related terms and conditions of the transfer agreement were terminated.

## **Insurance**

We and our generation subsidiaries carry insurance covering against certain risks, including fire, in respect of key assets, including buildings, equipment, machinery, construction-in-progress and procurement in transit, as well as, in the case of KEPCO, directors' and officers' liability insurance. We and our generation subsidiaries maintain casualty and liability insurance against risks related to our business to the extent we consider appropriate. Other than KHNP, neither we nor our generation subsidiaries separately insure against terrorist attacks. These insurance and indemnity policies, however, cover only a portion of the assets that we own and operate and do not cover all types or amounts of loss that could arise in connection with the ownership and operation of these assets.

Substantial liability may arise from the operation of nuclear-fueled generation units and from the use and handling of nuclear fuel and possible radioactive emissions associated with such nuclear fuel. KHNP maintains property and liability insurance against risks of its business to the extent required by the related law and regulations or considered as appropriate and otherwise self-insures against such risks. KHNP carries insurance for its generation units against certain risks, including property damage, nuclear fuel transportation and liability insurance for personal injury and property damage. Each of KHNP's four power plant complexes has property damage insurance coverage of up to US\$1 billion per accident in respect of such plant complex, which includes property insurance coverage for acts of terrorism up to US\$300 million and for breakdown of machinery up to US\$300 million. KHNP maintains a nuclear liability insurance for personal injury and third-party property

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damage for a coverage of up to Won 50 billion per accident per plant complex, for a total coverage of Won 250 billion. Under the terms of an agreement between KHNP and the Korean Atomic Insurance Pool, this coverage can be extended from Won 50 billion to Won 100 to 120 billion (Won 100 billion for a plant complex with under four units, and additional Won 10 billion added per unit for a plant complex with more than four units). KHNP is also the beneficiary of a Government indemnity with respect to such risks for damage claims of up to Won 50 billion per nuclear plant complex, for a total coverage of Won 250 billion. Under the Nuclear Damage Compensation Act of 1969, as amended, KHNP is liable only up to 300 million Special Drawing Rights, or SDRs, which amounts to approximately US\$450 million, at the rate of 1 SDR = US\$1.50094 as posted on the Internet homepage of the International Monetary Fund on March 12, 2013, per single accident; provided that such limitation will not apply where KHNP intentionally causes harm or knowingly fails to prevent the harm from occurring. KHNP will receive the Government's support, subject to the approval of the National Assembly, if (i) the damages exceed the insurance coverage amount of Won 50 billion and (ii) the Government deems such support to be necessary for the purposes of protecting damaged persons and supporting the development of nuclear energy business. The amount of Government's support to KHNP for such qualifying nuclear incident would be 300 million SDRs, or the limit of KHNP's liability, minus the coverage amount of up to Won 50 billion as determined by the National Assembly. While KHNP carries insurance for its generation units and nuclear fuel transportation, the level of insurance is generally adequate and is in compliance with relevant laws and regulations, and KHNP is the beneficiary of a certain Government indemnity which covers a portion of liability in excess of the insurance, such insurance is limited in terms of amount and scope of coverage and does not cover all types or amounts of losses which could arise in connection with the ownership and operation of nuclear plants. Accordingly, material adverse financial consequences could result from a serious accident to the extent it is neither insured nor covered by the government indemnity.

See Item 3D. Risk Factors Risks Relating to KEPCO The amount and scope of coverage of our insurance are limited.

**Competition**

In July 2004, the Government adopted the Community Energy System to enable regional districts to source electricity from independent power producers to supply electricity without having to undergo the cost-based pool system used by our generation subsidiaries and most independent power producers to distribute electricity nationwide. A supplier of electricity under the Community Energy System must be authorized by Korea Electricity Commission and be approved by the minister of the Ministry of Trade, Industry and Energy in accordance with the Electricity Business Act. The purpose of this system is to decentralize electricity supply and thereby reduce transmission costs and improve the efficiency of energy use. These entities do not supply electricity on a national level but are licensed to supply electricity on a limited basis to their respective districts under the Community Energy System. As of March 31, 2013, 14 districts were using this system. The generation capacity installed or under construction of the electricity suppliers in these 14 districts amounted to approximately 1% of the aggregate generation capacity of our generation subsidiaries as of March 31, 2013. Since the introduction of the Community Energy System in 2004, a total of 31 districts have obtained the license to supply electricity through the Community Energy System, but 17 of such districts have reportedly abandoned plans to adopt the Community Energy System, largely due to the relatively high level of capital expenditure required, the rise in fuel costs and the lower-than-expected electricity output per cost. However, if the Community Energy System is widely adopted, it will erode our currently dominant market position in the generation and distribution of electricity in Korea, and may have a material adverse effect on our business, growth, revenues and profitability.

While preparing for the sixth Basic Plan, which was announced in February 2013, the Ministry of Trade, Industry and Energy accepted applications from private independent power producers, in addition to those from our generation subsidiaries, for construction of additional coal-fired power plants. Previously, private enterprises were not permitted to own and operate coal-fired power plants in Korea. Out of such applications by 15 independent power producers for construction of a total of 40 coal-fired generation units with aggregate

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generation capacity of 37,100 megawatts, the Government approved applications for the construction of six generation units with aggregate generation capacity of 6,000 megawatts as well as two additional generation units with aggregate generation capacity of 2,000 megawatts to provide for the contingency of failed or delayed construction of these six generation units. Construction for the six generation units is scheduled to be completed between 2018 and 2021. While it remains to be seen whether construction of these generation units will be completed as scheduled, if it were to be completed as scheduled or independent power producers are permitted to build additional generation capacity (whether coal-fired or not), our market share in Korea may decrease, which may have a material adverse effect on our results of operations and financial condition.

The electric power industry, which began its liberalization process with the establishment of our power generation subsidiaries in April 2001, may become further liberalized in accordance with the Restructuring Plan. See Item 4B. Business Overview Restructuring of the Electric Power Industry in Korea.

In the residential sector, consumers may use natural gas, oil and coal for space and water heating and cooking. However, currently there is no practical substitute for electricity for lighting and other household appliances, which is available on commercially affordable terms.

In the commercial sector, electricity is the dominant energy source for lighting, office equipment and air conditioning. For its other uses, such as space and water heating, natural gas and, to a lesser extent, oil, provide competitive alternatives to electricity.

In the industrial sector, currently there is no practical substitute for electricity in a number of applications, including lighting and power for many types of industrial machinery and processes that are available on commercially affordable terms. For other uses, such as space and water heating, electricity competes with oil and natural gas and potentially with gas-fired combined heating and power plants.

## **Regulation**

We are a statutory juridical corporation established under the KEPCO Act for the purpose of ensuring a stable supply of electric power and further contributing toward the sound development of the national economy through facilitating development of electric power resources and carrying out proper and effective operation of the electricity business. The KEPCO Act (including the amendment thereto) prescribes that we engage in the following activities:

1. development of electric power resources;
2. generation, transmission, transformation, distribution of electricity and other related business;
3. research and technology development related to the businesses mentioned in items 1 and 2;
4. overseas business related to the businesses mentioned in items 1 through 3;
5. investments or contributions related to the businesses mentioned in items 1 through 4;
6. businesses incidental to items 1 through 5;
7. development and operation of real estate holdings, subject to certain restrictions pursuant to the Presidential Decree of the KEPCO Act; and

8. other businesses entrusted by the Government.

The KEPCO Act currently requires that our profits be applied in the following order of priority:

first, to make up any accumulated deficit;

second, to set aside 20.0% or more of profits as a legal reserve until the accumulated reserve reaches one-half of our capital;



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third, to pay dividends to shareholders;

fourth, to set aside a reserve for expansion of our business;

fifth, to set aside a voluntary reserve for the equalization of dividends; and

sixth, to carry forward surplus profit.

Based on our consolidated financial results as of December 31, 2012, the legal reserve was Won 1,604 billion and the voluntary reserve was Won 25,961 billion, which consisted of reserve for business expansion of Won 20,144 billion, reserve for investment in social overhead capital of Won 5,277 billion, research for research and human development of Won 330 billion and reserve for equalizing dividends of Won 210 billion.

We are under the supervision of the Ministry of Trade, Industry and Energy, which has principal responsibility with respect to director and management appointments and rate approval.

Because the Government owns part of our capital stock, the Government's Board of Audit and Inspection may audit our books.

The Electricity Business Act requires that licenses be obtained in relation to the generation, transmission and distribution and sale of electricity, with limited exceptions. We hold the license to generate, transmit, distribute and sell electricity. Several other companies have received a license solely for power generation. See Item 4B. Business Overview Purchase of Electricity Cost-based Pool System. Each of our six generation subsidiaries holds an electricity generation license. As of March 31, 2013, we and 11 other electricity suppliers (we nationally and the 11 other suppliers for a total of 14 districts) had a license for the distribution of electricity under the Community Energy System as authorized by Korea Electricity Commission and approved by the Ministry of Trade, Industry and Energy in accordance with the Electricity Business Act. The Electricity Business Act also governs the formulation and approval of electricity rates in Korea. See Sales and Customers Electricity Rates above. In addition, while preparing for the sixth Basic Plan, which was announced in February 2013, the Ministry of Trade, Industry and Energy accepted applications from private independent power producers, in addition to those from our generation subsidiaries, for construction of additional coal-fired power plants. Previously, private enterprises were not permitted to own and operate coal-fired power plants in Korea. See Item 4B Business Overview Competition .

Our operations are subject to various laws and regulations relating to environmental protection and safety. See Community Programs above.

**Proposed Sale by Us of Certain Power Plants and Equity Interests**

The following table summarizes our current plans for sale of certain of our assets. The consummation of these plans, however, is subject to, among others, related Government policies and market conditions.

Equity holdings	Primary business	Fair value / book value as of December 31, 2012	Ownership percentage as of December 31, 2012 (in billions of Won)	Ownership percentage to be sold
KEPCO Plant Service & Engineering Co., Ltd.	Overhauling and repairing power plants	1,918	70.0%	10.0%
KEPCO Engineering & Construction Co., Inc	Designing and engineering power plants	2,006	74.9%	16.9%
LG Uplus Corp.	Electronics, telecommunications and Internet access services	300	8.8%	8.8%
	Electricity metering	49	29.0%	29.0%

Korea Electric Power Industrial  
Development Co., Ltd.

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### *KEPCO Plant Service & Engineering Co., Ltd.*

In December 2007, we completed the initial public offering of KEPCO Plant Service & Engineering Co., Ltd., or KPS, formerly our wholly-owned subsidiary, by listing approximately 20.0% of its equity interest on the Korea stock exchange for an aggregate consideration of Won 120 billion. Pursuant to the Third Phase of the Public Institution Reform Plan, we sold 5.0% of KPS shares through a block sale on September 11, 2012. We currently hold 70.0% equity interest in KPS.

### *KEPCO Engineering & Construction Co., Inc.*

Pursuant to the Third Phase of the Public Institution Reform Plan announced by the Government in August 2008, we conducted the initial public offering of Korea Engineering and Construction Co., Ltd., or KEPCO E&C formerly known as Korea Power Engineering Co., Ltd., in December 2009. We owned 97.9% of KEPCO E&C's shares prior to the initial public offering which declined to 77.9% following the initial public offering. Gross proceeds from the initial public offering were Won 165 billion. In furtherance of the Third Phase of the Public Institution Reform Plan, we sold 3.08% of our shares in KEPCO E&C on November 29, 2011 to third party investors for gross proceeds of approximately Won 101 billion. We currently hold 74.9% equity interest in KEPCO E&C.

### *LG Uplus Corp.*

We currently own a 8.8% equity interest in LG Uplus Corp., a telecommunications and Internet access service provider in Korea which is the surviving entity after the consolidation of LG Dacom, LG Telecom and LG Powercom in January 2010. Pursuant to the Fifth Phase of the Public Institution Reform Plan, we currently plan to sell our remaining equity interest in LG Uplus Corp. subject to prevailing economic and market conditions.

### *Korea Electric Power Industrial Development Co., Ltd.*

In February 2003, we privatized Korea Electric Power Industrial Development, or KEPID, formerly our wholly-owned subsidiary, by selling 51.0% of its equity interest to Korea Freedom Federation. Pursuant to the Fifth Phase of the Public Institution Reform Plan announced by the Government in January 2009, we sold 20% of the KEPID shares through additional listing and currently plan to sell the remaining 29.0% of KEPID's equity interest based on, among others, considerations of economic and market conditions.

## **Item 4C. Organizational Structure**

As of December 31, 2012, we had 81 subsidiaries, 40 associates and 32 joint ventures (not including any special purpose entities).

### **Subsidiaries**

Our wholly-owned six generation subsidiaries are KHNP, KOSEP, KOMIPO, KOWEPO, KOSPO and EWP. Our non-generation subsidiaries include KEPCO E&C, KEPCO KPS, KEPCO NF, and KEPCO KDN. For a full list of our subsidiaries, including foreign subsidiaries, and their respective jurisdiction of incorporation, please see Exhibit 8.1 attached to this report.

### **Associates and Joint Ventures**

An associate is an entity over which we have significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies. A joint venture is a contractual

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arrangement whereby we and other parties undertake an economic activity that is subject to joint control (namely when the strategic financial and operating policy decisions relating to the activities of the joint venture require the unanimous consent of the parties sharing control). Joint venture arrangements that involve the establishment of a separate entity in which each party has an interest are referred to as jointly controlled entities. The accounts of the associates and joint ventures are not required to be consolidated in our financial statements. We record our equity interests in these associates and joint ventures as investments under the equity method of accounting. See Note 17 of the notes to our consolidated financial statements. The table below sets forth for each of our principal associates and joint ventures the name and our percentage shareholding and their principal activities as of December 31, 2012.

	Ownership (Percent)	Principal Activities
<b>Associates:</b>		
Daegu Green Power Co., Ltd.	48.0	Power generation
Korea Gas Corporation	24.5	Importing and wholesaling LNG
Korea Electric Power Industrial Development Co., Ltd.	29.0	Electricity metering
YTN Co. Ltd.	21.4	Broadcasting
Cheongna Energy Co., Ltd.	30.0	Generating and distributing vapor and hot/cold water
Gangwon Wind Power Co., Ltd. <sup>(1)</sup>	15.0	Wind power generating
Hyundai Green Power Co. Ltd.	29.0	Generating electricity
AMEC Partners Korea <sup>(2)</sup>	19.0	Resources development
Hyundai Energy Co., Ltd.	29.0	Power generation
Ecollite Co. Ltd.	29.0	Artificial light-weight aggregate
Taebaek Wind Power Co., Ltd.	25.0	Construction and service
Alternergy Philippine Investments Corporation	50.0	Power generation
Muju Wind Power Co., Ltd.	25.0	Power generation
Pyeongchang Wind Power Co., Ltd.	25.0	Power generation
Daeryun Power co., Ltd.	19.8	Power generation
JinanJangsu Wind Power Co., Ltd	25.0	Power generation
Changjuk Wind Power Co., Ltd.	30.0	Power generation
Commerce and Industry Energy Co., Ltd.	29.5	Power generation
KNH Solar Co., Ltd.	27.0	Power generation
SPC Power Corporation	38.0	Power generation
Gemeng International Energy Group Co., Ltd.	34.0	Construction and operation of utility plant
PT.Cirebon Electric Power	27.5	Construction and operation of utility plant
KNOC Nigerian East Oil Co., Ltd. <sup>(3)</sup>	14.6	Oil and gas exploration in Nigeria
KNOC Nigerian West Oil Co., Ltd. <sup>(3)</sup>	14.6	Oil and gas exploration in Nigeria
Dolphin Property Limited <sup>(3)</sup>	15.0	Rental company
E-Power S.A	30.0	Operation of utility plant and sales of electricity
PT Wampu Electric Power	46.0	Power generation
PT. Bayan Resources TBK	20.0	Resources development
Korea Power Exchange <sup>(4)</sup>	100.0	Management of power market
S-Power Co., Ltd.	40.0	Power generation
Pioneer Gas Power Limited	22.7	Power generation
Eurasia Energy Holdings	40.0	Power generation and resources development
Xe-Pian Xe-Namnoy Power Co., Ltd.	25.0	Power generation
Busan Solar Co., Ltd. <sup>(2)</sup>	19.8	Power generation
Hadong Mineral Fiber Co., Ltd.	25.0	Recycling fly ashes
Green Biomass Co., Ltd.	34.0	Power generation

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	Ownership (Percent)	Principal Activities
Gumi-ochang Photovoltaic Power Co., Ltd. <sup>(1)</sup>	10.0	Power generation
Chungbuk Photovoltaic Power Co., Ltd. <sup>(1)</sup>	10.0	Power generation
Cheonan Photovoltaic Power Co., Ltd. <sup>(1)</sup>	10.0	Power generation
PT. Mutiara Jawa	29.0	Manufacturing and operating floating coal terminal
<b>Joint ventures:</b>		
Canada Korea Uranium Limited Partnership <sup>(5)</sup>	12.5	Resources development
KEPCO-Uhde Inc. <sup>(6)</sup>	66.0	Power generation
Eco Biomass Energy Sdn. Bhd.	61.5	Power generation
Datang Chaoyang Renewable Power Co., Ltd.	40.0	Power generation
Shuweiha Asia Power Investment B.V.	49.0	Holding company
Shuweiha Asia Operation & Maintenance Company <sup>(6)</sup>	55.0	Maintenance of utility plant
Waterbury Lake Uranium LP	39.8	Resources development
ASM-BG Investicii AD	50.0	Power generation
RES Technology AD	50.0	Power generation
KV Holdings, Inc.	40.0	Power generation
KEPCO SPC Power Corporation <sup>(6)</sup>	75.0	Construction and operation of utility plant
KEPCO Energy Resource Nigeria Limited	30.0	Holding company
Gansu Datang Yumen Wind Power Company Ltd.	40.0	Power generation
Datang Chifeng Renewable Power Co., Ltd.	40.0	Power generation
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	40.0	Power generation
Rabigh Electricity Company	40.0	Construction of utility plant and sales of electricity
Rabigh Operation & Maintenance Company	40.0	Maintenance of utility plant
Jamaica Public Service Company Limited	40.0	Power generation
KW Nuclear Components Co., Ltd.	43.0	R&D
Busan Shinho Solar power Co., Ltd.	25.0	Power generation
STX Electric Power Co., Ltd.	49.0	Power generation
Yeongnam Wind Power Co., Ltd.	49.0	Power generation
Global Trade Of Power System Co., Ltd.	29.0	Exporting products and technology of small or medium sized business by proxy
Expressway Solar-light Power Generation Co., Ltd	29.0	Power generation
Yeongam F1 Solar Power Plant	29.0	Power generation
KODE NOVUS 1 LLC	50.0	Power generation
KODE NOVUS 2 LLC	49.0	Power generation
Daejung Offshore Wind Power Co., Ltd	49.9	Power generation
Amman Asia Electric Power Company <sup>(6)</sup>	60.0	Power generation
KEPCO-ALSTOM Power Electronics Systems, Inc. <sup>(6)</sup>	51.0	R&D
Dongbu Power Dangjin Corporation	40.0	Power generation
Honam Wind Power Co., Ltd.	30.0	Power generation

*Notes:*

- (1) We hold less than 20% of the equity shares of this investment. However, we can exercise significant influence by virtue of our contractual right to appoint directors to the board of directors of the entity, and by strict decision criteria of our financial and operating policy of the board of directors.

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- (2) We hold less than 20% of the equity shares of this investment. However, we can exercise significant influence by virtue of our contractual right to appoint a director to the board of directors of the entity.
- (3) We hold less than 20% of the equity shares of these investments in associates. However, we can exercise significant influence by virtue of our contractual right to appoint one out of four members of the steering committee of the entity. Moreover, we have significant financial transactions with the associate which can affect our influence on the entity.
- (4) We hold 100% of the equity shares of the investments in associate. However, the Government regulates our ability to make operating and financial decisions over the entity, as the Government requires maintaining arms-length transactions between KPX and our other subsidiaries. We can exercise significant influence by our right to nominate directors to the board of directors of the entity.
- (5) We hold less than 20% of the equity shares of the entity. However, we have joint control on the associates by virtue of our contractual right to appoint directors to the board of directors of the entity, and by strict decision criteria of our financial and operating policy of the board of directors.
- (6) We hold more than 50% of the equity shares of the entities. However, according to the shareholder agreement, all critical financial and operating decisions must be agreed to by all ownership parties. For these reasons, the entities are classified as joint ventures.

**Item 4D. Property, Plant and Equipment**

Our property consists mainly of power generation, transmission and distribution equipment and facilities in Korea. See Item 4B. Business Overview Power Generation, Transmission and Distribution and Capital Investment Program. In addition, we own our corporate headquarters building complex at 167 Samseong-dong, Gangnam-gu, Seoul 135-791, Korea. On June 24, 2005, the Government announced its policy to relocate the headquarters of government-invested enterprises, including us and certain of our subsidiaries, out of the Seoul metropolitan area to other provinces in Korea. As of December 31, 2012, the net book value of our property, plant and equipment was Won 122,376 billion. As of December 31, 2012, investment property, which is accounted for separately from our property, plant and equipment, amounted to Won 590 billion. No significant amount of our properties is leased. There are no material encumbrances on our properties, including power generation, transmission and distribution equipment and facilities.

**ITEM 4A. UNRESOLVED STAFF COMMENTS**

We do not have any unresolved comments from the SEC staff regarding our periodic reports under the Securities Exchange Act of 1934, as amended (the Exchange Act ).

**ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

*You should read the following discussion on our operating and financial review and prospects together with our consolidated financial statements and the related notes which appear elsewhere in this report. Our results of operations, financial condition and cash flows may materially change from time to time, for reasons including various policy initiatives (including changes to the Restructuring Plan) by the Government in relation to the Korean electric power industry, and accordingly our historical performance may not be indicative of our future performance. See Item 4B. Business Overview Restructuring of the Electric Power Industry in Korea and Item 3D. Risk Factors The Government may adopt policy measures to substantially restructure the Korean electric power industry or our operational structure, which may have a material adverse effect on our business, operations and profitability.*

**Item 5A. Operating Results**

**Overview**

As we are a predominant market participant in the Korean electric power industry, our business is heavily regulated by the Government, including with respect to the rates we charge to customers for the electricity we

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sell. In addition, our business requires a high level of capital expenditures for the construction of electricity generation, transmission and distribution facilities and is subject to a number of variable factors, including demand for electricity in Korea and fluctuations in fuel costs, which are in turn impacted by the movements in the exchange rates between the Won and other currencies.

Under the Electricity Business Law and the Price Stabilization Act, the Government generally establishes electricity rates at levels that are expected to permit us to recover our operating costs attributable to our basic electricity generation, transmission and distribution operations in addition to receiving a fair investment return on capital used in those operations. For a detailed description of the fair investment return, see Item 4B. Business Overview Sales and Customers Electricity Rates. We have recorded operating income for every fiscal year since our inception in 1981; however, since 2008, we have recorded operating losses and/or net losses due to substantial increases in fuel prices which have more than offset the effect from the increases in the electricity tariff rates we charge to our customers.

We estimate that fuel prices will continue to be volatile and accordingly have a material adverse effect on our results of operations and profitability in 2013 and beyond. In part to address these concerns, the Government from time to time increases the electricity tariff rates (most recently in August 2012 and January 2013). However, such increases may be insufficient to fully offset the adverse impact from the rise in the fuel costs, and since such increases typically require lengthy public deliberations in order to be implemented, the tariff increases often occur with a significant time lag and as a result our results of operations and cash flows may suffer.

Further to the announcement by the Ministry of Trade, Industry and Energy in February 2010, a new electricity tariff system went into effect on July 1, 2011. Previously, the electricity tariff consisted of two components: (i) base rate and (ii) usage rate based on the cost of electricity and the amount of electricity consumed by the end-users. Under the new tariff system, the electricity tariff is also to have a third component of fuel cost-adjusted rate, which is to be added to or subtracted on a monthly basis two months later from the sum of the base rate and the usage rate based on the three-month average movements of coal, LNG and oil prices. The new tariff system is intended to provide greater financial stability and ensure a minimum return on investment to electricity suppliers, such as us. However, due to inflationary and other policy considerations relating to protecting the consumers from sudden and substantial rises in electricity tariff, the Ministry of Trade, Industry and Energy issued a hold order on July 29, 2011 suspending our billing and collecting of the fuel cost pass-through adjustment ( FCPTA ) amount. The hold order remains in effect to-date. In addition, on January 11, 2013, we were informed by the Ministry of Trade, Industry and Energy that the fuel cost-based tariff adjustment system would need to be reassessed in light of the prolonged unbilled period after the announcement of such system. There is no assurance as to when the Government will lift the hold order and allow us to bill and collect the accumulated FCPTA amount or whether the new tariff system will undergo other amendments to the effect that it will not fully cover our fuel and other costs on a timely basis or at all, or will not have unintended consequences that we are not presently aware of. Any such development may have a material adverse effect on our business, financial condition, results of operations and cash flows. See Item 4B. Business Overview Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment , Item 4B. Business Overview Sales and Customers Electricity Rates , Item 4B. Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment, Item 5B. Operating and Financial Review and Prospects Overview, Item 5B. Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment and Notes 2, 15 and 36 to the notes to our consolidated annual financial statements.

The results of our operations are largely affected by the following factors:

demand and supply of electricity;

electricity rates we charge to our customers;

fuel costs; and

the exchange rates of Won against other foreign currencies, in particular the U.S. dollar.

**Table of Contents*****Demand and Supply of Electricity***

Our sales are largely dependent on the level of demand for electricity in Korea and the rates we charge for the electricity we sell.

Demand for electricity in Korea grew at a compounded average rate of 4.9% per annum for the five years ended December 31, 2012. According to The Bank of Korea, the compounded growth rate for real gross domestic product, or GDP, was approximately 2.9% during the same period. The GDP increased, on a year-on-year basis, by 6.2% in 2010, by 3.6% in 2011 and by 2.0% in 2012.

The table below sets forth, for the periods indicated, the annual rate of growth in Korea's gross domestic product, or GDP, and the annual rate of growth in electricity demand (measured by total annual electricity consumption).

	2008	2009	2010	2011	2012
Growth in GDP (at 2008 constant prices)	2.3%	0.3%	6.2%	3.6%	2.0%
Growth in electricity consumption	4.5%	2.4%	10.1%	4.8%	2.5%

Demand for electricity may be categorized either by the type of its usage or by the type of customers. The following describes the demand for electricity by the type of its usage, namely, industrial, commercial and residential:

The industrial sector currently represents the largest segment of electricity consumption in Korea. While demand from the industrial sector has increased steadily as a result of the economic expansion in Korea, it has gradually declined as a percentage of total demand from 57.3% in 2000 to 55.3% in 2012. Demand from the industrial sector was 258,102 gigawatt hours in 2012, representing an increase by 2.6% from 2011, largely due to the continued export-led growth of the Korean economy.

Demand for electricity from the commercial sector has increased in recent years, both in absolute terms and as a percentage of total demand, as a result of the continuing growth of the service sector in the Korean economy, which has led to an increased number of office buildings, office automation and use of air conditioners. Growth in the commercial sector is also attributable to the construction industry and the expansion of the leisure and distribution industries. Demand from the commercial sector was 101,593 gigawatt hours in 2012, representing an increase by 2.1% from 2011, largely as a result of the increased commercial activities in Korea, which was partially offset by weakened consumer sentiment in light of the enhanced uncertainties in the global economy.

Demand for electricity from the residential sector was 65,484 gigawatt hours in 2012, representing an increase by 3.1% from 2011. In 2012, we provided electricity to approximately 20 million households, which represent substantially all of the households in Korea. Demand from the residential sector is largely dependent on population growth and the increased use of air conditioners, heating and other electrical appliances. Residential demand for electricity increased in 2012, largely due to increased usage of heating and air conditioning.

For a discussion on demand by the type of customers, see Item 4B. Business Overview Sales and Customers Demand by the Type of Usage.

As for the supply of electricity in Korea, we have since our inception had, and, subject to any substantial future developments in respect of the Restructuring Plan, expect to have, the predominant market share, in terms of generation of electricity as well as transmission and distribution thereof to the end-users. As for transmission and distribution of electricity, we accounted for approximately 99% of the market share, in terms of transmission and distribution capacity, in each of the past three years. While as of March 31, 2013, there were 11 other entities in Korea that are also licensed to supply electricity under the Community Energy System, these suppliers are, by the terms of their licenses, permitted to supply electricity to limited geographical areas, and their aggregate



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transmission and distribution capacity accounted for approximately 1% of our market share. Furthermore, since the introduction of the Community Energy System in 2004, a total of 31 districts have obtained the license to supply electricity through the Community Energy System, but 17 of such districts have reportedly abandoned plans to adopt the Community Energy System, largely due to the relatively high level of capital expenditure required, the rise in fuel costs and the lower-than-expected electricity output per cost. See Item 4B. Business Overview Transmission and Distribution.

As for the generation of electricity that we purchase for transmission and distribution from the market to our end-users, our generation subsidiaries accounted for 91.5%, 88.9% and 90.9% in 2010, 2011 and 2012, respectively, with the remainder accounted for by independent power producers. We currently expect that our market dominance in the supply of electricity in Korea will continue for the foreseeable future, absent any substantial changes to the Restructuring Plan or other policy initiatives by the Government in relation to the Korean electric power industry, or an unexpected proliferation of districts opting for supply of electricity through the Community Energy System. In addition, while preparing for the sixth Basic Plan, which was announced in February 2013, the Ministry of Trade, Industry and Energy accepted applications from private independent power producers, in addition to those from our generation subsidiaries, for construction of additional coal-fired power plants. Previously, private enterprises were not permitted to own and operate coal-fired power plants in Korea. Out of such applications by 15 independent power producers for construction of a total of 40 coal-fired generation units with aggregate generation capacity of 37,100 megawatts, the Government approved applications for the construction of six generation units with aggregate generation capacity of 6,000 megawatts as well as two additional generation units with aggregate generation capacity of 2,000 megawatts to provide for the contingency of failed or delayed construction of these six generation units. Construction for the six generation units is scheduled to be completed between 2018 and 2021. While it remains to be seen whether construction of these generation units will be completed as scheduled, if it were to be completed as scheduled or independent power producers are permitted to build additional generation capacity (whether coal-fired or not), our market share in Korea may decrease, which may have a material adverse effect on our results of operations and financial condition.

***Electricity Rates***

Under the Electricity Business Law and the Price Stabilization Act, electricity rates are established at levels that will permit us to recover our operating costs attributable to our basic electricity generation, transmission and distribution operations in addition to receiving a fair investment return on capital used in those operations. For further discussion of fair investment return, see Item 4B. Business Overview Sales and Customers Electricity Rates.

From time to time, our actual rate of return on invested capital may differ significantly from the fair rate of return on invested capital assumed for the purposes of electricity tariff approvals, for reasons, among others, related to movements in fuel prices, exchange rates and demand for electricity that differs from what is assumed for determining our fair rate of return. For example, between 1987 and 1990, the actual rate of return was above the fair rate of return due to declining fuel costs and rising demand for electricity at a rate not anticipated for purposes of determining our fair rate of return. Similarly, depreciation of the Won against the U.S. dollar accounted for our actual rates of return being lower than the fair rate of return for the period from 1996 to 2000. For the period since 2006, our actual rate of return has been lower than the fair rate of return largely due to a general increase in fuel costs and additional facility investment costs incurred, the effects of which were not offset by timely increases in our tariff rates. Partly in response to the variance between our actual rates of return and the fair rate of return, the Government from time to time adjusts the electricity tariff rates, but there typically is a significant time lag for the tariff adjustment as such adjustment requires a series of deliberative processes and administrative procedures and the Government also has to consider other policy considerations, such as the inflationary effect of overall tariff increases and the efficiency of energy use through sector-specific tariff increases. Furthermore, there is no assurance that the tariff adjustments will have the desired effect at a level anticipated or at all, or that they will not have unintended adverse consequences.

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Recent adjustments to the electricity tariff rates by the Government involve the following, which were made principally in response to the rising fuel prices which hurt our profitability as well as to encourage a more efficient use of electricity by the different sectors:

effective August 1, 2010, a 3.5% overall increase in our average tariff rate, consisting of increases in the residential, educational, industrial, street lighting and overnight power usage tariff rates by 2.0%, 5.9%, 5.8%, 5.9% and 8.0%, while making no changes to the commercial and agricultural tariff.

effective August 1, 2011, a 4.9% overall increase in our average tariff rate, consisting of increases in the industrial, commercial, residential, educational, street lighting and overnight power usage tariff rates by 6.1%, 4.4%, 2.0%, 6.3% and 8.0%, while making no changes to the agricultural tariff.

effective December 5, 2011, a 4.5% overall increase in our average tariff rate, consisting of increases in the industrial, commercial, educational and street lighting tariff rates by 6.5%, 4.5%, 4.5% and 6.5%, while making no changes to the residential, agricultural and overnight power usage tariff.

effective August 6, 2012, a 4.9% overall increase in our average tariff rate, consisting of increases in the residential, commercial, educational, industrial, street lighting, agricultural and overnight power usage tariff rates by 2.7%, 4.4%, 3.0%, 6.0%, 4.9%, 3.0% and 4.9%, respectively.

effective January 14, 2013, a 4.0% overall increase in our average tariff rate, consisting of increases in the residential, commercial, educational, industrial, street lighting, agricultural and overnight power usage tariff rates by 2.0%, 4.6%, 3.5%, 4.4%, 5.0%, 3.0% and 5.0%, respectively.

Our electricity rates are subject to the fuel cost pass-through tariff adjustment system. For background and recent developments relating to such system, see Item 4B. Business Overview Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment , Item 4B.

Business Overview Sales and Customers Electricity Rates , Item 4B. Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment, Item 5B. Operating and Financial Review and Prospects Overview , Item 5B. Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment and Notes 2, 15 and 36 to the notes to our consolidated annual financial statements.

### ***Fuel Costs***

Our results of operations are also significantly affected by the cost of producing electricity, which is subject to a variety of factors, including, in particular, the cost of fuel.

Cost of fuel in any given year is a function of the volume of fuels consumed and the unit fuel cost for the various types of fuel used for generation of electricity (i) by our generation subsidiaries or (ii) by independent power producers from whom we purchase electric power. A significant change in the unit fuel costs materially impacts the costs of electricity generated by our generation subsidiaries (which costs form part of our power generation, transmission and distribution expenses) as well as, to our knowledge, the costs of electricity generated by the independent power producers that sell their electricity to us (which costs form part of our purchased power expenses). We believe that unit fuel costs materially impact the total fuel costs for both generated power and purchased power, but we are unable to provide a comparative analysis since the unit fuel cost information for purchased power is proprietary information of the independent power producers, who use a significantly different composition of the types of fuels for power generation.

Fuel costs accounted for 46.8%, 49.7% and 48.5% of our sales and 51.1%, 50.2% and 49.2% of our cost of sales in 2010, 2011 and 2012, respectively. Substantially all of the fuel (except for anthracite coal) used by our generation subsidiaries is imported from outside of Korea at prices determined in part by prevailing market prices in currencies other than Won. In addition, our generation subsidiaries purchase a significant portion of their fuel requirements under contracts with limited quantity and duration. Pursuant to the terms of our long-term supply



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contracts, prices are adjusted from time to time subject to prevailing market conditions. See Item 4B. Business Overview Fuel.

Uranium accounted for 34.1%, 34.9% and 33.6% of our fuel requirements in 2010, 2011 and 2012, respectively. Coal accounted for 45.5%, 45.0% and 44.2% of our fuel requirements in 2010, 2011 and 2012, respectively. LNG accounted for 16.6%, 16.7% and 17.6% of our fuel requirements in 2010, 2011 and 2012, respectively. Oil accounted for 2.7%, 2.4% and 3.5% of our fuel requirements in 2010, 2011 and 2012, respectively. In each case, the fuel requirements are measured by the amount of electricity generated by us and do not include electricity purchased from third parties. In order to ensure stable supplies of fuel materials, our generation subsidiaries enter into long-term and medium-term contracts with various suppliers and supplement such supplies with fuel materials purchased on spot markets.

In the past few years, the price of bituminous coal fluctuated significantly. For example, the price of bituminous coal increased substantially in the first half of 2008, after which it gradually decreased. However, it has increased again significantly from the second half of 2009. See Item 4B. Business Overview Fuel. In 2012, approximately 80.3% of the bituminous coal requirements of our generation subsidiaries were purchased under long-term contracts and 19.7% purchased on the spot market. The average free on board Newcastle coal 6300 GAR spot price index published by Platts was US\$96.2 per ton in 2012 and slightly decreased to US\$92.3 per ton as of April 9, 2013. If the bituminous coal price were to sharply rise, our generation subsidiaries may not be able to secure their respective bituminous coal supplies at prices commercially acceptable to them. In addition, any significant interruption or delay in the supply of fuel, bituminous coal in particular, from any of their suppliers could cause our generation subsidiaries to purchase fuel on the spot market at prices higher than contracted, resulting in an increase in fuel cost.

Nuclear power has a stable and relatively low-cost structure and forms a significant portion of electricity supplied in Korea. Due to significantly lower fuel costs as compared with those of conventional power plants, our nuclear power plants generally operate at full capacity with only routine shutdowns for fuel replacement and maintenance. In case of shortage in electricity generation resulting from stoppages of the nuclear power plants, we seek to make up for such shortage with power generated by our non-nuclear power plants.

Because the Government heavily regulates the rates we charge for the electricity we sell (see Item 4B. Business Overview Sales and Customers Electricity Rates), our ability to pass on such cost increases to our customers is limited. For example, since 2008 we recorded operating loss and/or net loss largely due to sustained rises in fuel costs that were neither timely nor sufficiently offset by a corresponding rise in electricity tariff rates. If the fuel prices remain at the current level or continue to increase and the Government, out of concern for inflation or for other reasons, maintains the current level of electricity tariff, does not increase it to a level to sufficiently offset the impact of rising fuel prices or prolongs the hold-order on the fuel cost pass-through adjustment system or cancel or modify it to the effect that we are prevented from timely billing and collection of the fuel cost pass-through adjustment amount, the price increases will negatively affect our profit margins or even cause us to suffer net losses and our business, financial condition, results of operations and cash flows would suffer.

***Movements of the Won against the U.S. Dollar and Other Foreign Currencies***

Korean Won has fluctuated significantly against major currencies in recent years. For fluctuations in exchange rates, see Item 3A. Selected Financial Data Currency Translations and Exchange Rates. In particular, Korean Won underwent substantial fluctuations during the recent global financial crisis, and has remained subject to significant volatility even in its aftermath. The Noon Buying Rate per one U.S. dollar increased from Won 1,130.6 on December 31, 2010 to Won 1,158.5 on December 31, 2011 and decreased to Won 1,063.2 on December 31, 2012, and was Won 1,136.8 on April 5, 2013 as a result of the escalation in tension with North Korea. While the Won generally appreciated against U.S. dollar and other foreign currencies in 2012, Won also depreciates from time to time, including in recent months, and such depreciation may result in

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a significant increase in the cost of fuel materials and equipment purchased from overseas as well as the cost of servicing our foreign currency debt. As of December 31, 2012, approximately 21.4% of our long-term debt (including the current portion but excluding issue discounts and premium) before accounting for swap transactions was denominated in foreign currencies, principally in U.S. dollar. The prices for substantially all of the fuel materials and a significant portion of the equipment we purchase are stated in currencies other than Won, generally in U.S. dollars. Since substantially all of our revenues are denominated in Won, we must generally obtain foreign currencies through foreign-currency denominated financings or from foreign currency exchange markets to make such purchases or service such debt, fulfill our obligations under existing overseas investments and make new overseas investments. As a result, any significant depreciation of Won against U.S. dollar or other foreign currencies will have a material adverse effect on our profitability and results of operations. See Item 3D. Risk Factors Risks Relating to KEPCO The movement of Won against the U.S. dollar and other currencies may have a material adverse effect on us.

**Recent Accounting Changes**

***Amendments to IFRS that are mandatorily effective for the year ended December 31, 2012***

The following amendments to IFRS have been applied in the current year and have affected the amounts reported in these financial statements.

*Amendments to IFRS 7 Financial Instrument Disclosures*

We may have transferred financial assets in such a way that part or all of the transferred financial assets do not qualify for derecognition. The amendments to IFRS 7 increase the disclosure requirements for transactions involving transfers of financial assets in order to provide greater transparency around the nature of the transferred assets, the nature of the risks and rewards of ownership to which we are exposed, description of the nature of the relationship between the transferred assets and the associated liabilities and carrying value of the associated liabilities. When we continue our involvement on the transferred assets although the transferred assets are derecognized in our entirety, we disclose the carrying amounts of the transferred assets and the associated liabilities and information showing how the maximum exposure to loss. The amendments do not have impact on our financial statements.

*Amendments to IAS 12 Deferred Tax Recovery of Underlying Assets*

We have applied the amendments to IAS 12 *Income Taxes* in the current year. Under the amendments, investment properties that are measured using the fair value model in accordance with IAS 40 *Investment Property* are presumed to be recovered entirely through sale for the purpose of measuring deferred taxes unless the presumption is rebutted. Also, we recognize deferred income tax assets and deferred income tax liabilities on investment properties that were revalued in accordance with IFRS 16 *Property, Plant and Equipments*, under a business model whose objective is to consume substantially all of the economic benefits embodied through sales. The amendments do not have impact on our financial statements.

*Amendments to IFRIC 14 The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interpretation*

These amendments require us to recognize net defined benefit liability (asset), deficit or surplus, adjusted for any effect of limiting a net defined benefit asset to the asset ceiling. The amendments do not have impact on our financial statements.

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### ***New and revised IFRS that have been issued and early adopted but are not yet effective***

#### *Amendments to IAS 1 Presentation of Financial Statements*

The amendments to IAS 1 require items of other comprehensive income to be grouped into two categories in the other comprehensive income section: (a) items that will not be reclassified subsequently to profit or loss and (b) items that may be reclassified subsequently to profit or loss when specific conditions are met. The accompanying financial statements have been prepared with the application of the early adopted amendments.

Amendments to IAS 1 *Presentation of Financial Statements* (as part of the Annual Improvements to IFRS 2009-2011 cycle issued in May 2012)

We have applied the amendments to IAS 1 as part of the Annual Improvements to IFRS 2009-2011 Cycle in advance of the effective date (annual periods beginning on or after January 1, 2013).

IAS 1 requires an entity that changes accounting policies retrospectively, or makes a retrospective restatement or reclassification to present a statement of financial position as at the beginning of the preceding period (third statement of financial position). The amendments to IAS 1 clarify that an entity is required to present a third statement of financial position only when the retrospective application, restatement or reclassification has a material effect on the information in the third statement of financial position and that related notes are not required to accompany the third statement of financial position. In accordance with the amendments to IAS 1, we have not presented a third statement of financial position and related notes as of January 1, 2011 in relation to the retrospective reclassification as further described in Notes 2-24.

### ***New and revised IFRS that have been issued but are not yet effective and not have been early adopted.***

#### *Amendments to IAS 19 Employee Benefits*

The amendments to IAS 19 require the recognition of changes in defined benefit obligations and in fair value of plan assets when they occur, and hence eliminate the corridor approach permitted under the previous version of IAS 19 and the accelerate the recognition of past service costs. The amendments to IAS 19 are effective for annual periods beginning on or after January 1, 2013. We are in the process of evaluating the impact on the financial statements upon the adoption of amendments.

#### *Amendments to IAS 32 Offsetting Financial Assets and Financial Liabilities and the related disclosures*

The amendments to IAS 32 clarify existing application issue relating to the offset of financial assets and financial liabilities requirements. Specifically, the amendments clarify the meaning of currently has a legally enforceable right of set-off and simultaneous realization and settlement .

Our right to offset must not be conditional on the occurrence of future events but enforceable anytime during the contract periods, during the ordinary course of business with counterparty, a default of counterparty and master netting agreement or in some forms of non-recourse debt. The amendments to IAS 32 are effective for annual periods beginning on January 1, 2014. We are in the process of evaluating the impact on the financial statements upon the adoption of amendments.

#### *Amendments to IFRS 7 Financial Instruments: Disclosures*

The amendments to IFRS 7 are mainly focusing on presentation of the offset between financial assets and financial liabilities. The amendments to IFRS 7 are effective for annual periods beginning on or after January 1, 2013. We are in the process of evaluating the impact on the financial statements upon the adoption of amendments.

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### *IFRS 10 Consolidated Financial Statements*

The amendments to IFRS 10 include a new definition of control that contains three elements: (a) power over an investee, (b) exposure, or rights, to variable returns from its involvement with the investee, and (c) the ability to use its power over the investee to affect the amount of the investor's return. This standard is effective for annual periods beginning on or after January 1, 2013. We are in the process of evaluating the impact on the financial statements upon the adoption of amendments.

### *IFRS 11 Joint Arrangement*

IFRS 11 deals with how a joint arrangement of which two or more parties have joint control should be classified. Under IFRS 11, joint arrangements are classified as joint operations or joint ventures, depending on the rights and obligations of the parties to the arrangements. If we are to participate as a joint operator, we will recognize assets, liabilities, revenues and expenses proportionally to our investment and if we are to participate as part of a joint venture, we will account for that investment using the equity method accounting. This standard is effective for annual periods beginning on or after January 1, 2013. We are in the process of evaluating the impact on the financial statements upon the adoption of amendments.

### *IFRS 12 Disclosure of Interest in Other Entities*

IFRS 12 is a disclosure standard and is applicable to entities that have interests in subsidiaries, joint arrangements, associates, or unconsolidated structured entities. This standard is effective for annual periods beginning on or after January 1, 2013. We are reviewing the impact of the application of this standard on our financial statements.

### *IFRS 13 Fair Value Measurement*

IFRS 13 establishes a single source of guidance for fair value measurements and disclosure about fair value measurements. The standard defines fair value, establishes a framework for measuring fair value, and requires disclosures about fair value measurements. This standard is effective for annual periods beginning on or after January 1, 2013. We are reviewing the impact of the application of this standard on the financial statements.

### *IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine*

The interpretation provides accounting for the costs from waste removal activity (stripping). This interpretation is effective for annual periods beginning on or after January 1, 2013. We do not anticipate that the application of the interpretation will have no effect to our financial statements as we do not engage in such activities.

## **Critical Accounting Policies**

The following discussion and analysis is based on our consolidated financial statements. The fundamental objective of financial reporting is to provide useful information that allows a reader to comprehend our business activities. To aid in that understanding, our management has identified critical accounting policies.

We make a number of estimates and judgments in preparing our consolidated financial statements. These estimates may differ from actual results and have a significant impact on our recorded assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. We consider an estimate to be a critical accounting estimate if it requires a high level of subjectivity or judgment, and a significant change in the estimate would have a material impact on our financial condition or results of operations. Further discussion of these critical accounting estimates and policies is included in the notes to our consolidated financial statements.

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The accounting policies set out below have been applied consistently by us and our subsidiaries to all periods presented in these consolidated annual financial statements and in preparing the opening IFRS statement of financial position as of January 1, 2010 for the purposes of the transition from previous GAAP (Korean GAAP) to IFRS, unless otherwise indicated.

### ***Electricity Sales***

The Government approves the rates we charge to customers. Our utility rates are designed to recover our reasonable costs plus a fair investment return. Our power generation subsidiaries' rates are determined in the market.

We recognize electricity sales revenue based on power sold (transferred to the customer) up to the reporting date. To determine the amount of power sold, we estimate reasonable daily power volumes for residential, commercial, industrial and other uses. The differences between the current month's estimated amount and actual (meter-read) amount are adjusted for (trued-up) during the next month period.

### ***Correction of Accounting for Fuel Cost Pass-through Adjustment***

As of July 1, 2011, a new electricity tariff system approved by the Government took effect featuring a fuel cost pass-through adjustment (FCPTA). This system was intended to allow us to pass through fluctuations in fuel costs ultimately to the customers. The FCPTA amount is determined based on a prior three-months moving average of international fuel prices and other factors, which is reflected two months later. On July 29, 2011, out of inflationary and other policy considerations, the Government issued a hold-order suspending us from billing or collecting the FCPTA amount from customers.

Our accounting policy was to recognize unbilled fuel cost adjustments as assets under the IFRS Conceptual Framework when we concluded that it is probable that future economic benefits would flow to us. We had concluded that we controlled a resource as a result of past events from which future economic benefits were expected to flow to us. The Regulation for Electricity Service, which regulates the FCPTA system, provides a legal resource or right to bill where the costs we incur will result in future cash flows. The operation of the FCPTA system creates a right to charge rates in amounts that would permit us to recover the related costs, such amounts being subject to government approval. In addition, we relied on the authority of the Ministry of Trade, Industry and Energy, which regulates and approves the electricity tariff we charge to our customers, including the FCPTA system. As of December 31, 2011, we determined that it was probable that economic benefits associated with the unbilled fuel cost adjustments would be realizable based on the authority of the Ministry of Trade, Industry and Energy in setting and enforcing electricity rates for customers. Therefore, we concluded that as of December 31, 2011 it was probable that our unbilled FCPTA amount would be collected.

We previously recognized revenue and a receivable for the FCPTA amounts subject to the hold order in the amount of Won 357,085 million at December 31, 2011. However, we came to realize that our FCPTA rate regulatory scheme closely resembles a cost-of-service scheme, and have therefore determined that the appropriate accounting for the unbilled FCPTA amounts is to reduce cost of sales by the unbilled FCPTA amounts and recognize a related non-financial asset by the same amount, which is more consistent with accounting policies for rate regulated assets of other standard setting bodies. In accordance with IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*, we used judgment in developing and applying an accounting policy that results in information that is relevant and reliable. In making that judgment, management considered pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices. We have concluded that the aforementioned error is immaterial, and corrected the accounting for our unbilled FCPTA amounts in our consolidated financial statements as of and for the year ended December 31, 2011 included in Item 18. Financial Statements.

During the fourth quarter of 2012, we had further consultations with the Ministry of Trade, Industry and Energy as to the outlook for the lifting the hold-order. Furthermore, on January 11, 2013, the Ministry of Trade,



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Industry and Energy informed us that the FCPTA system needed to be reassessed in light of the current circumstances such as the prolonged unbilled period since the announcement of the FCPTA system. We have therefore concluded that, in consideration of the prolonged unbilled period and recent consultations with, and information from, the Ministry, we would not be able to bill and collect the unbilled FCPTA amounts for the foreseeable future. As a result, we wrote off the entire unbilled FCPTA amounts of Won 1,877 billion recognized through December 31, 2012, including the unbilled FCPTA amounts as of December 31, 2011. As a result, there were no FCPTA amounts remaining in the consolidated statement of financial position as of December 31, 2012.

Furthermore, we will cease recording a regulatory asset prospectively related to the FCPTA amounts unless and until the likelihood of recovery once again satisfies the probable threshold contained in the IFRS Conceptual Framework or enacted IFRS at such time.

See Item 4B. Business Overview Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment , Item 4B. Business Overview Sales and Customers Electricity Rates , Item 4B. Recent Developments Correction of Accounting for Fuel Cost Pass-through Adjustment, Item 5B. Operating and Financial Review and Prospects Overview, Item 5B. Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment and Notes 2, 15 and 36 to the notes to our consolidated annual financial statements.

### ***Derivative Instruments***

We record rights and obligations arising from derivative instruments as assets and liabilities, which are stated at fair value. The gains and losses that result from the change in the fair value of derivative instruments are reported in current earnings. However, for derivative instruments designated as hedging the exposure of variable cash flows, the effective portions of the gains or losses on the hedging instruments are recorded as accumulated other comprehensive income (loss) and credited or charged to operations at the time the hedged transactions affect earnings, and the ineffective portions of the gains or losses are credited or charged immediately to operations.

Significant management judgment is involved in determining the fair value of estimated derivative instruments. The estimates and assumptions used by our management to determine fair value can be impacted by many factors, such as the estimated discount factor derived from observable market data, credit risk of the counterparty and the estimated cash flow based on settlement period, interest convention, and other contract information of the derivative instruments.

We recorded derivative instruments under IFRS. As of December 31, 2010 and 2011, we recorded Won 244 billion and Won 376 billion of net amounts as assets, and as of December 31, 2012, we recorded Won 376 billion of net amounts as liabilities. Changes in the estimated discount factor or cash flow, or changes in the assumptions and judgments by management underlying these estimates, may cause material revisions to the estimated total gain or loss effect of derivative instruments, which could have a material effect on the recorded asset or liability.

### ***Decommissioning Costs***

We record the fair value of estimated decommissioning costs as a liability in the period in which we incur a legal obligation associated with retirement of long-lived assets that result from acquisition, construction, development and/or normal use of the assets. We also record a corresponding asset that is depreciated over the life of the asset. Accretion expense consists of period-to-period changes in the liability for decommissioning costs resulting from the passage of time and revisions to either the timing or the amount of the original estimate of undiscounted cash flows. Depreciation and accretion expenses are included in cost of electric power in the accompanying consolidated statements of comprehensive income.

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Significant management judgment is involved in determining the fair value of estimated decommissioning costs. The estimates and assumptions used by our management to determine fair value can be impacted by many factors, such as the estimated decommissioning costs based on engineering studies commissioned and approved by the Korean government, and changes in assumed dates of decommissioning, inflation rate, discount rate, decommissioning technology, regulation and the general economy.

As of December 31, 2010, 2011 and 2012, we recorded liability for decommissioning costs in the amounts of Won 5,976 billion, Won 6,727 billion and Won 11,913 billion, respectively. Changes in the estimated costs or timing of decommissioning, or changes in the assumptions and judgments by management underlying these estimates, may cause material revisions to the estimated total cost to decommission these facilities, which could have a material effect on the recorded liability. We used a discount rate of 4.36%, 4.36% and 4.49% and an inflation rate of 2.30%, 2.30% and 2.93% when calculating the decommissioning cost liability recorded as of December 31, 2010, 2011 and 2012. In addition, the following is a sensitivity analysis of the potential impact on decommissioning costs from a 0.1% increase or decrease in each of the inflation rate and the discount rate, assuming that all other aforementioned assumptions remain constant:

	Sensitivity to inflation rate		Sensitivity to discount rate	
	+0.10%	-0.10%	+0.10%	-0.10%
	(in billions of Won)			
Increase (decrease) of liability for decommissioning costs	279	(271)	(266)	274

See Notes 26 and 43 of the notes to our consolidated financial statements for further related information.

***Provision for Decontamination of Transformer***

Under the Persistent Organic Pollutants Management Act which was enacted in 2007, we are required to remove the toxin polychlorinated biphenyls (PCBs) from our transformers' insulating oil by 2015. We are also required to inspect the PCB levels in our transformers and dispose of any PCBs in excess of established safety standards.

As of December 31, 2010, 2011 and 2012, we recorded a liability of Won 278 billion, Won 215 billion and Won 220 billion, respectively, for inspection and disposal costs related to the decontamination of existing transformers.

The estimates and assumptions used by our management to determine fair value can be affected by many factors, such as the estimated costs of inspection and disposal, inflation rate, discount rate, regulations and the general economy.

Changes in the estimated costs or changes in the assumptions and judgments underlying these estimates may cause material revisions to the estimated total costs, which could have a material effect on our recorded liability. When calculating the provision for the decontamination of our transformers, we used a discount rate of 6.49% and an inflation rate of 2.81% as of December 31, 2010, a discount rate of 5.84% and an inflation rate of 3.34% as of December 31, 2011, and a discount rate of 4.92% and an inflation rate of 3.10% as of December 31, 2012. In addition, the following is a sensitivity analysis of the potential impact on decontamination costs based on a 0.1% increase or decrease in each of the inflation rate and the discount rate, assuming that all other aforementioned assumptions remain constant:

	Sensitivity to inflation rate		Sensitivity to discount rate	
	+0.10%	-0.10%	+0.10%	-0.10%
	(in billions of Won)			
Increase (decrease) of liability for decommissioning costs	1	(1)	(1)	1

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### ***Deferred Tax Assets***

In assessing the realizability of the deferred tax assets, our management considers whether it is probable that a portion or all of the deferred tax assets will not be realized. The ultimate realization of our deferred tax assets is dependent on whether we are able to generate future taxable income in specific tax jurisdictions during the periods in which temporary differences become deductible. Our management has scheduled the expected future reversals of the temporary differences and projected future taxable income in making this assessment. Based on these factors, our management believes that it is probable that we will realize the benefits of these temporary differences as of December 31, 2012. However, the amount of deferred tax assets that is realized may be different if we do not realize estimated future taxable income during the carry forward periods as originally expected.

We recognize deferred tax assets and liabilities based on the differences between the financial statement carrying amounts and the tax bases of assets and liabilities at each separate taxpaying entity. Under IFRS, a deferred tax asset is recognized for temporary difference that will result in deductible amounts in future years and for carry forwards. If, based on the weight of available evidence, it is more likely that some or the entire portion of the deferred tax asset will not be realized, that portion is deducted directly from the deferred tax asset.

We believe that the accounting estimate related to the realizability of deferred tax asset is a critical accounting estimate because: (i) it requires management to make assessments about the timing of future events, including the probability of expected future taxable income and available tax planning opportunities, and (ii) the difference between these assessments and the actual performance could have a material impact on the realization of tax benefits as reported in our results of operations. Management's assumptions require significant judgment because actual performance has fluctuated in the past and may continue to do so.

### ***Useful Lives of Property, Plant and Equipment***

Property, plant and equipment are stated at cost less subsequent accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment is directly attributable to their purchase or construction, which includes any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. Subsequent costs are recognized in carrying amount of an asset or as an asset if it is probable that future economic benefits associated with the assets will flow into us and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred. We do not depreciate land. Depreciation is computed by the straight-line method (and unit-of-production method for loaded nuclear fuel (PWR) and capitalized asset retirement cost of loaded nuclear fuel), using rates based on the estimated useful lives. Net property, plant and equipment as of December 31, 2012 totaled approximately Won 122,376 billion representing more than 83% of total assets. Given the significance of property, plant and equipment and the associated depreciation expense to our financial statements, the determination of an asset's economic useful life is considered to be a critical accounting estimate.

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Economic useful life is the duration of time the asset is expected to be productively employed by us, which may be less than its physical life. Management's assumptions on the following factors, among others, affect the determination of estimated economic useful life: wear and tear, obsolescence, technical standards, changes in market demand and technological changes. We apply the following useful lives for our property, plant and equipment:

	<b>Estimated useful life</b>
Buildings	8 ~ 40
Structures	8 ~ 50
Machinery	6 ~ 32
Vehicles	4
Loaded heavy water	30
Asset retirement costs	18, 30, 40
Finance lease assets	20
Ships	9
Others	4 ~ 9

Generally, useful life is estimated at the time the asset is acquired and is based on historical experience with similar assets and takes into account anticipated technological or other changes. We review our depreciation method and the estimated useful lives and residual values of our property, plant and equipment at the end of each annual reporting period. If our expectations differ from previous estimates, the related changes are accounted for as a change in accounting estimate. During the current period, we changed the estimated useful lives of the certain buildings. In result of the change in accounting estimate, depreciation expenses were reduced by Won 85,388 million for the current year and expected to be reduced by Won 57,378 million, Won 31,979 million and Won 22,158 million for each of the three years following the current year, respectively. In addition, if technological changes were to occur more rapidly than anticipated or in a different form than anticipated, or our assets experienced unexpected levels of wear and tear, the useful lives assigned to these assets may need to be shortened, resulting in the recognition of increased depreciation expenses in future periods.

***Impairment of Long-lived Assets***

At the end of each reporting period, we review the carrying amounts of tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired. Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in income or loss, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

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In the event that an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, ensuring that such carrying amount increase does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in income or loss, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

The assessment of impairment is a critical accounting estimate, because significant management judgment is required to determine: (i) whether an indicator of impairment has occurred, (ii) how assets should be grouped, and (iii) the recoverable amount of the asset or asset group in the case of an impairment. If management's assumptions about these assets change as a result of events or circumstances, and management believes the assets may have declined in value, we may record impairment charges, resulting in lower profits. Our management uses its best estimate in making these evaluations and considers various factors, including the future prices of energy, fuel costs and other operating costs. However, actual market prices and operating costs could vary from those used in the impairment evaluations, and the impact of such variations could be material.

### ***Accrual for Loss Contingencies for Legal Claims***

We are involved in legal proceedings regarding matters arising in the ordinary course of business. Related to these matters, as of December 31, 2012, we were engaged in 559 lawsuits as a defendant and 107 lawsuits as a plaintiff. The total amount claimed against us was Won 391 billion and the total amount claimed by us was Won 74 billion as of December 31, 2012. As of December 31, 2012, we had an accrual for loss contingencies of Won 27 billion. We record liabilities for estimated loss contingencies when we assess that a loss is probable and the amount of the loss can be reasonably estimated. The determination for a loss contingency is based on management judgment and estimates with respect to the likely outcome of the matter, including the analysis of different scenarios. Liabilities are recorded or adjusted when events or circumstances cause these judgments or estimates to change. In assessing whether a loss is a reasonable possibility, we may consider the following factors: the nature of the litigation, claim or assessment, available information, opinions or views of legal counsel and other advisors, and the experience gained from similar cases. We provide disclosures for material contingencies when there is a reasonable possibility that a loss or an additional loss may be incurred.

As new developments occur or more information becomes available, our assumptions and estimates with respect to the likelihood or amount of loss related to these liabilities may change. Such revisions to contingent liabilities are generally reflected in income. If changes in these or other assumptions or the anticipated outcomes we use to estimate contingencies cause a loss to become more likely, it could materially affect future results of operations for any particular quarterly or annual period.

Actual amounts realized upon settlement of contingencies may be different from amounts recorded and disclosed and may be recorded as additional liabilities and expenses which could have a significant impact on our results of operations, financial condition and cash flows.

### **Consolidated Results of Operations**

#### ***2012 Compared to 2011***

In 2012, our consolidated sales, which is principally derived from the sale of electric power, increased by 13.8% to Won 49,121 billion from Won 43,175 billion in 2011, reflecting primarily a 2.53% increase in the volume of electricity sold from 455,070 gigawatt hours in 2011 to 466,593 gigawatt hours in 2012 and a 4.9% increase in our overall average electricity tariff rates effective August 6, 2012. The overall increase in the volume of electricity sold was primarily attributable to a 2.6% increase in the volume of electricity sold to the industrial sector, which represents the largest segment of electricity consumption in Korea, from 251,491 gigawatt hours in 2011 to 258,102 gigawatt hours in 2012, and, to a lesser extent, a 2.1% increase in the volume of electricity sold

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to the commercial sector from 99,504 gigawatt hours in 2011 to 101,593 gigawatt hours in 2012 and a 1.2% increase in the volume of electricity sold to the residential sector, including overnight power usage, from 82,130 gigawatt hours in 2011 to 83,104 gigawatt hours in 2012. The increase in the volume of electricity sold to the industrial sector was primarily due to the general increase in demand for electricity in this sector in Korea largely as a result of the continued export-led growth of the Korean economy, which involved an increased industrial output and greater capacity utilization in industrial plants. The increase in the volume of electricity sold to the commercial sector was primarily due to increased commercial activities in Korea, which was partially offset by weakened consumer sentiment in light of the ongoing uncertainties in the global economy. The increase in the volume of electricity sold to the residential sector was primarily due to increased usage of heating and air conditioning due to extreme weather conditions in the summer of 2012 and winter of 2012 and 2013. For a discussion of the increase in our electricity tariff rates, see Item 4B. Business Overview Sales and Customers Electricity Rates.

Our consolidated cost of sales, which is principally derived from the costs related to the purchase of fuels for generation of electricity and to a lesser extent, from the purchase of power from independent power producers, depreciation and salaries, increased by 13.4% to Won 48,459 billion in 2012 from Won 42,725 billion in 2011, primarily due to a 11.0% increase in fuel costs, a 32.4% increase in purchased power, a 6.0% increase in salaries, a 1.7% increase in depreciation and a 7.0% increase in other cost of sales. Fuel costs increased to Won 23,823 billion in 2012 from Won 21,456 billion in 2011. Fuel costs accounted for 49.2% and 50.2% of our consolidated cost of sales in 2012 and 2011, respectively. Such increase in fuel costs was primarily due to a 1.0% increase in energy consumption as a result of the general economic recovery and extreme weather conditions in 2012 and a 9.8% increase in unit cost of fuel mainly due to a 14.8% increase in unit cost of LNG. Purchased power, which accounted for 20.2% and 17.3% of our cost of sales in 2012 and 2011, respectively, increased by 32.4% to Won 9,801 billion in 2012 from Won 7,404 billion in 2011, primarily due to a 13.9% increase in the volume of power purchased from independent power producers (who generate electricity primarily through LNG-fired power plants), from 53,024 gigawatt hours in 2011 to 60,392 gigawatt hours in 2012, primarily to compensate for the shortfall in the supply of electricity due to the higher than anticipated rise in demand for electricity in 2012. Salaries increased by 6.0% to Won 2,662 billion in 2012 from Won 2,510 billion in 2011 primarily due to an increase in the number of our and our generation subsidiaries employees. Depreciation expense increased by 1.7% to Won 6,846 billion in 2012 from Won 6,733 billion in 2011 primarily due to the increase of additional property, plant and equipment related to the construction of new generation facilities pursuant to our capital investment program. Other remaining items of our cost of sales increased to Won 5,327 billion in 2012 from Won 4,622 in 2011 primarily due to an increase in costs related to our nuclear complex construction projects in the United Arab Emirates, an increase in provision for decommissioning costs of our nuclear facilities and provision for potential fines and penalties under the Renewable Portfolio Standard.

As a cumulative result of the foregoing factors, our consolidated gross profit increased by 46.8% to Won 662 billion in 2012 from Won 450 billion in 2011, and our gross profit margin increased to 1.3% in 2012 from 1.0% in 2011.

Our consolidated selling and administrative expenses increased by 1.6% to Won 1,780 billion in 2012 from Won 1,751 billion in 2011, primarily as a result of increases in salaries, research and development expenses and rent expenses.

Our consolidated net other operating income increased by 33.2% to Won 600 billion in 2012 from Won 451 billion in 2011, mainly as a result of an increase in compensation for damages received from a lawsuit in which we were the plaintiff, which more than offset the return to normal levels of donations related to renewable energy initiatives.

We recorded consolidated net other loss of Won 1,781 billion in 2012 compared to consolidated net other income of Won 166 billion in 2011, primarily as a result of the write-off of our accumulated but unbilled fuel

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cost-based adjustment amounts as further described in Item 5B Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment and Notes 2, 15 and 36 to the notes to our consolidated annual financial statements.

As a cumulative result of the foregoing factors, we recorded consolidated operating loss of Won 2,300 billion in 2012 compared to consolidated operating loss of Won 685 billion in 2011. We recorded operating loss margin of 4.7% in 2012 compared to operating loss margin of 1.6% in 2011, largely due to a 11.0% increase in fuel costs and a 32.4% increase in purchased power which more than offset the 13.8% increase in our revenue from the sale of electricity.

Our consolidated net financial expense increased by 1.5% to Won 1,940 billion in 2012 from Won 1,911 billion in 2011, primarily as a result of an increase in losses by Won 673 billion in our derivative instruments, an increase by Won 1,001 billion in incomes related to foreign currencies, net, an increase by Won 221 billion in net interest expense and an increase by Won 40 billion in impairment loss on available-for-sale financial assets.

Our consolidated profits of affiliates or joint ventures using equity method increased by 43.7% to Won 177 billion in 2012 from Won 123 billion in 2011, primarily as a result of an increase in profits from Korea Gas Corporation and our overseas affiliates primarily as a result of the expansion of our overseas business.

As a cumulative result of the foregoing factors, we recorded consolidated loss before income taxes of Won 4,063 billion in 2012 compared to consolidated income before income taxes of Won 2,473 billion in 2011. We recorded consolidated income tax income of Won 985 billion in 2012 compared to consolidated income tax expense of Won 820 billion in 2011, primarily due to the absence of a one-time write-off in 2011 of deferred tax assets in relation to net loss from the previous year due to the low probability of recovery.

As a cumulative result of the above factors, our consolidated loss for the year decreased to Won 3,078 billion in 2012 from Won 3,293 billion in 2011, and our consolidated net loss margin decreased to 6.3% in 2012 from 7.6% in 2011. We also recorded net loss attributable to our shareholders of Won 3,167 billion in 2012, compared to net loss of Won 3,370 billion attributable to our shareholders in 2011.

Our consolidated other comprehensive loss increased to Won 322 billion in 2012 from Won 262 billion in 2011 as a result of positive changes in actuarial losses on retirement benefit obligations, net of tax, and net change in fair value of available-for-sale financial assets, net of tax, which was partially offset by our recording negative changes in loss on valuation of derivatives using cash flow hedge accounting, net of tax, foreign currency translation of foreign operations, net of tax, and share in other comprehensive income(loss) of associates and joint ventures, net of tax.

As a cumulative result of the above factors, our consolidated total comprehensive loss for the period decreased to Won 3,400 billion in 2012 from Won 3,555 billion in 2011.

***2011 Compared to 2010***

In 2011, our consolidated sales, which is principally derived from the sale of electric power, increased by 9.3% to Won 43,175 billion from Won 39,507 billion in 2010, reflecting primarily a 4.8% increase in the volume of electricity sold from 434,160 gigawatt hours in 2010 to 455,070 gigawatt hours in 2011 and a 4.9% increase in our overall average electricity tariff rates effective August 1, 2011 and a 4.5% increase in our overall average electricity tariff rates effective December 5, 2011. The overall increase in the volume of electricity sold was primarily attributable to a 8.1% increase in the volume of electricity sold to the industrial sector, which represents the largest segment of electricity consumption in Korea, from 232,672 gigawatt hours in 2010 to 251,491 gigawatt hours in 2011, and, to a lesser extent, a 2.1% increase in the volume of electricity sold to the commercial sector from 97,410 gigawatt hours in 2010 to 99,504 gigawatt hours in 2011, which more than offset a 0.9% decrease in the volume of electricity sold to the residential sector, including overnight power usage, from 82,890 gigawatt hours in 2010 to 82,130 gigawatt hours in 2011. The increase in the volume of electricity sold to

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the industrial sector was primarily due to the general increase in demand for electricity in these sectors in Korea largely as a result of the continued export-led growth of the Korean economy, which involved an increased industrial output and greater capacity utilization in industrial plants. The increase in the volume of electricity sold to the commercial sector was primarily due to increased commercial activities in Korea, which was partially offset by weakened consumer sentiment in light of the enhanced uncertainties in the global economy. The decrease in the volume of electricity sold to the residential sector was primarily due to the unanticipated low temperatures during the summer of 2011. For a discussion of the increase in our electricity tariff rates, see Item 4B. Business Overview Sales and Customers Electricity Rates.

Our consolidated cost of sales, which is principally derived from the costs related to the purchase of fuels for generation of electricity and to a lesser extent, from the purchase of power from independent power producers and depreciation, increased by 18.1% to Won 42,725 billion in 2011 from Won 36,188 billion in 2010, primarily due to a 15.9% increase in fuel costs, a 44.2% increase in purchased power and a 10.4% increase in other cost of sales (excluding purchased power). Fuel costs increased to Won 21,455 billion in 2011 from Won 18,505 billion in 2010. The fuel costs accounted for 50.2% and 51.1% of our consolidated cost of sales in 2011 and 2010, respectively. Such increase in fuel costs was primarily due to a 17.8% increase in fuel cost for LNG, which was partially offset by a 1.4% decrease in fuel cost for oil. Fuel cost for LNG, which accounted for 43.3% of the total fuel cost in 2011, increased mainly due to a 14.1% increase in unit cost of LNG and a 3.2% increase in LNG consumption mainly due to increased energy consumption as a result of the general economic recovery and extreme weather conditions in 2011. Fuel cost for coal, which accounted for 45.0% of the total fuel cost in 2011, increased by 21.1%, mainly due to a 17.1% increase in unit cost for bituminous coal. For further information on the increase in fuel costs, see Item 4B. Business Overview Fuel. Purchased power, which accounted for 17.3% and 14.2% of our cost of sales in 2011 and 2010, respectively, increased by 44.2% to Won 7,404 billion in 2011 from Won 5,133 billion in 2010, primarily due to a 37.1% increase in the volume of power purchased from independent power producers (who generate electricity primarily through LNG-fired power plants), from 38,682 gigawatt hours in 2010 to 53,024 gigawatt hours in 2011, primarily to compensate for the shortfall in the supply of electricity due to the higher than anticipated rise in demand for electricity in 2011. Depreciation expense increased by 3.0% to Won 6,733 billion in 2011 from Won 6,540 billion in 2010 primarily due to the increase of additional property, plant and equipment related to the construction of new generation facilities pursuant to our capital investment program. Maintenance costs increased by 6.0% to Won 1,416 billion in 2011 from Won 1,335 billion in 2010 primarily due to an increase in new construction projects and maintenance on KHNP's Wolsong-1 unit. Other remaining items of our cost of sales increased significantly to Won 5,717 billion in 2011 from Won 4,675 billion in 2010 primarily due to an increase in costs related to the disposal of nuclear waste.

As a cumulative result of the foregoing factors, our consolidated gross profit decreased by 86.4% to Won 450 billion in 2011 from Won 3,319 billion in 2010, and our gross profit margin decreased to 1.0% in 2011 from 8.4% in 2010.

Our consolidated selling and administrative expenses increased by 6.5% to Won 1,752 billion in 2011 from Won 1,645 billion in 2010, primarily as a result of increases in amortization of intangibles related to the increase in purchase of software, research and development expenses related to electronic data processing, maintenance costs, employee benefits, fees and commissions related to electricity meter outsourcing costs and other expenses related to marketing and promotion.

Our consolidated other operating expense decreased by 3.5% to Won 451 billion in 2011 from Won 467 billion in 2010, mainly as a result of the increase in contributions related to renewable energy initiatives.

Our consolidated net other income increased by 40.2% to Won 166 billion from Won 118 billion in 2010, primarily as a result of the increase in gains on foreign currency transactions due to increased volatility in foreign exchange rates in 2011.



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As a cumulative result of the foregoing factors, we recorded consolidated operating loss of Won 685 billion in 2011 compared to consolidated operating income of Won 2,260 billion in 2010. We recorded operating loss margin of 1.6% in 2011 compared to operating profit margin of 5.7% in 2010, largely due to a 15.9% increase in fuel costs and a 44.2% increase in purchased power which more than offset the 10.0% increase in our revenue from the sale of electricity.

Our consolidated net financial expense decreased by 2.8% to Won 1,911 billion in 2011 from Won 1,967 billion in 2010, primarily as a result of the increase in gains on valuation of derivatives related to the overall appreciation of Won against the U.S. dollar.

Our consolidated profits of affiliates or joint ventures using equity method increased by 60.6% to Won 123 billion in 2011 from Won 77 billion in 2010, primarily as a result of an increase in profits from our overseas subsidiaries and affiliates primarily as a result of the expansion of our overseas business.

As a cumulative result of the foregoing factors, we recorded consolidated loss before income taxes of Won 2,473 billion in 2011 compared to consolidated income before income taxes of Won 370 billion in 2010. Our consolidated income tax expenses increased by 86.9% to Won 820 billion in 2011 from Won 439 billion in 2010, primarily due to a one-time write-off in 2011 of deferred tax assets in relation to net loss from the previous year due to the low probability of recovery as well as an increase in the statutory income tax rate from 22.0% to 24.2% in 2011.

As a cumulative result of the above factors, our consolidated loss for the year increased substantially to Won 3,293 billion in 2011 from Won 69 billion in 2010, and our consolidated net loss margin substantially increased to 7.6% in 2011 from 0.2% in 2010. We also recorded net loss attributable to our shareholders of Won 3,370 billion in 2011, compared to net loss of Won 120 billion attributable to our shareholders in 2010.

Our consolidated other comprehensive loss substantially increased to Won 262 billion in 2011 from Won 43 billion in 2010, primarily as a result of the effect of recording a negative net change in fair value of available-for-sale financial assets, net of tax in 2011, which was largely due to unfavorable market conditions of the Korean stock market. Such change more than offset a positive change in share in other comprehensive income (loss) of associates and joint ventures, net of tax in 2011, which was largely due to exchange rate fluctuations that impacted the translations of other comprehensive income (loss) of our overseas associates and joint ventures.

As a cumulative result of the above factors, our consolidated total comprehensive loss for the period increased substantially to Won 3,555 billion in 2011 from Won 112 billion in 2010.

## **Inflation**

The effects of inflation in Korea on our financial condition and results of operations are reflected primarily in construction costs as well as in labor expenses. Inflation in Korea has not had a significant impact on our results of operations in recent years. It is possible that inflation in the future may have an adverse effect on our financial condition or results of operations.

## **Segment Results**

We operate the following business segments: transmission and distribution, nuclear power generation and non-nuclear power generation, and all other. The transmission and distribution segment, which is operated by KEPCO, the parent company, consists of operations related to the transmission, distribution and sale to end-users of electricity purchased from our generation subsidiaries as well as from independent power producers. The power generation segment, which is operated by KEPCO's one nuclear generation subsidiary and five non-nuclear generation subsidiaries, consists of operations related to the generation of electricity sold to KEPCO.

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through the Korea Power Exchange. The transmission and distribution segment and the power generation segment together represent our electricity business. The remainder of our operation is categorized as all other. The all other segment consists primarily of operations related to the engineering and maintenance of generation plants, information services, and sales of nuclear fuel, communication line leasing, overseas businesses and others. In 2010, 2011 and 2012, the unaffiliated revenues of the power generation segment (representing the six generation subsidiaries) and all our other revenues in the aggregate amounted to only 2.2%, 2.4% and 2.5% of our consolidated revenues, respectively, and the results of operations for our business segments substantially mirror our consolidated results of operations.

### **Item 5B. Liquidity and Capital Resources**

*We expect that our capital requirements, capital resources and liquidity position may change in the course of implementing the Restructuring Plan. See Item 4B. Business Overview Restructuring of the Electric Power Industry in Korea and Item 3D. Risk Factors Risks Relating to KEPCO The Government may adopt policy measures to substantially restructure the Korean electric power industry or our operational structure, which may have a material adverse effect on our business, operations and profitability.*

#### **Capital Requirements**

We anticipate that the following represent the major sources of our capital requirements in the short-term to intermediate future:

capital expenditures pursuant to our capital investment program;

working capital requirements, the largest component of which is fuel purchases;

payment of principal and interest on our existing debt;

headquarters relocation expenses pursuant to Government policy; and

overseas investments.

In addition, if there were to occur unanticipated material changes to the Restructuring Plan, the Basic Plan or other major policy initiatives of the Government relating to the electric power industry, or natural disasters, such developments may require a significant amount of additional capital requirements.

#### **Capital Expenditures**

We anticipate that capital expenditures will be the most significant use of our funds for the next several years. Our capital expenditures relate primarily to the construction of new generation units, maintenance of existing generation units and a significant expansion of our transmission and distribution systems. Our capital expenditures generally follow budgets established under the fifth Basic Plan, which contains projections relating to the supply and demand of electricity of Korea based on which we plan the construction of additional generation units and transmission systems. See Item 4B. Business Overview Capital Investment Program for a further description of our capital investment program.

Our total capital expenditures (including capitalized interest) for the construction of generation, transmission and distribution facilities were Won 11,414 billion, Won 11,984 billion and Won 13,215 billion in 2010, 2011 and 2012, respectively, and under our current budgets, are estimated to be approximately Won 19,714 billion, Won 20,376 billion and Won 18,651 billion in 2013, 2014 and 2015, respectively. We plan to finance our capital expenditures primarily through issuance of securities in the capital markets, borrowings from financial institutions and construction grants.

In addition, in order to deal with the long-term shortage of fuel and other resources and also to comply with various environmental standards, in April 2010 the Government announced a plan to adopt the Renewable



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Portfolio Standard ( RPS ) policy, under which each of our generation subsidiaries was required to supply 2.0% of the total electricity generated from it in the form of renewable energy by 2012 and 10% of the total electricity generated by 2022, with fines being levied on any unit failing to do so in the prescribed timeline. Satisfaction of the supply target for 2012 by our generation subsidiaries is currently under evaluation, and our generation subsidiaries found to have failed to satisfy the supply target may become subject to fine or other penalty although we are currently unable to predict the type or amount of fine or other penalty that will be imposed. The current budgeted amount of capital expenditure for implementation of the RPS as currently planned for the period from 2012 to 2022 is approximately Won 45 trillion. We expect that such additional capital expenditure will be covered by a corresponding increase in electricity tariff. However, there is no assurance that the Government will in fact raise the electricity tariff at a level sufficient to fully cover such additional capital expenditures or at all. See Item 4B.

Business Overview Renewable Energy for a further description of the Renewable Portfolio Standard and our related past capital expenditures.

**Fuel Purchases**

We require significant funds to finance our operations, principally in relation to the purchase of fuels by our generation subsidiaries for generation of electricity. In 2010, 2011 and 2012, fuel costs accounted for 46.8%, 49.7% and 48.5% of our sales and 51.1%, 50.2% and 49.2% of our cost of sales, respectively. We plan to fund our fuel purchases primarily with net operating cash, although in cases of rapid increases in fuel prices as was the case in recent years, we may also rely on borrowings and issuance of debt securities in the capital markets.

**Repayment of Existing Debt**

Payments of principal and interest on indebtedness will require considerable resources. The table below sets forth the scheduled maturities of the outstanding debt of us and our six wholly-owned generation subsidiaries as of December 31, 2012 for each year from 2013 to 2017 and thereafter. As of December 31, 2012, such debt represented 98.1% of our outstanding debt on a consolidated basis (including the current portion but excluding issue discounts and premium).

Year ended	Local currency borrowings	Foreign currency borrowings	Domestic Debentures	Foreign debentures	Exchangeable bonds	Total
December 31			(in millions of Won)			
2013	1,736,427	442,180	3,980,000	1,500,331		7,658,938
2014	532,782	321,330	4,250,000	2,089,237		7,193,349
2015	423,320		4,400,000	1,553,451		6,376,771
2016	354,047		4,680,000	696,291		5,730,338
2017	860,835		4,180,000	1,392,430		6,433,265
Thereafter	1,203,950	9,409	15,190,000	2,513,573		18,916,932
Total	5,111,361	772,919	36,680,000	9,745,313		52,309,593

We have incurred interest charges (including capitalized interest) of Won 2,482 billion, Won 2,697 billion and Won 2,946 billion in 2010, 2011 and 2012, respectively. We anticipate that interest charges will increase in future years because of, among other factors, anticipated increases in our long-term debt. See Capital Resources below. The weighted average rate of interest on our debt was 5.16%, 4.91% and 4.65% in 2010, 2011 and 2012, respectively.

We plan to finance our relocation costs primarily through net cash flows from our operating and investing activities, as well as borrowings from financial institutions and issuance of securities in the capital markets, among others.

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**Table of Contents*****Relocation Expenses***

In June 2005, the Government announced its policy to relocate the headquarters of government-invested enterprises, including us and certain of our subsidiaries including six generation subsidiaries, from the Seoul metropolitan area to other provinces in Korea. Pursuant to this policy, our headquarters are scheduled to be relocated to Naju in Jeolla Province, which is approximately 300 kilometers south of Seoul. Although the relocation was initially scheduled to occur by the end of 2012, due to construction delays, we currently expect that the relocation will occur by the end of 2014. In addition, the headquarters of certain of our subsidiaries are scheduled to be relocated to various other cities in Korea. Under the current relocation plan as approved by the Government in 2007 and in accordance with the relevant statute and related guidelines, the total relocation cost for us and our generation subsidiaries is estimated to be Won 1,497 billion, which will be paid out over the construction period. Under a special act enacted for this purpose, we are required to sell the property in our current headquarters within one year after the relocation.

We plan to finance our relocation costs primarily through borrowings from financial institutions and issuance of securities in the capital markets, as well as net operating cash.

***Overseas Investments***

As part of our revenue diversification and fuel procurement strategy, we plan to continue to make overseas investments on a selective basis, which will be funded primarily through foreign currency-denominated borrowings and debt securities issuances as well as net operating cash from such projects.

***Capital Resources***

We have traditionally met our working capital and other capital requirements primarily from net cash provided by operating activities, issuance of debt securities and borrowings from financial institutions. Net cash provided by operating activities was Won 6,740 billion, Won 4,145 billion and Won 3,917 billion in 2010, 2011 and 2012, respectively. Total long-term debt (including the current portion but excluding issue discounts and premium) as of December 31, 2012 was Won 52,649 billion, of which Won 41,358 billion was denominated in Won and an equivalent of Won 11,291 billion was denominated in foreign currencies, primarily U.S. dollars. In addition, in anticipation of potential liquidity shortage, we maintain several credit facilities with domestic financial institutions amounting to Won 3,816 billion and US\$2,185 million, the full amount of which was available as of December 31, 2012. In addition, we, KHNP and KOWEPO also maintain U.S. dollar-denominated global medium-term note programs in the aggregate amount of US\$10 billion, of which approximately US\$5.8 billion remains currently available for future drawdown.

As of December 31, 2010, 2011 and 2012, our long-term debt, excluding the current portion thereof, as a percentage of shareholders' equity was 57.3%, 72.9% and 89.1%, respectively. As of December 31, 2010, 2011 and 2012, the current portion of our long-term debt was Won 6,311 billion, Won 5,832 billion and Won 7,005 billion, respectively. As of December 31, 2010, 2011 and 2012, our short-term borrowings amounted to Won 458 billion, Won 1,174 billion and Won 689 billion, respectively. See Note 23 of the notes to our consolidated financial statements.

Subject to the implementation of our capital expenditure plan and the sale of our interests in our generation subsidiaries and other subsidiaries, our long-term debt may increase or decrease in future years. Until recently, a substantial portion of our long-term debt was raised through foreign currency borrowings. However, in order to reduce the impact of foreign exchange rate fluctuations on our results of operations, we have reduced the proportion of our debt which is denominated in foreign currencies and plan to adjust the proportion of foreign currency debt in order to optimize our foreign currency exposure in light of, among others, the fluctuations in the value of Won, the cost of funding by each currency and the maturity of fund available in each market. Our foreign currency-denominated long-term debt (including the current portion but excluding issue discounts and

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premium) increased from Won 10,462 billion as of December 31, 2011 to Won 11,291 billion as of December 31, 2012 before accounting for swap transactions.

Our ability to incur long-term debt in the future is subject to a variety of factors, many of which are beyond our control, including, the implementation of the Restructuring Plan and the amount of capital that other Korean entities may seek to raise in capital markets. Economic, political and other conditions in Korea may also affect investor demand for our securities and those of other Korean entities. In addition, our ability to incur debt will also be affected by the Government's policies relating to foreign currency borrowings, the liquidity of the Korean capital markets and our operating results and financial condition. In case of adverse developments in Korea, however, the price at which such financing may be available may not be acceptable to us.

We incur our short-term borrowings primarily through commercial papers sold to domestic financial institutions. We have not had, and we do not expect to have, any material difficulties in obtaining short-term borrowings.

We may raise capital from time to time through the issuance of equity securities. However, there are certain restrictions on our ability to issue equity, including limitations on shareholdings by foreigners. In addition, without changes in the existing KEPCO Act which requires that the Government, directly or pursuant to the Korea Finance Corporation Act, through Korea Finance Corporation, own at least 51% of our capital stock, it may be difficult or impossible for us to undertake any equity financing other than sales of treasury stock without the participation of the Government. Even if we are able to conduct equity financing with the participation of the Government, prevailing market conditions may be such that we may not be able to conduct equity financing on terms that are commercially acceptable to us. See Item 3D. Risk Factors Risks Relating to Korea and the Global Economy.

Our total shareholders' equity decreased from Won 53,804 billion as of December 31, 2011 to Won 51,064 billion as of December 31, 2012.

## **Liquidity**

Our liquidity is substantially affected by our construction expenditures and fuel purchases. Construction in progress increased slightly from Won 19,912 billion as of December 31, 2011 to Won 21,184 billion as of December 31, 2012. Fuel costs represented 49.7% and 48.5% of our sales in 2011 and 2012, respectively.

Due to the capital-intensive nature of our business as well as significant volatility in fuel prices, from time to time we operate with a working capital deficit, and we may have substantial working capital deficit in the future. As of December 31, 2010, 2011 and 2012, we had a working capital deficit of Won 916 billion, Won 3,974 billion and Won 4,884 billion, respectively. We have traditionally met our working capital and other capital requirements primarily from net cash provided by operating activities, issuance of debt securities, borrowings from financial institutions and construction grants. We also incur our short-term borrowings primarily through commercial papers sold to domestic financial institutions. We have not had, and we do not expect to have, any material difficulties in obtaining short-term borrowings. See Capital Resources.

We may face liquidity concerns in the case of significant depreciation of Korean Won against major foreign currencies over a short period of time. While substantially all of our revenues are denominated in Won, we pay for substantially all of our fuel purchases in foreign currencies and a substantial portion of our long-term debt is denominated in foreign currencies, and payment of principal and interest thereon is made in foreign currencies. In the past, we have incurred foreign currency debt principally due to the limited availability and the high cost of Won-denominated financing in Korea. However, in light of the increasing sophistication of the Korean capital markets and the recent increase in liquidity in the Korean financial markets, we plan to reduce the portion of our debt which is denominated in foreign currencies although we intend to continue to raise certain amounts of capital through long-term foreign currency debt for purposes of maintaining diversity in our funding sources as

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well as paying for overseas investments in foreign currencies. As of December 31, 2012, approximately 21.4% of our long-term debt (including the current portion but excluding issue discount and premium) before accounting for swap transactions, was denominated in currencies other than Won.

We enter into currency swaps and other hedging arrangements with respect to our debt denominated in foreign currencies only to a limited extent due primarily to the limited size of the Korean market for such derivative arrangements. Such instruments include combined currency and interest rate swap agreements, interest rate swaps and foreign exchange agreements. We do not enter into derivative financial instruments in order to hedge market risk resulting from fluctuations in fuel costs. Our policy is to hold or issue derivative financial instruments for hedging purposes only. Our derivative financial instruments are entered into with major financial institutions, thereby minimizing the risk of credit loss. See Note 11 of the notes to our consolidated financial statements.

We did not pay any dividends in 2011 and 2012, and we currently have no plans to pay dividends in 2013 as we recorded net losses in 2012.

### **Other**

Our operations are materially affected by the policies and actions of the Government. See Item 4B. **Business Overview** Regulation.

### **Item 5C. Research and Development, Patents and Licenses, etc.**

#### **Research and Development**

Our research and development program is focused on developing advanced electric power and renewable energy technology that will enable us to become a global leader in the energy industry. In order to achieve our corporate vision of becoming a **Global Top Green & Smart Energy Pioneer**, in 2012 we adopted the KEPCO Technology Strategy as part of our 2020 Mid- and Long-Term Strategic Management Plan. As part of such strategy, we seek to develop clean and smart energy technology, including in relation to low carbon emission in power generation, an efficient power transmission and distribution grid, and construction and operation of high value-added power plants.

In 2013, consistent with the Government guidelines, we plan to invest approximately 0.6% of our annual revenue in the research and development of green and smart technologies such as wind power, integrated gasification combined cycle for synthetic natural gas production, carbon capture and storage, solar power generation, bio-energy, geothermal energy, smart grid, micro grid, energy storage system, high voltage direct currents, super conductor, rehabilitation, operation and maintenance, management ( **ROMM** ), smart plant, development of natural resources and water desalination.

Our high-priority **green and smart energy** projects currently include the following:

acquiring integrated gasified process technology;

establishing high-tech smart grid and micro grid test beds in Jeju Island;

developing highly efficient absorbents for carbon capture;

commercializing offshore wind power plants; and

obtaining high voltage direct currents technology suitable for domestic operation.

Our research and development activities also focus on the following:

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In the thermal power generation sector, enhancing efficiency and reducing cost in power plant construction and operation as well as in our plant maintenance, including through improvements in damage analysis and environmental-friendly inspections;



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In the renewable energy sector, enhancing efficiency, lowering costs of power generation, identifying new energy sources and exploring new business opportunities; and

In the electric power system sector, enhancing the stability and reliability in the operation of our electric power grid as well as enhancing efficiency in electricity distribution, including through introducing preventive maintenance measures for substations and developing technologies related to system automation, power utilization and power line communication.

In addition, we cooperate closely with several other electric utility companies and research institutes, both foreign and domestic, on various projects to diversify the scope and scale of our research and development activities.

We invested approximately Won 327 billion in 2012 and currently plan to invest Won 491 billion in 2013 on research and development. We had approximately 1,087 employees engaged in research and development activities as of December 31, 2012. As a result of our research, 7,620 patent applications were submitted in Korea and abroad and 3,944 applications have been approved as of December 31, 2012. In addition, we plan to establish a management infrastructure that will facilitate the development of high value-added intellectual properties. We also seek opportunities to market our technologies overseas.

**Item 5D. Trend Information**

Trends, uncertainties and events which could have a material impact on our sales, liquidity and capital resources are discussed above in Item 5A. Operating Results and Item 5B. Liquidity and Capital Resources.

**Item 5E. Off-Balance Sheet Arrangements**

We have no significant off-balance sheet arrangements as of December 31, 2012.

**Item 5F. Tabular Disclosure of Contractual Obligations**

The following summarizes certain of the contractual obligations of KEPCO and its six wholly-owned generation subsidiaries as of December 31, 2012 and the effect such obligations are expected to have on liquidity and cash flow in future periods.

Contractual Obligations <sup>(1)</sup>	Total	Payments Due by Period			
		Less than 1 year	2 3 years	4 5 years	After 5 years
		(in billions of Won)			
Long-term debt <sup>(2)</sup>	51,620	6,970	13,570	12,163	18,917
Interest payments on long-term debt <sup>(3)</sup>	11,941	2,161	3,457	1,892	4,431
Short-term borrowings	689	689			
Plant construction <sup>(4)</sup>	44,557	10,501	18,472	15,584	
<b>Total</b>	<b>108,807</b>	<b>20,321</b>	<b>35,499</b>	<b>29,639</b>	<b>23,348</b>

Notes:

- (1) We have several contractual obligations other than those mentioned below, including finance lease agreements. We believe the remaining annual payments under capital and operating lease agreements as of December 31, 2012 were immaterial.
- (2) Includes the current portion but excludes issue discounts and premium.
- (3)

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A portion of our long-term debt carried a variable rate of interest. We used the interest rate in effect as of December 31, 2012 for the variable rate of interest in calculating the interest payments on long-term debt for the periods indicated.

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(4) Based on budgeted amounts, as of December 31, 2012, of capital expenditure for the construction of generation facilities through 2017. The budgeted amounts may differ from the actual amounts of expenditure.

For a description of our commercial commitments and contingent liabilities, see Note 48 of the notes to our consolidated financial statements.

We entered into a power purchasing agreement with GS EPS Co., Ltd. and other independent power producers, under which we are required to annually purchase a minimum amount of power from these companies. Power we purchased from these companies amounted to Won 1,939 billion, Won 2,291 billion and Won 3,020 billion for the years ended December 31, 2010, 2011 and 2012, respectively.

We have entered into contracts with domestic and foreign suppliers (including Korea Gas Corporation, a related party) to purchase bituminous coal, anthracite coal and LNG. These contracts generally have terms of three months to one year and are periodically adjusted to prevailing market prices. Under most of the coal purchase contracts, we are required to purchase an annual quantity of coal. We have also entered into long-term transportation contracts with Hanjin Shipping Co., Ltd. and others.

We import all uranium ore concentrates from sources outside Korea (including the United States, United Kingdom, Kazakhstan, France, Russia, South Africa, Canada and Australia) through medium- to long-term contracts and pay for such concentrates with currencies other than Won, primarily U.S. dollars. Contract prices for processing of uranium are generally based on market prices. See Note 47 of the notes to our consolidated financial statements for further details of these contracts.

Under the Long-term Transmission and Substation Plan approved by the Ministry of Trade, Industry and Energy, which took effect on March 13, 2009, we are liable for the construction of all of our power transmission facilities and the maintenance and repair expenses for such facilities.

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Payment guarantee and short-term credit facilities from financial institutions as of December 31, 2012 were as follows:

**Payment guarantee**

Description	Financial Institutions	Credit Lines (In millions of Won or thousands of US\$, GBR, INR, SAR, BTN and EUR)	
Payment of import letter of credits	Shinhan Bank and others	KRW	32,133
	Kookmin Bank and others	USD	1,599,013
Inclusive credits	Korea Exchange Bank	GBP	61,169
	Korea Exchange Bank	EUR	60,000
	Korea Exchange Bank	KRW	1,081,000
	Korea Exchange Bank	USD	100,500
Performance guarantees on guarantees	HSBC and others	USD	525,000
	Seoul Guarantee Insurance and others	KRW	89,333
	Standard Chartered Bank	BTN	11,501
	HSBC and others	INR	480,776
Guarantees for bid	SABB	SAR	100,000
	Standard Chartered Bank and others	USD	730,357
	SMBC and others	USD	13,216
	Gulf International Bank	SAR	75,000
Warranty bond and others	Export-import Bank of Korea and others	EUR	450
	Shinhan Bank	EUR	5,438
	HSBC	INR	139,690
Other guarantees	Standard Chartered Bank and others	USD	13,754
	Korea Exchange Bank and others	KRW	9,456
	Shinhan Bank and others	USD	6,500
	HSBC	INR	1,020

**Overdraft and Others**

Description	Financial Institutions	Credit Lines (In millions of Won or thousands of US\$)	
Overdraft	Nonghyup Bank and others	Won	1,595,000
Commercial paper	Korea Exchange Bank and others	Won	1,709,000
Limit amount available for card	Hana Bank and others	Won	71,500
Loan limit	Korea Exchange Bank and others	Won	440,148
	Korea Exchange Bank and others	USD	2,185,159
Repayment guarantees for foreign currency debentures	Korea Development Bank	USD	567,659

We have entered into contracts with several companies in the aggregate amount of Won 28,719 billion as of December 31, 2012 for construction of power plant facilities and facility maintenance.

We have provided a debt guarantee of US\$58 million to Sumitomo Mitsui Banking Corporation and other financial institutions in relation to the UAE Shuweihat S3 project.

We also provided a performance guarantee to Kookmin bank related to a construction contract. Such guarantees are not recognized as a provision for financial guarantee because these guarantees do not meet the definition of a financial guarantee contract under IFRS.

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We have provided as collateral shares of Hyundai Energy Co., Ltd. in the amount of Won 390 billion, in addition to a performance guarantee and funding for a redemption obligation of Won 60 billion, in relation to

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Hyundai Energy Co., Ltd. s indebtedness of Won 450 billion from Korea Development Bank in connection with its community energy business in Yeosu city. In relation to such guarantees, NH POWER 2nd Co., Ltd. and Daewoo Securities Co., Ltd. have agreed to purchase shares of Hyundai Energy Co., Ltd. owned by Yeochun TPL Co., Ltd. We also have been granted preferential rights to purchase the shares of the investors in the project in lieu of our investment guarantee.

We have provided warrants with regards to shares of RES Technology AD and ASM-BG Investicii AD, in connection with their indebtedness of EUR 59,243 thousand and EUR 59,469 thousand, respectively, from Korea Development Bank, in connection with their solar business in Bulgaria.

We have provided the following guarantees for our affiliates and joint ventures as of December 31, 2012:

Primary guarantor (providing company)	Secondary guarantor (provided company)	Type of guarantees	Foreign Currency	Credit limit	Guarantee (final provided company)
Korea Electric Power Corporation	KNOC Nigerian East Oil Co., Ltd.,  KNOC Nigerian West Oil Co., Ltd.	Performance guarantees	USD	34,650	Korea National Oil Corporation (Nigerian government)
Korea Electric Power Corporation	Shuweihat Asia Power Investment B.V.	Performance guarantees	USD	17,944	ADWEA
Korea Electric Power Corporation	Shuweihat Asia O&M Co.	Performance guarantees	USD	11,000	ADWEA
Korea Electric Power Corporation	KEPCO SPC Power Co.	Debt guarantees	USD	186,897	SMBC, ADB, Export-import Bank of Korea
Korea Electric Power Corporation	Rabigh Electricity Company	Performance guarantees	SAR	100,000	Saudi Electricity Company (SEC)
Korea Western Power Co., Ltd.	Cheongna Energy Co., Ltd.	Collateralized money invested	KRW	100,000	Hana Bank,  Korea Exchange Bank
Korea Midland Power Co., Ltd.	Commerce and industry energy Co., Ltd.	Collateralized money invested	KRW	8,500	Hana Bank and others
Korea East-West Power Co., Ltd.	Busan Shinho Solar power Co., Ltd.	Collateralized money invested	KRW	61,880	KT Capital Ltd., Co.
Korea Southern Power Co., Ltd.	KNH Solar Co., Ltd.	Collateralized money invested	KRW	1,296	Shinhan Bank, Kyobo Life Insurance Co., Ltd.
Korea Southern Power Co., Ltd.	Daeryun Power co., Ltd.	Collateralized money invested	KRW	25,477	Korea development bank and others
Korea Southern Power Co., Ltd.	Changjuk Wind Power Co., Ltd.	Collateralized money invested	KRW	3,801	Shinhan Bank, Woori Bank
Korea Midland Power Co., Ltd.	Hyundai Green Power Co., Ltd.	Collateralized money invested	KRW	38,135	Hana Bank and others
Korea Midland Power Co., Ltd.	Gangwon Wind Power Co., Ltd.	Collateralized money invested	KRW	5,725	Korea industrial bank

Other than as described in this report and also in Notes 45 and 47 of the notes to our consolidated financial statements, we did not have any other material credit lines and guarantee commitments provided to any third parties as of December 31, 2012.



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We are subject to a number of legal proceedings. For a description of our legal proceedings, see Item 8A. Consolidated Statements and Other Financial Information Legal Proceedings.

### **ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES**

#### **Item 6A. Directors and Senior Management**

##### **Board of Directors**

Under the KEPCO Act, the Public Agencies Management Act and our Articles of Incorporation, our board of directors, which is required to consist of not more than 15 directors, including the president, is vested with the authority over our management.

Pursuant to our Articles of Incorporation and the Public Agencies Management Act, we have two types of directors: standing directors (sangim-isa in Korean) and non-standing directors (bisangim-isa in Korean). The standing directors refer to our directors who serve their positions in full-time capacity. Many of our standing directors concurrently hold executive positions with us or our subsidiaries. The non-standing directors refer to our directors who do not serve their positions in full-time capacity. The non-standing directors currently do not hold any executive positions with us or our subsidiaries.

Under our Articles of Incorporation, there may not be more than seven standing directors, including our president, and more than eight non-standing directors. The number of standing directors, including our president, may not exceed the number of non-standing directors. A senior non-standing director appointed by the Ministry of Strategy and Finance becomes our chairman of the board following the review and resolution of the Public Agencies Operating Committee.

Our president is appointed by the President of the Republic upon the motion of the Ministry of Trade, Industry and Energy following the nomination by our director nomination committee, the review and resolution of the Public Agencies Operating Committee pursuant to the Public Agencies Management Act and an approval at the general meeting of our shareholders. Our controller & auditor general is appointed by the President of the Republic upon the motion of the Ministry of Strategy and Finance following the nomination by our director nomination committee, the review and resolution of the Public Agencies Operating Committee pursuant to the Public Agencies Management Act and an approval at the general meeting of our shareholders. Standing directors (other than our president and controller & auditor general) are appointed by our president with the approval at the general meeting of our shareholders.

On January 24, 2011, the Ministry of Trade, Industry and Energy changed the designation of our generation subsidiaries from other public institutions to market-oriented public enterprise. As other public institutions under the provisions of the Public Agencies Management Act, our generation subsidiaries were not subject to the same regulations applicable to us with regards to corporate governance matters such as the appointment and dismissal of directors and the composition of the boards of directors. However, as market-oriented public enterprises, our generation subsidiaries are currently subject to the same corporate governance rules applicable to us. All of our generation subsidiaries accordingly amended their respective articles of incorporation in 2011 and are currently generally subject to the same system of regulations applicable to us.

The non-standing directors must be appointed by the Ministry of Strategy and Finance following the review and resolution of the Public Agencies Operating Committee from a pool of candidates recommended by the director nomination committee and must have ample knowledge and experience in business management. Government officials that are not part of the teaching staff in national and public schools are ineligible to become our non-standing directors. Our president serves as our chief executive officer and represents us and administers our day-to-day business in all matters and bears the responsibility for the management's performance. The term of our president is three years, while that of our directors is two years. According to the Public Agencies Management Act, our president's term cannot be terminated unless done so by the President of the Republic pursuant to the Public Agencies Management Act or upon an event as specified in our Articles of Incorporation.



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Attendance by a majority of the board members constitutes a voting quorum for our board meetings, and resolutions can be passed by a majority of the board members. In the event the president acts in violation of law or the Articles of Incorporation, is negligent in his duties, or otherwise is deemed to be significantly impeded in performing his official duties as chief executive officer, the board of directors may by resolution request the minister of the Ministry of Trade, Industry and Energy to dismiss or recommend the dismissal of the president.

Non-standing directors may request any information necessary to fulfill their duties from the chief executive officer, and except in special circumstances, the chief executive officer must comply with such request.

The names, titles and outside occupations, if any, of the directors as of March 15, 2013 and the respective years in which they took office are set forth below.

<b>Name</b>	<b>Age</b>	<b>Title</b>	<b>Outside Occupation</b>	<b>Position Held Since</b>
Cho, Hwan-Eik	(63)	President, Chief Executive Officer and Standing Director	None	December 17, 2012
Han, Dae-Soo	(68)	Standing Director and Controller & Auditor General	None	January 24, 2011
Cho, In-Kook	(58)	Standing Director and Executive Vice President of Domestic Operations	None	March 11, 2011
Byun, Jun-Yeon	(58)	Standing Director and Executive Vice President of Overseas Operations & Chief Nuclear Officer	None	April 22, 2011
Kim, Jong-Ho	(58)	Standing Director and Executive Vice President & Chief Human Resources Officer	None	March 11, 2011
Kim, Chong-Young	(58)	Standing Director and Executive Vice President & Chief Technology Officer	None	March 11, 2011
Koo, Bon-Woo	(57)	Standing Director and Executive Vice President & Chief Operating Officer	None	February 20, 2012
Lee, Tae-Sik	(67)	Non-Standing Director	Advisor, SK Energy Co., Ltd.	June 8, 2011
Shin, Il-Soon	(65)	Non-Standing Director	Policy advisor of Grand National Party	April 11, 2011
Kim, Kyung-Min	(58)	Non-Standing Director and member of the Audit Committee	Professor, Department of Political Science and Diplomacy, Hanyang University	June 8, 2011
Chung, Hae-Joo	(70)	Non-Standing Director	Chairman of the Board, Korea Testing & Research Institute	June 30, 2011
Nam, Dong-Kyoon	(60)	Non-Standing Director and member of the Audit Committee		October 24, 2011
Kim, Jung-Hyun	(57)	Non-Standing Director	Professor, Yonsei University	June 13, 2012
Yim, Chu-Hwan	(64)	Non-Standing Director	Visiting Professor, Korea University	October 19, 2012

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*Cho, Hwan-Eik* has been our President, Chief Executive Officer and Standing Director since December 17, 2012. Prior to his current position, he served as Chair-professor of Hanyang University, President of the Korea Trade-Investment Promotion Agency, CEO of Korea Export Insurance Corporation and Vice Minister of the Ministry of Commerce. Mr. Cho received a Ph.D. in business administration from Hanyang University.

*Han, Dae-Soo* has been our Standing Director and Controller & Auditor General since January 24, 2011. Prior to his current position, he served as Second Deputy Secretary-General of the Grand National Party, the current ruling political party in Korea. Mr. Han received an M.A. in public administration from Yonsei University.

*Cho, In-Kook* has been our Standing Director since March 11, 2011. Mr. Cho also currently serves as our Executive Vice President of Domestic Operations and previously served as our Executive Vice President and Chief Strategy Officer. Mr. Cho received a B.A. in economics from Hanyang University.

*Byun, Jun-Yeon* has been our Standing Director since April 22, 2011. Mr. Byun also currently serves as our Executive Vice President of Overseas Operations and Chief Nuclear Officer and previously served as our Executive Vice President and Chief Global Business Officer. Mr. Byun received a B.S. in electrical engineering from Korea University.

*Kim, Jong-Ho* has been our Standing Director since March 11, 2011. Mr. Kim also currently serves as our Executive Vice President and Chief Human Resources Officer and previously served as our Vice President of the Labor Management Department. Mr. Kim received a B.A. in economics from Chung-Ang University.

*Kim, Chong-Young* has been our Standing Director since March 11, 2011. Mr. Kim also currently serves as our Executive Vice President and Chief Technology Officer and previously served as our Vice President of the KEPCO Research Institute. Mr. Kim received a D.S. in metallurgical engineering from Seoul National University.

*Koo, Bon-Woo* has been our Standing Director since February 20, 2012. Mr. Koo also currently serves as our Executive Vice President and Chief Operating Officer and previously served as our Vice President of Transmission Operation Department. Mr. Koo received a B.S. in electrical engineering from Chung-Ang University.

*Lee, Tae-Sik* has been our Non-Standing Director since June 8, 2011. Mr. Lee is currently an advisor of SK Energy Co., Ltd. Mr. Lee received a B.A. in political science from Seoul National University and an M.A. in international public policy from Johns Hopkins University.

*Shin, Il-Soon* has been our Non-Standing Director since April 11, 2011. Mr. Shin is currently a policy advisor to the Grand National Party. Mr. Shin received a B.S. in electrical engineering from U.S. Military Academy (West Point), an M.A. in military art and science from the United States Army Command and General Staff College and a M.A. in business administration from Kyungnam University.

*Kim, Kyung-Min* has been our Non-Standing Director since June 8, 2011. Mr. Kim is currently a professor of political science and diplomacy in Hanyang University. Mr. Kim received a B.A. in politics from Hanyang University and a Ph.D in political science from the University of Missouri.

*Chung, Hae-Joo* has been our Non-Standing Director since June 30, 2011. Mr. Chung is currently the chairman of the board of Korea Testing & Research Institute. Mr. Chung received a B.A. in law from Seoul National University and completed a public policy course at Seoul National University Graduate School of Public Administration.

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*Nam, Dong-Kyoon* has been our Non-Standing Director since October 24, 2011. Mr. Nam previously served as the Vice Mayor for Political Affairs, Daegu Metropolitan City. Mr. Nam received an M.A. in economics from Vanderbilt University.

*Kim, Jung-Hyun* has been our Non-Standing Director since June 13, 2012. Mr. Kim previously served as a professor of chemical and biomolecular engineering in Yonsei University. Mr. Kim received a M.A in chemical and biomolecular engineering from Yonsei University and a Ph.D in polymer engineering from Lehigh University.

*Yim, Chu-Hwan* has been our Non-Standing Director since October 19, 2012. Mr. Yim previously served as a visiting professor of electronics and information engineering in Korea University. Mr. Yim received a M.A in industrial education from Seoul National University and a Ph.D in telecommunication system from Braunschweig University.

The business address of our directors is 167 Samseong-Dong, Gangnam-Gu, Seoul, Korea.

### **Audit Committee**

Under the Public Agencies Management Act, which took effect as of April 1, 2007, we are designated as a market-oriented public enterprise and, as such, are required to establish an audit committee in lieu of the pre-existing board of auditors upon expiration of the term of the last remaining member of the board of auditors. In September 2007, we amended our Articles of Incorporation to establish, in lieu of the pre-existing board of auditors, an audit committee meeting the requirements under the Sarbanes-Oxley Act. Under the Public Agencies Management Act, the Korean Commercial Code and the amended Articles of Incorporation, we are required to maintain an audit committee consisting of three members, of which not less than two members are required to be the non-standing directors. The roles and responsibilities of our audit committee members are to perform the functions of an audit committee meeting the requirements under the Sarbanes-Oxley Act. Our audit committee was established on December 8, 2008.

Our audit committee currently consists of Han, Dae Soo, a standing director, and Kim, Kyung-Min and Nam, Dong-Kyoon, both non-standing directors. All such members of the audit committee are independent within the meaning of the Korea Stock Exchange listing standards, the regulations promulgated under the Korean Commercial Code and the New York Stock Exchange listing standards.

### **Item 6B. Compensation**

In 2012, the aggregate amount of remuneration paid and accrued to our directors and executive officers in the aggregate was Won 1,180 million. The aggregate amount accrued in 2012 to provide retirement and severance benefits for our directors and executive officers was Won 11 million.

### **Item 6C. Board Practices**

Under the Public Agencies Management Act and our Articles of Incorporation, the term of office for our directors and executive officers that are appointed after April 1, 2007 is three years for the president and two years for other executive officers. The officers and the directors may be reappointed for an additional term of one year. In order to be reappointed, the president must be evaluated on the basis of his management performance; a standing director, on the basis of the performance of the duties for which he was elected to perform, or if the standing director has executed an incentive bonus contract, on the basis of his performance under the contract; and a non-standing director, on the basis of his performance of the duties for which he was elected to perform.

Our board currently does not maintain a compensation committee. See Item 16G. Corporate Governance. However, we currently maintain an audit committee meeting the requirements of the Sarbanes-Oxley Act to

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perform the roles and responsibilities of the compensation committee. Prior to the establishment of the audit committee on December 8, 2008 pursuant to the Public Agencies Management Act, we maintained a board of auditors, which performed the roles and responsibilities required of an audit committee under the Sarbanes-Oxley Act, including the supervision of the financial and accounting audit by the independent registered public accountants.

The president's management contract provides for benefits upon termination of his employment. The amount for termination benefits payable equals the average value of compensation for one month times the number of years the president is employed by us, provided that the president is only eligible for termination benefits after more than one year of continuous service.

The termination benefits for standing directors are determined in accordance with our internal regulations for executive compensation. Standing directors are only eligible for benefits upon termination of employment or death following one year of continuous service.

See also Item 16G. Corporate Governance for a further description of our board practices.

**Item 6D. Employees**

As of December 31, 2012, we and our generation subsidiaries had a total of 38,562 regular employees and 297 non-regular employees, almost all of whom are employed within Korea. Approximately 11.6% of our regular employees (including employees of our generation subsidiaries) are located at our head office in Seoul.

The following table sets forth the number of and other information relating to our employees, not including directors or senior management, as of December 31, 2012.

	KEPCO	KHNP	KOSEP	KOMIPO	KOWEPO	KOSPO	EWP	Total
<b>Regular Employees</b>								
Administrative	4,410	827	231	281	237	260	245	6,491
Engineers	9,186	7,417	1,527	1,697	1,465	1,533	1,720	24,545
Others	5,682	1,087	185	196	138	142	96	7,526
<b>Total</b>	<b>19,278</b>	<b>9,331</b>	<b>1,943</b>	<b>2,174</b>	<b>1,840</b>	<b>1,935</b>	<b>2,061</b>	<b>38,562</b>
<b>Head Office Employees</b>	<b>1,675</b>	<b>1,351</b>	<b>327</b>	<b>216</b>	<b>295</b>	<b>306</b>	<b>311</b>	<b>4,481</b>
% of total	8.7%	14.5%	16.8%	9.9%	16.0%	15.8%	15.1%	11.6%
<b>Members of Labor Union</b>	<b>14,545</b>	<b>5,440</b>	<b>1,284</b>	<b>1,424</b>	<b>1,144</b>	<b>1,269</b>	<b>1,280</b>	<b>26,386</b>
% of total	75.4%	58.3%	66.1%	65.5%	62.2%	65.6%	62.1%	68.4%

We and each of our generation subsidiaries have separate labor unions. Approximately 68.4% of our and our generation subsidiaries' employees in the aggregate are members of these labor unions, each of which negotiates a collective bargaining agreement for its members each year.

Under applicable Korean law, an employee-employer cooperation committee, which is composed of eight representatives of management and eight representatives of labor, is required to be, and has been, established at the holding company and at each of our generation subsidiaries. The committee meets periodically to discuss various labor issues.

Since our formation in 1981, our businesses had not been interrupted by any work stoppages or strikes except in early 2002, when employees belonging to our five non-nuclear generation subsidiaries went on strike for six weeks to protest the Government's decision to privatize such non-nuclear generation subsidiaries according to the Restructuring Plan, which privatization plan has since been suspended indefinitely. See Item 3D. Risk Factors Risks Relating to KEPCO The Government may adopt policy measures to substantially restructure the Korean electric power industry or our operational structure, which may have a material adverse effect on our business, operations and profitability.

We believe our relations with our employees are generally good.

**Table of Contents****Item 6E. Share Ownership**

None of our directors and members of our administrative, supervisory or management bodies own more than 0.1% of our common stock.

**ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS****Item 7A. Major Shareholders**

The following table sets forth certain information relating to certain owners of our capital stock as of December 31, 2012, the date we last closed our shareholders registry:

<b>Title of Class</b>	<b>Identity of Person or Group</b>	<b>Shares Owned</b>	<b>Percentage of Class<sup>(1)</sup> (%)</b>
Common stock	Government	135,917,118	21.17
	Korea Finance Corporation <sup>(2)</sup>	192,159,940	29.94
	Subtotal	328,077,058	51.11
	National Pension Corporation	22,972,988	3.58
	KEPCO (held in the form of treasury stock)	18,929,995	2.95
	Korea Resolution & Collection Corporation <sup>(3)</sup>	8,710,933	1.36
	Employee Stock Ownership Association		
	Directors and executive officers as a group		
	Public (non-Koreans)	161,715,208	25.18
	Common shares	122,074,158	19.01
	American depository shares	39,641,050	6.17
	Public (Koreans)	101,557,895	15.82
	Total	641,964,077	100.00

*Notes:*

- (1) Percentages are based on issued shares of common stock (including treasury stock).
- (2) Korea Finance Corporation is a Government-controlled entity.
- (3) Korea Resolution & Collection Corporation is a wholly owned subsidiary of Korea Deposit Insurance Corporation that specializes in the resolution, management and collection of debts and assets originated from troubled financial institutions.

All of our shareholders have equal voting rights. See Item 10B. Memorandum and Articles of Incorporation Description of Capital Stock Voting Rights.

**Item 7B. Related Party Transactions**

We are engaged in a variety of transactions with our affiliates. We have related party transactions with Government-controlled entities such as Korea Gas Corporation, our consolidated subsidiaries and our equity investees. In addition, we engage in related party transactions with Korea Finance Corporation, one of our major shareholders. See Note 45 of the Notes to our consolidated financial statements included in this report for a description of transaction and balances with our related parties.

In the past three years, our related party transactions principally consisted of purchases of LNG from Korea Gas Corporation, sales of electricity to Korea District Heating Co., Ltd., and long-term borrowings from Korea Finance Corporation. In 2010, 2011 and 2012, we and our generation

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subsidiaries purchased LNG from Korea Gas Corporation in the aggregate amount of Won 6,930 billion, Won 9,377 billion and Won 11,506 billion, respectively. As of December 31, 2012, we had long-term borrowings from Korea Finance Corporation in the aggregate amount of Won 2,448 billion.

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We also engage in extensive transactions with our consolidated generation subsidiaries, including the purchase of electricity from them through Korea Power Exchange, sales of electricity to them, payment and receipt of commissions for services and receivables and payables transactions. These are eliminated in the consolidation process. We also provide guarantees for certain of our affiliates. See Item 5F. Tabular Disclosure of Contractual Obligations Overdraft and Others. We also have certain relationships with the Korea Power Exchange. See Item 4B. Business Overview Purchase of Electricity Cost-based Pool System.

For a further description of our transactions with our affiliates, see Note 45 of the Notes to our consolidated financial statements included in this report.

### **Item 7C. Interests of Experts and Counsel**

Not Applicable

## **ITEM 8. FINANCIAL INFORMATION**

### **Item 8A. Consolidated Statements and Other Financial Information**

We prepare our consolidated financial statements in compliance with requirements under Item 18. Financial Statements.

### **Legal Proceedings**

As of December 31, 2012, we, including our generation subsidiaries, were engaged in 559 lawsuits as the defendant and 107 lawsuits as the plaintiff. As of the same date, the total amount of damages claimed against us was Won 390.9 billion, for which we have made a reserve of Won 26.7 billion as of December 31, 2012, and the total amount claimed by us was Won 74.2 billion as of December 31, 2012. While the outcome of these lawsuits cannot presently be determined, our management believes that the final results from these lawsuits will not have a material adverse effect on our liquidity, financial position or results of operation.

Our generation subsidiaries, currently and from time to time, are involved in lawsuits incidental to the conduct of their business. A significant number of such lawsuits are based on the claim that the construction and operation of the electricity generation units owned by our generation subsidiaries have impaired neighboring fish farms. Our generation subsidiaries normally pay compensation to the members of fishery associations near our power plant complex for expected losses and damages arising from the construction and operation of their power plants in advance. Despite such compensation paid by us, a claim may still be filed against our generation subsidiaries challenging the compensation paid by us. We do not believe such claims or proceedings, individually or in the aggregate, have had or will have a material adverse effect on us and our generation subsidiaries. However, we cannot assure you that this will be the case in the future, given the possibility that we may become subject to more litigation and lawsuits arising from changes in the environmental laws and regulations applicable to us and our generation subsidiaries and people's growing demand for more compensation.

### **Dividend Policy**

For our dividend policy, see Item 10B. Memorandum and Articles of Incorporation Description of Capital Stock Dividend Rights. For a description of the tax consequences of dividends paid to our shareholders, see Item 10E. Taxation Korean Taxes Shares or ADSs Dividends on the Shares of Common Stock or ADSs and Item 10E. Taxation U.S. Federal Income and Estate Tax Consideration for U.S. Persons Tax Consequences with Respect to Common Stock and ADSs Distributions on Common Stock or ADSs.

### **Item 8B. Significant Changes**

Not Applicable

**Table of Contents****ITEM 9. THE OFFER AND LISTING****Item 9A. Offer and Listing Details****Notes**

We have issued the following registered notes and debentures, which are traded principally in the over-the counter market:

7.40% Amortizing Debentures, due April 1, 2016 (the 7.40% Debentures );

7.95% Zero-To-Full Debentures, due April 1, 2096 (the 7.95% Debentures );

6% Debentures due December 1, 2026, (the 6% Debentures );

7% Debentures due February 1, 2027 (the 7% Debentures ); and

6-3/4% Debentures due August 1, 2027 (the 6-3/4% Debentures, and together with the 7-3/4% Debentures, the 7.40% Debentures, the 7.95% Debentures, the 6% Debentures and the 7% Debentures, the Registered Debt Securities ).

Sales prices for the Registered Debt Securities are not regularly reported on any United States securities exchange or other United States securities quotation service.

**Share Capital**

The principal trading market for our common stock is the Korea Exchange. Our common stock is also listed on the New York Stock Exchange in the form of ADSs. The ADSs have been issued by JPMorgan Chase Bank as depositary and are listed on the New York Stock Exchange under the symbol KEP. One ADS represents one-half of one share of our common stock. As of December 31, 2012, the date we last closed our shareholders registry, 79,282,100 ADSs representing 6.17% shares of our common stock were outstanding.

**Common Stock**

Shares of our common stock are listed on the KRX KOSPI Market of the Korea Exchange. The table below shows the high and low closing prices on the KRX KOSPI Market of the Korea Exchange for our common stock since 2008.

Period	Price	
	High	Low
	(In Won)	
2008		
First Quarter	39,500	28,200
Second Quarter	34,150	30,200
Third Quarter	42,300	37,500
Fourth Quarter	32,950	21,000
2009		
First Quarter	32,500	23,000
Second Quarter	30,600	25,700
Third Quarter	35,800	28,000
Fourth Quarter	35,700	31,550
2010		



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First Quarter	41,600	33,800
Second Quarter	36,600	30,700
Third Quarter	33,600	28,800
Fourth Quarter	32,700	27,700

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Period	Price	
	High	Low
<b>(In Won)</b>		
2011		
First Quarter	30,050	25,800
Second Quarter	30,000	25,600
Third Quarter	28,400	20,450
Fourth Quarter	27,150	20,650
2012		
First Quarter	27,900	22,250
Second Quarter	25,850	21,450
Third Quarter	27,900	23,750
Fourth Quarter	30,450	26,200
2013		
First Quarter (through April 5)		
January	34,850	30,800
February	33,600	30,550
March	33,200	29,000
April (through April 5)	31,500	30,750

**ADSs**

The table below shows the high and low trading prices on the New York Stock Exchange for the outstanding ADSs since 2008. Each ADS represents one-half of one share of our common stock.

Period	Price	
	High	Low
<b>(In US\$)</b>		
2008		
First Quarter	20.66	13.99
Second Quarter	16.83	14.40
Third Quarter	16.32	12.08
Fourth Quarter	12.50	7.23
2009		
First Quarter	12.38	6.90
Second Quarter	12.37	9.34
Third Quarter	15.24	10.99
Fourth Quarter	15.25	13.52
2010		
First Quarter	17.89	14.86
Second Quarter	16.55	12.70
Third Quarter	14.19	12.28
Fourth Quarter	14.54	11.91
2011		
First Quarter	13.48	11.39
Second Quarter	13.74	11.86
Third Quarter	13.35	8.50
Fourth Quarter	11.55	8.25
2012		
First Quarter	12.45	9.73
Second Quarter	11.18	9.36
Third Quarter	12.42	10.37
Fourth Quarter	13.97	11.65

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Period	Price	
	High	Low
	(In US\$)	
2013		
First Quarter (through April 5)		
January	16.35	14.34
February	15.35	14.14
March	15.19	13.04
April (through April 5)	13.86	13.51

**Item 9B. Plan of Distribution**

Not Applicable

**Item 9C. Markets****The Korea Exchange**

The Korea Exchange began its operations in 1956, originally under the name of the Korea Stock Exchange. On January 27, 2005, pursuant to the Korea Securities and Futures Exchange Act, the Korea Exchange was officially created through the consolidation of the Korea Stock Exchange, the Korea Futures Exchange, the KOSDAQ Stock Market, Inc., or KOSDAQ, and the KOSDAQ Committee within the Korea Securities Dealers Association, which was in charge of the management of the KOSDAQ. The KRX KOSPI Market of the Korea Exchange, formerly the Korea Stock Exchange, has a single trading floor located in Seoul. The Korea Exchange is a limited liability company, the shares of which are held by (i) securities companies and futures companies that were the members of the Korea Stock Exchange or the Korea Futures Exchange and (ii) the shareholders of the KOSDAQ.

As of March 31, 2013 the aggregate market value of equity securities listed on the KOSPI of the Korea Exchange was approximately Won 1,161,664 billion. The average daily trading volume of equity securities for 2012 was approximately 343 million shares with an average transaction value of Won 3,831 billion.

The Korea Exchange has the power in some circumstances to suspend trading of shares of a given company or to de-list a security. The Korea Exchange also restricts share price movements. All listed companies are required to file accounting reports annually, semi-annually and quarterly and to release immediately all information that may affect trading in a security.

The Government has in the past exerted, and continues to exert, substantial influence over many aspects of the private sector business community which can have the intention or effect of depressing or boosting the market. In the past, the Government has informally both encouraged and restricted the declaration and payment of dividends, induced mergers to reduce what it considers excess capacity in a particular industry and induced private companies to publicly offer their securities.

The Korea Exchange publishes the Korea Composite Stock Price Index, or KOSPI, every thirty seconds, which is an index of all equity securities listed on the KRX KOSPI Market of the Korea Exchange. On January 1, 1983, the method of computing KOSPI was changed from the Dow Jones method to the aggregate value method. In the new method, the market capitalizations of all listed companies are aggregated, subject to certain adjustments, and this aggregate is expressed as a percentage of the aggregate market capitalization of all listed companies as of the base date, January 4, 1980.

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Movements in KOSPI in the past five years are set out in the following table:

	<b>Opening</b>	<b>High</b>	<b>Low</b>	<b>Closing</b>
2008	1,853.5	1,888.9	938.8	1,124.5
2009	1,157.4	1,718.9	1,018.8	1,682.8
2010	1,696.1	2,043.5	1,552.8	2,043.5
2011	2,070.1	2,228.9	1,706.2	1,825.7
2012	1,826.4	2,049.3	1,769.3	1,982.3
2013 (through April 5)	2,031.1	2,031.1	1,927.2	1,927.2

*Source:* The Korea Exchange

Shares are quoted ex-dividend on the first trading day of the relevant company's accounting period; since the calendar year is the accounting period for the majority of listed companies, this may account for the drop in KOSPI between its closing level at the end of one calendar year and its opening level at the beginning of the following calendar year.

With certain exceptions, principally to take account of a share being quoted ex-dividend and ex-rights, upward and downward movements in share prices of any category of shares on any day are limited under the rules of the Korea Exchange to 15% of the previous day's closing price of the shares, rounded down as set out below:

<b>Previous Day's Closing Price (Won)</b>	<b>Rounded Down to (Won)</b>
less than 5,000	5
5,000 to less than 10,000	10
10,000 to less than 50,000	50
50,000 to less than 100,000	100
100,000 to less than 500,000	500
500,000 or more	1,000

As a consequence, if a particular closing price is the same as the price set by the fluctuation limit, the closing price may not reflect the price at which persons would have been prepared, or would be prepared to continue, if so permitted, to buy and sell shares. Orders are executed on an auction system with priority rules to deal with competing bids and offers.

Due to deregulation of restrictions on brokerage commission rates, the brokerage commission rate on equity securities transactions may be determined by the parties, subject to commission schedules being filed with the Korea Exchange by the securities companies. In addition, a securities transaction tax will generally be imposed on the transfer of shares or certain securities representing rights to subscribe for shares. A special agricultural and fishery tax of 0.15% of the sales prices will also be imposed on transfer of these shares and securities on the Korea Exchange. See Item 10E. **Taxation** Korean Taxes.

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The number of companies listed on the KRX KOSPI Market of the Korea Exchange since 2008, the corresponding total market capitalization at the end of the periods indicated and the average daily trading volume for those periods are set forth in the following table:

Year	Number of Listed Companies	Total Market Capitalization on the last day for each period		Average Daily Trading Volume, Value		
		(Millions of Won)	(Thousands of U.S. dollars) <sup>(1)</sup>	(Thousands of Shares)	(Millions of Won)	Thousands of U.S. dollars) <sup>(1)</sup>
2008	765	576,927,703	458,789,426	355,205	5,189,644	4,126,953
2009	770	887,935,183	760,478,917	485,657	5,795,552	4,963,645
2010	777	1,141,885,458	1,002,621,352	380,859	5,619,768	4,934,382
2011	791	1,041,999,162	903,493,594	353,759	6,883,146	5,950,877
2012	784	1,154,294,166	1,077,672	486,480	4,823,643	4,503,448
2013 (as of March 31)	778	1,161,664,022	1,044,568	342,831	3,830,684	3,444,550

Source: The Korea Exchange

Note:

- (1) Converted at the Concentration Base Rate of The Bank of Korea or the market average exchange rate as announced by Seoul Money Brokerage Services, Ltd. in Seoul, as the case may be, at the end of the periods indicated.

The Korean securities markets are principally regulated by the Financial Services Commission and the Financial Investment Services and Capital Markets Act. The law imposes restrictions on insider trading and price manipulation, requires specified information to be made available by listed companies to investors and establishes rules regarding margin trading, proxy solicitation, takeover bids, acquisition of treasury shares and reporting requirements for shareholders holding substantial interests. Beginning on February 4, 2009, the Korean securities markets became subject to the Financial Investment Services and Capital Markets Act.

#### Protection of Customer's Interest in Case of Insolvency of Financial Investment Companies with a Brokerage License

Under Korean law, the relationship between a customer and a financial investment company with a brokerage license in connection with a securities sell or buy order is deemed to be consignment, and the securities acquired by a consignment agent (i.e., the financial investment company with a brokerage license) through such sell or buy order are regarded as belonging to the customer insofar as the customer and the consignment agent's creditors are concerned. Therefore, in the event of bankruptcy or reorganization procedures involving a financial investment company with a brokerage license, the customer of such financial investment company is entitled to the proceeds of the securities sold by such financial investment company.

When a customer places a sell order with a financial investment company with a brokerage license which is not a member of the Korea Exchange and this financial investment company places a sell order with another financial investment company with a brokerage license which is a member of the Korea Exchange, the customer is still entitled to the proceeds of the securities sold received by the non-member company from the member company regardless of the bankruptcy or reorganization of the non-member company.

Likewise, when a customer places a buy order with a non-member company and the non-member company places a buy order with a member company, the customer has the legal right to the securities received by the non-member company from the member company, because the purchased securities are regarded as belonging to the customer insofar as the customer and the non-member company's creditors are concerned.

Under the Financial Investment Services and Capital Markets Act, the Korea Exchange is obliged to indemnify any loss or damage incurred by a counterparty as a result of a breach by its members. If a financial

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investment company with a brokerage license which is a member of the Korea Exchange breaches its obligation in connection with a buy order, the Korea Exchange is obliged to pay the purchase price on behalf of the breaching member.

As the cash deposited with a financial investment company with a brokerage license is regarded as belonging to such financial investment company, which is liable to return the same at the request of its customer, the customer cannot take back deposited cash from the financial investment company with a brokerage license if a bankruptcy or reorganization procedure is instituted against such financial investment company and, therefore, can suffer from loss or damage as a result. However, the Depositor Protection Act provides that Korean Deposit Insurance Corporation will, upon the request of the investors, pay investors up to Won 50 million per depositor per financial institution in case of the such financial investment company's bankruptcy, liquidation, cancellation of securities business license or other insolvency events (collectively, the Insolvency Events). Pursuant to the Financial Investment Services and Capital Markets Act, subject to certain exceptions, financial investment companies with a brokerage license are required to deposit the cash received from their customers with the Korea Securities Finance Corporation, a special entity established pursuant to the Financial Investment Services and Capital Markets Act. Set-off or attachment of cash deposits by financial investment companies with a brokerage license is prohibited. The premiums related to this insurance under the Depositor Protection Act are paid by financial investment companies with a brokerage license.

### **Item 9D. Selling Shareholders**

Not Applicable

### **Item 9E. Dilution**

Not Applicable

### **Item 9F. Expenses of the Issue**

Not Applicable

## **ITEM 10. ADDITIONAL INFORMATION**

### **Item 10A. Share Capital**

Not Applicable

### **Item 10B. Memorandum and Articles of Incorporation**

Set forth below is information relating to our capital stock, including brief summaries of material provisions of our Articles of Incorporation, the KEPCO Act, the Financial Investment Services and Capital Markets Act, the Korean Commercial Code and certain related laws of Korea, all currently in effect. The following summaries are qualified in their entirety by reference to our Articles of Incorporation and the applicable provisions of the KEPCO Act, Financial Investment Services and Capital Markets Act, the Korean Commercial Code, the Public Agencies Management Act and certain related laws of Korea. In April 2012 we amended our Articles of Incorporation to reflect the amendments to the KEPCO Act, the Korean Commercial Code and the Public Agencies Management Act.

#### **Objects and Purposes**

We are a statutory juridical corporation established under the KEPCO Act for the purpose of ensuring stabilization of the supply and demand of electric power, and further contributing toward the sound development of the national economy through expediting development of electric power resources and carrying

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out proper and effective operation of the electricity business. The KEPCO Act and our Articles of Incorporation contemplate that we engage in the following activities:

1. development of electric power resources;
2. generation, transmission, transformation, distribution of electricity and other related business;
3. research and technology development related to the businesses mentioned in items 1 and 2;
4. overseas business related to the businesses mentioned in items 1 through 3;
5. investments or contributions related to the businesses mentioned in items 1 through 4;
6. businesses incidental to items 1 through 5;
7. development and operation of real estate holdings, subject to certain restrictions pursuant to Presidential Decree of the KEPCO Act; and
8. other businesses entrusted by the Government.

Our registered name is Hankook Chollryuk Kongsa in Korean and Korea Electric Power Corporation in English. Our registration number in the commercial registry office is 114671-0001456.

## **Directors**

Under the KEPCO Act and our Articles of Incorporation, our board of directors consists of our president, standing directors and non-standing directors. A majority of the board members constitutes a voting quorum, and resolutions will be passed by a majority of the board members. Directors who have an interest in certain agenda proposed to the board may not vote on such issues.

The standards of remuneration for our officers, including directors, shall be determined by a resolution of the board of directors, provided that the maximum amount of remuneration to be paid to our officers shall be determined by shareholder resolution and provided that the remuneration standards for the president and standing directors shall be determined by board resolution in accordance with the guideline thereon established by the minister of the Ministry of Strategy and Finance through review and resolution of our management committee. Directors who have an interest may not participate in the meeting of the board of directors for determining the remuneration for officers.

Neither the KEPCO Act nor our Articles of Incorporation have provisions relating to (i) borrowing powers exercisable by the directors and how such borrowing powers can be varied, (ii) retirement or non-retirement of directors under an age limit requirement, or (iii) the number of shares required for a director's qualification.

## **Share Capital**

Currently, our authorized share capital is 1,200,000,000 shares, which consists of shares of common stock and shares of non-voting preferred stock, par value Won 5,000 per share. Under our Articles of Incorporation, we are authorized to issue up to 150,000,000 non-voting preferred shares. As of December 31, 2012, the last day on which the shareholder registry was closed for purposes of identifying shareholders of record, 641,964,077 common shares were issued and no non-voting preferred shares have been issued. As of December 31, 2012, we held 18,929,995

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shares of our common stock as treasury stock. All of the issued and outstanding common shares are fully-paid and non-assessable and are in registered form. Share certificates are issued in denominations of 1, 5, 10, 50, 100, 500, 1,000 and 10,000 shares.

### **Description of Capital Stock**

#### *Dividend Rights*

Under the KEPCO Act, we are authorized to pay preferential dividends on our shares held by public shareholders as opposed to those held by the Government. Dividends to public shareholders are distributed in



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proportion to the number of shares of the relevant class of capital stock owned by each public shareholder following approval by the shareholders at a general meeting of shareholders. Korea Finance Corporation may receive dividends in proportion to the numbers of our shares held by them. Under the Korean Commercial Code and our Articles of Incorporation, we will pay full annual dividends on newly issued shares.

Under our Articles of Incorporation, holders of non-voting preferred shares (of which there are currently none) are entitled to receive an amount not less than 8% of their par value as determined by a resolution of the board of directors at the time of their issuance. However, if the dividends on our common shares exceed the dividends on our non-voting preferred shares, the holders of non-voting preferred shares will be entitled to participate in the distribution of such excess amount with the holders of the common shares at an equal rate.

We declare our dividend annually at the annual general meeting of shareholders which is held within three months after the end of the fiscal year. The annual dividend is paid to the shareholders on record as of the end of the fiscal year preceding the annual shareholders' meeting. Annual dividends may be distributed either in cash or in our shares. However, a dividend of shares must be distributed at par value, and dividends in shares may not exceed one-half of the annual dividend.

Under the Korean Commercial Code and our Articles of Incorporation, we do not have an obligation to pay any annual dividend unclaimed for five years from the payment date.

The KEPCO Act provides that we shall not pay an annual dividend unless we have made up any accumulated deficit and set aside as a legal reserve an amount equal to 20.0% or more of our net profit until our accumulated reserve reaches one-half of our stated capital.

### ***Distribution of Free Shares***

In addition to dividends in the form of shares to be paid out of retained or current earnings, the Korean Commercial Code permits us to distribute to our shareholders an amount transferred from our capital surplus or legal reserve to stated capital in the form of free shares.

### ***Voting Rights***

Holders of our common shares are entitled to one vote for each common share, except that voting rights with respect to any common shares held by us or by a corporate shareholder, more than one-tenth of whose outstanding capital stock is directly or indirectly owned by us, may not be exercised. Any person (with certain exceptions) who holds more than 3% of our issued and outstanding shares cannot exercise voting rights with respect to the shares in excess of this 3% limit. See *Limitation on Shareholdings*. Pursuant to the Korean Commercial Code, cumulative voting is permissible in relation to the appointment of directors. Under the Korean Commercial Code, a cumulative vote can be requested by the shareholders of a corporation representing at least 1% of the total voting shares of such corporation if the relevant shareholders' meeting is intended to elect more than two seats of the board of directors and the request for cumulative voting is made to the management of the corporation in writing at least six weeks in advance of the shareholders' meeting. Under this new voting method, each shareholder will have multiple voting rights corresponding to the number of directors to be appointed in such voting and may exercise all such voting rights to elect one director. Shareholders are entitled to vote cumulatively unless the Articles of Incorporation expressly prohibit cumulative voting. Our current Articles of Incorporation do not prohibit cumulative voting. Except as otherwise provided by law or our Articles of Incorporation, a resolution can be adopted at a general meeting of shareholders by affirmative majority vote of the voting shares of the shareholders present or represented at a meeting, which must also represent at least one-fourth of the voting shares then issued and outstanding. The holders of our non-voting preferred shares (other than enfranchised preferred shares (as described below)) are not entitled to vote on any resolution or to receive notice of any general meeting of shareholders unless the agenda of the meeting includes consideration of a resolution on which such holders are entitled to vote. If we are unable to pay any dividend to holders of non-

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voting preferred shares as provided in our Articles of Incorporation, the holders of non-voting preferred shares will become enfranchised and will be entitled to exercise voting rights until such dividends are paid. The holders of these enfranchised preferred shares have the same rights as holders of our common shares to request, receive notice of, attend and vote at a general meeting of shareholders. Pursuant to the KEPCO Act and our Articles of Incorporation, the appointment of standing directors, the president and standing statutory auditor are subject to shareholder approval.

Under the Korean Commercial Code, for the purpose of electing our statutory auditor, a shareholder (together with certain related persons) holding more than 3% of the total shares having voting rights may not exercise voting rights with respect to shares in excess of such 3% limit.

The Korean Commercial Code provides that the approval by holders of at least two-thirds of those shares having voting rights present or represented at a meeting, where such shares also represent at least one-third of the total issued and outstanding shares having voting rights, is required in order to, among other things:

amend our Articles of Incorporation;

remove a director or statutory auditor;

effect any dissolution, merger, consolidation or spin-off of us;

transfer the whole or any significant part of our business;

effect the acquisition by us of all of the business of any other company;

effect the acquisition by us of the business of another company that may have a material effect on our business;

reduce capital; or

issue any new shares at a price lower than their par value.

Under our Articles of Incorporation, an approval by the Ministry of Trade, Industry and Energy is required in order to amend the Articles of Incorporation. Any change to our authorized share capital requires an amendment to our Articles of Incorporation.

In addition, in the case of amendments to our Articles of Incorporation or any merger or consolidation of us or in certain other cases which affect the rights or interests of the non-voting preferred shares a resolution must be adopted by a meeting of the holders of non-voting preferred shares approving such event. This resolution may be adopted if approval is obtained from holders of at least two-thirds of those non-voting preferred shares present or represented at such meeting and such non-voting preferred shares also represent at least one-third of our total issued and outstanding non-voting preferred shares.

A shareholder may exercise his voting rights by proxy. The proxy shall present the power of attorney prior to the start of the general meeting of shareholders. Under the Financial Investment Services and Capital Markets Act and our Articles of Incorporation, no one other than us may solicit a proxy from shareholders.

Subject to the provisions of the deposit agreement, holders of our American Depositary Shares ( ADSs ) are entitled to instruct the depositary, whose agent is the record holder of the underlying common shares, how to exercise voting rights relating to those underlying common shares.

*Preemptive Rights and Issuance of Additional Shares*

Authorized but unissued shares may be issued at such times and, unless otherwise provided in the Korean Commercial Code, upon such terms as our board of directors may determine. The new shares must be offered on uniform terms to all our shareholders who have preemptive rights and who are listed on the shareholders register as of the record date. Subject to the limitations described under Limitation on Shareholdings below and with

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certain other exceptions, all our shareholders are entitled to subscribe for any newly issued shares in proportion to their existing shareholdings. Under the Korean Commercial Code, we may vary, without shareholder approval, the terms of such preemptive rights for different classes of shares. Public notice of the preemptive rights to new shares and their transferability must be given not less than two weeks (excluding the period during which the shareholders' register is closed) prior to the record date. Our board of directors may determine how to distribute shares for which preemptive rights have not been exercised or where fractions of shares occur.

Our Articles of Incorporation provide that new shares that are (1) publicly offered pursuant to the Financial Investment Services and Capital Markets Act, (2) issued to members of our employee stock ownership association, (3) represented by depositary receipts, (4) issued through offering to public investors, or (5) issued to investors in kind under the State Property Act may be issued pursuant to a resolution of the board of directors to persons other than existing shareholders, who in such circumstances will not have preemptive rights.

Under our Articles of Incorporation, we may issue convertible bonds or bonds with warrants each up to an aggregate principal amount of Won 2,000 billion and Won 1,000 billion, respectively, to persons other than existing shareholders. However, the aggregate principal amount of convertible bonds and bonds with warrants so issued to persons other than existing shareholders may not exceed Won 2,000 billion.

Under the Financial Investment Services and Capital Markets Act and our Articles of Incorporation, members of our employee stock ownership association, whether or not they are our shareholders, have a preemptive right, subject to certain exceptions, to subscribe for up to 20.0% of any shares publicly offered pursuant to the Financial Investment Services and Capital Markets Act. This right is exercisable only to the extent that the total number of shares so acquired and held by members of our employee stock ownership association does not exceed 20.0% of the total number of shares then outstanding.

### ***Liquidation Rights***

In the event of our liquidation, the assets remaining after payment of all debts, liquidation expenses and taxes will be distributed among shareholders in proportion to the number of shares held. Holders of our non-voting preferred shares have no preference in liquidation.

### ***Rights of Dissenting Shareholders***

In certain limited circumstances (including, without limitation, the transfer of the whole or any significant part of our business or the merger, or consolidation upon a split-off of us with another company), dissenting holders of shares have the right to require us to purchase their shares. To exercise such right, shareholders must submit a written notice of their intention to dissent to us prior to the general meeting of shareholders or the class meeting of holders of non-voting preferred shares, as the case may be. Within 20 days after the date on which the relevant resolution is passed at such meeting, such dissenting shareholders must request us in writing to purchase their shares. We are obligated to purchase the shares of dissenting shareholders within one month after the expiration of such 20-day period. The purchase price for such shares must be determined through negotiation between the dissenting shareholders and us. Under the Financial Investment Services and Capital Markets Act, if we cannot agree on a price through negotiation, the purchase price will be the average of (1) the weighted average of the daily share price on the Korea Exchange for a two-month period before the date of adoption of the relevant board resolution, (2) the weighted average of the daily share price on the Korea Exchange for the one month period before such date and (3) the weighted average of the daily share price on the Korea Exchange for the one week period before such date. However, if we or dissenting shareholders who requested us to purchase their shares oppose such purchase price, the determination of a purchase price may be filed with a court. Holders of ADSs will not be able to exercise dissenters' rights unless they have withdrawn the underlying Common Stock and become our direct shareholders.

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### **Transfer of Shares**

Under the Korean Commercial Code, the transfer of shares is effected by delivery of share certificates, but in order to assert shareholders' rights against us, the transferee must have his name and address registered on our register of shareholders. For this purpose, shareholders are required to file one's name, address and seal with our transfer agent. Under our Articles of Incorporation, non-resident shareholders must appoint an agent authorized to receive notices on their behalf in Korea and file a mailing address in Korea. These requirements do not apply to the holders of ADSs. Under current Korean regulations, the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and internationally recognized foreign custodians are authorized to act as agents and provide related services for foreign shareholders. Our transfer agent is the Kookmin Bank, located at 9-1, Namdaemun-ro, 2-ga, Chung-ku, Seoul, Korea. Certain foreign exchange controls and securities regulations apply to the transfer of our shares by non-residents of Korea or non-Koreans. See Item 9. The Offer and Listing.

### **Acquisition of Our Own Shares**

We generally may not acquire our own shares except in certain limited circumstances, including, without limitation, a reduction in capital. Under the Korean Commercial Code, except in case of a reduction in capital, any of our shares acquired by us must be sold or otherwise transferred to a third party within a reasonable time. In general, our 50.0% or more owned-subidiaries are not permitted to acquire our shares.

In addition, we may acquire our shares through purchase on the Korea Exchange or through a tender-offer. We may also acquire interests in our own shares through trust agreements with financial investment companies with a trust license. The aggregate purchase price for our shares may not exceed the total amount available of dividends at the end of the preceding fiscal year, less the amount of dividends and mandatory reserves required to be set aside for that fiscal year, subject to certain procedural requirements.

### **General Meeting of Shareholders**

The ordinary general meeting of our shareholders is held within three months after the end of each fiscal year, and subject to board resolution or court approval, an extraordinary general meeting of our shareholders may be held as necessary or at the request of shareholders holding an aggregate of 1.5% or more of our outstanding common shares for at least six consecutive months. Under the Korean Commercial Code, an extraordinary general meeting of shareholders may be convened at the request of our audit committee, subject to a board resolution or court approval. Holders of non-voting preferred shares may only request a general meeting of shareholders once the non-voting preferred shares have become enfranchised as described under Description of Capital Stock Voting Rights above. Written notices setting forth the date, place and agenda of the meeting must be given to shareholders at least two weeks prior to the date of the general meeting of shareholders. However, pursuant to the Korean Commercial Code and our Articles of Incorporation, with respect to holders of less than 1% of the total number of our issued and outstanding shares which are entitled to vote, notice may be given by placing at least two public notices at least two weeks in advance of the meeting in at least two daily newspapers published in Seoul or by placing a public notice in the electrical disclosure system of the Financial Supervisory Service or the Korea Exchange, at least two weeks in advance of the meeting. Currently, for giving such notice, we use two daily newspapers published in Seoul as well as an electronic disclosure system available for access at a website maintained by the FSS (known as the Data Analysis, Retrieval and Transfer System, or DART). Shareholders not on the shareholders' register as of the record date are not entitled to receive notice of the general meeting of shareholders or attend or vote at such meeting. Holders of the enfranchised preferred shares on the shareholders' register as of the record date are entitled to receive notice of, and to attend and vote at, the general meetings. Otherwise, holders of non-voting preferred shares are not entitled to receive notice of general meetings of shareholders or vote at such meetings but may attend such meetings.

The general meeting of shareholders is held in Seoul.

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### **Register of Shareholders and Record Dates**

Our transfer agent, Kookmin Bank, maintains the register of our shareholders at its office in Seoul, Korea. It registers transfers of our shares on the register of shareholders upon presentation of the share certificates.

The record date for annual dividends is December 31. For the purpose of determining the holders of shares entitled to annual dividends, the register of shareholders may be closed from January 1 to January 31 of each year. Further, the Korean Commercial Code and our Articles of Incorporation permit us at least two weeks' public notice to set a record date and/or close the register of shareholders for not more than three months for the purpose of determining the shareholders entitled to certain rights pertaining to our shares. The trading of our shares and the delivery of certificates in respect of them may continue while the register of shareholders is closed.

### **Annual Report**

At least one week prior to the annual general meeting of shareholders, our annual report and audited consolidated financial statements must be made available for inspection at our principal office and at all branch offices. Copies of annual reports, the audited non-consolidated financial statements and any resolutions adopted at the general meeting of shareholders will be available to our shareholders.

Under the Financial Investment Services and Capital Markets Act, we must file with the Financial Services Commission and the Korea Exchange an annual report within 90 days after the end of our fiscal year, a half-year report within 45 days after the end of the first six months of our fiscal year and quarterly reports within 45 days after the end of the first three months and nine months of our fiscal year. However, due to our adoption of IFRS starting in January 1, 2011 pursuant to regulatory requirements for listed companies in Korea, we are required to file half-year and quarterly reports containing interim financial statements and notes thereto on a consolidated basis in addition to non-consolidated basis. The filing deadline for such reports will be temporarily extended to 60 days for fiscal years 2011 and 2012. Therefore, we are required to file our half-year report within 60 days after the end of the first six months of 2011 and 2012 and our quarterly reports within 60 days after the end of the first three months and nine months of 2011 and 2012.

### **Limitation on Shareholdings**

No person other than the Government, our employee stock ownership association and persons who obtain an approval from the Financial Services Commission may hold for its account more than 3% of our total issued and outstanding shares. In calculating shareholdings for this purpose, shares held by your spouse and your certain relatives or by your certain affiliates (such spouses, relatives and affiliates are together referred to as "Affiliated Holders") are deemed to be held by you. If you hold our shares in violation of this 3% limit, you are not entitled to exercise the voting rights or preemptive rights of our shares in excess of such 3% limit and the Financial Services Commission may order you to take necessary corrective action. In addition, the KEPCO Act currently requires that the Government, directly or through Korea Finance Corporation, own not less than 51% of our capital. For other restrictions on shareholdings, see Item 9. The Offer and Listing.

### **Change of Control**

The KEPCO Act requires that the Government, directly or pursuant to the Korea Finance Corporation Act, through Korea Finance Corporation, own not less than 51.0% of our capital.

### **Disclosure of Share Ownership**

Under the Financial Investment Services and Capital Markets Act, any person whose direct or beneficial ownership of a listed company's shares with voting rights, equity-related debt securities including convertible bonds, bonds with warrants, exchangeable bonds, certificates representing the rights to subscribe for common

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shares, derivatives-linked securities and depository receipts of the aforementioned securities (collectively referred to as Equity Securities ), together with the Equity Securities directly or beneficially owned by certain related persons or by any person acting in concert with the person, accounts for 5% or more of our total outstanding Equity Securities is required to report the status and purpose (in terms of whether the purpose of shareholding is to participate in the management of the issuer) of the holdings and the material contents of the agreements relating to the Equity Securities and other matters prescribed by the Presidential Decree under the Financial Investment Services and Capital Markets Act to the Financial Services Commission of Korea and the Korea Exchange within five business days after reaching the 5% ownership interest threshold.

In addition, any change (i) in the purpose of the shareholding or in the ownership, (ii) the major terms and conditions of agreements relating to Equity Securities owned (such as trust agreements and collateral agreements) to the extent the number of relevant Equity Securities is 1% or more of the total outstanding Equity Securities, or (iii) the type of ownership (direct ownership or holding) to the extent the number of relevant Equity Securities is 1% or more of the total outstanding Equity Securities, must be reported to the Financial Services Commission of Korea and the Korea Exchange within five business days from the date of such change (or by the 10<sup>th</sup> day of the month following the month in which the change occurs, in the case of a person with no intent to seek management control). Notwithstanding the foregoing, certain professional investors designated by the Financial Services Commission may report such matters to the Financial Services Commission and the Korea Exchange by the tenth day of the month immediately following the end of the quarter in which such 5.0% ownership interest is reached or the change occurs.

When filing a report to the Financial Services Commission and the Korea Exchange in accordance with the reporting requirements described above, a copy of such report must be sent to the relevant listed company. Violation of these reporting requirements may subject a person to sanctions such as prohibition on the exercise of voting rights with respect to the Equity Securities for which the reporting requirement was violated or fines or imprisonment. Furthermore, the Financial Services Commission may order the disposal of the Equity Securities for which the reporting requirement was violated.

A person reporting to the Financial Services Commission and the Korea Exchange that his purpose of holding the Equity Securities is to participate in the management of the listed company is prohibited from acquiring additional Equity Securities of the listed company and exercising voting rights during the period commencing from the date on which the event triggering the reporting requirements occurs to the fifth day from the date on which the report is made.

**Item 10C. Material Contracts**

Not applicable.

**Item 10D. Exchange Controls**

**General**

The Foreign Exchange Transaction Act and the Presidential Decree and regulations under that Act and Decree, or collectively the Foreign Exchange Transaction Laws, regulate investment in Korean securities by non-residents and issuance of securities outside Korea by Korean companies. Non-residents may invest in Korean securities pursuant to the Foreign Exchange Transaction Laws. The Financial Services Commission has also adopted, pursuant to its authority under the Financial Investment Services and Capital Markets Act, regulations that regulate investment by foreigners in Korean securities and issuance of securities outside Korea by Korean companies.

Subject to certain limitations, the Ministry of Strategy and Finance has the authority to take the following actions under the Foreign Exchange Transaction Laws: (i) if the Government deems it necessary on account of

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war, armed conflict, natural disaster or grave, sudden and significant changes in domestic or foreign economic circumstances or similar events or circumstances, the Ministry of Strategy and Finance may temporarily suspend performance under any or all foreign exchange transactions, in whole or in part, to which the Foreign Exchange Transaction Laws apply (including suspension of payment and receipt of foreign exchange) or impose an obligation to deposit, safe-keep or sell any instruments of payment to the Bank of Korea or certain other governmental agencies or financial institutions, and (ii) if the Government concludes that the international balance of payments and international financial markets are experiencing or are likely to experience significant disruption or that the movement of capital between Korea and other countries are likely to adversely affect the Korean Won, exchange rates or other macroeconomic policies, the Ministry of Strategy and Finance may take action to require any person who intends to effect or effects a capital transaction to deposit all or a portion of the instruments of payment acquired in such transactions with the Bank of Korea or certain other governmental agencies or financial institutions.

### **Government Review of Issuances of Debt Securities and ADSs and Report for Payments**

In order for us to issue debt securities of any series outside of the Republic, we are required to file a report with our designated foreign exchange bank or the Ministry of Strategy and Finance on the issuance of such debt securities, depending on the issuance amount. The Ministry of Strategy and Finance may at its discretion direct us to take measures as necessary to avoid undue exchange rate fluctuations before it accepts such report. Furthermore, in order for us to make payments of principal of or interest on the debt securities of any series and other amounts as provided in an indenture and such debt securities, we are required to present relevant documents to the designated foreign exchange bank at the time of each actual payment. The purpose of such presentation is to ensure that the actual remittance is consistent with the terms of the transaction reported to our designated foreign exchange bank or the Ministry of Strategy and Finance.

In order for us to offer for purchase shares of our common stock held in treasury in the form of ADSs or issue shares of our common stock represented by the ADSs, we are required to file a prior report of such offer or issuance with our designated foreign exchange bank or the Ministry of Strategy and Finance, depending on the offering amount. The Ministry of Strategy and Finance may at its discretion direct us to take measures as necessary to avoid undue exchange rate fluctuations before it accepts such report. No further Governmental approval is necessary for the initial offering and issuance of the ADSs.

In order for a depository to acquire any existing shares of our common stock from holders of these shares of common stock (other than from us) for the purpose of issuance of depository receipts representing these shares of common stock, the depository would be required to obtain our consent for the number of shares to be deposited in any given proposed deposit which exceeds the difference between (1) the aggregate number of shares deposited by us or with our consent for the issuance of ADSs (including deposits in connection with the initial and all subsequent offerings of ADSs and stock dividends or other distributions related to these ADSs) and (2) the number of shares on deposit with the depository at the time of such proposed deposit. We may not grant this consent for the deposit of shares of our common stock in the future, if our consent is required. Therefore, a holder of ADSs who surrenders ADSs and withdraws shares of our common stock may not be permitted subsequently to deposit such shares and obtain ADSs.

In addition, we are also required to notify the Ministry of Strategy and Finance upon receipt of the full proceeds from the offering of ADSs. No additional Governmental approval is necessary for the offering and issuance of ADSs.

### **Reporting Requirements for Holders of Substantial Interests**

Under the Financial Investment Services and Capital Markets Act, any person whose direct beneficial ownership of a listed company's Equity Securities, together with the Equity Securities beneficially owned by certain related persons or by any person acting in concert with such person, accounts for 5% or more of our total



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outstanding Equity Securities is required to report the status and purpose (namely, whether the purposes of the share ownership is to participate in the management of the issuer) of the holdings and the material contents of the agreements relating to the Equity Securities and other matters prescribed by the Presidential Decree under the Financial Investment Services and Capital Markets Act to the Financial Services Commission and the Korea Exchange within five business days after reaching the 5% ownership interest and any change in ownership interest subsequent to the report which equals or exceeds 1.0% of the total outstanding Equity Securities is required to be reported to the Financial Services Commission and the Korea Exchange within five business days from the date of the change.

In addition, any change (i) in the purpose of the shareholding or in the ownership, (ii) the major terms and conditions of agreements relating to Equity Securities owned (such as trust agreements and collateral agreements) to the extent the number of relevant Equity Securities is 1% or more of the total outstanding Equity Securities, or (iii) the type of ownership (direct ownership or holding) to the extent the number of relevant Equity Securities is 1% or more of the total outstanding Equity Securities, must be reported to the Financial Services Commission of Korea and the Korea Exchange within five business days from the date of such change (or by the 10<sup>th</sup> day of the month following the month in which the change occurs, in the case of a person with no intent to seek management control). Notwithstanding the foregoing, certain professional investors designated by the Financial Services Commission may report such matters to the Financial Services Commission and the Korea Exchange by the tenth day of the month immediately following the end of the quarter in which such 5.0% ownership interest is reached or the change occurs.

When filing a report to the Financial Services Commission and the Korea Exchange in accordance with the reporting requirements described above, a copy of such report must be sent to the relevant listed company. Violation of these reporting requirements may subject a person to sanctions such as prohibition on the exercise of voting rights with respect to the Equity Securities for which the reporting requirement was violated or fines or imprisonment. Furthermore, the Financial Services Commission may order the disposal of the Equity Securities for which the reporting requirement was violated.

A person reporting to the Financial Services Commission and the Korea Exchange that his purpose of holding the Equity Securities is to participate in the management of the listed company is prohibited from acquiring additional Equity Securities of the listed company and exercising voting rights during the period commencing from the date on which the event triggering the reporting requirements occurs to the fifth day from the date on which the report is made.

In addition to the reporting requirements described above, any person whose direct or beneficial ownership of our voting stock and/or depository receipts for our voting stock accounts for 10.0% or more of the total issued and outstanding voting stock, whom we refer to as a major shareholder, must file a report to the Securities and Futures Commission and to the Korea Exchange within five business days after the date on which the person reached such shareholding limit. In addition, such person must file a report to the Securities and Futures Commission and to the Korea Exchange regarding any subsequent change in his/her shareholding. Such report on subsequent change in shareholding must be filed within five business days of the occurrence of any such change. Violation of these reporting requirements may subject a person to criminal sanctions such as fines and imprisonment.

## **Restrictions Applicable to ADSs**

No Governmental approval is necessary for the sale and purchase of ADSs in the secondary market outside Korea or for the withdrawal of shares of our common stock underlying ADSs and the delivery inside Korea of the withdrawn shares. However, a foreigner who intends to acquire shares must obtain an Investment Registration Card from the Financial Supervisory Service as described below. The acquisition of shares by a foreigner must be reported by the foreigner or his standing proxy in Korea immediately to the Governor of the Financial Supervisory Service.

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**Special Reporting Requirement for Companies Whose Securities Are Listed on Foreign Exchanges**

Under the regulations of the Financial Services Commission amended on December 24, 2009, (i) if a company listed on the Korea Exchange has submitted a public disclosure of material matters to a foreign financial investment supervisory authority pursuant to the laws of the foreign jurisdiction, then it must submit a copy of the public disclosure and a Korean translation thereof to the Financial Services Commission of Korea and the Korea Exchange, and (ii) if a company listed on the Korea Exchange is approved for listing on a foreign stock market or determined to be de-listed from the foreign stock market or actually listed on, or de-listed from, a foreign stock market, then it must submit a copy of any document, which it submitted to or received from the relevant foreign government, foreign financial investment supervisory authority or the foreign stock market, and a Korean translation thereof to the Financial Services Commission of Korea and the Korea Exchange.

Persons who have acquired shares of our common stock as a result of the withdrawal of shares of common stock underlying ADSs may exercise their preemptive rights for new shares, participate in free distributions and receive dividends on shares of our common stock without any further governmental approval.

**Restrictions Applicable to Common Stock**

Under the Foreign Exchange Transaction Laws and the Regulations on Financial Investment Business (together, the Investment Rules ), foreigners are permitted to invest, subject to certain exceptions and procedural requirements, in all shares of Korean companies unless prohibited by specific laws. Foreign investors may trade shares listed on the Korea Exchange only through the Korea Exchange except for certain limited circumstances. These circumstances include, among others, (1) odd-lot trading of shares, (2) acquisition of shares by a foreign company as a result of a merger, (3) acquisition or disposal of shares in connection with a tender offer, (4) acquisition of shares by exercise of warrant, conversion right under convertible bonds, exchange right under exchangeable bonds or withdrawal right under depositary receipts issued outside of Korea by a Korean company, such shares being Converted Shares, (5) acquisition of shares through exercise of rights under securities issued outside of Korea, (6) acquisition of shares as a result of inheritance, donation, bequest or exercise of shareholders' rights (including preemptive rights or rights to participate in free distributions and receive dividends), (7) over-the-counter transactions between foreigners of a class of shares for which a ceiling on aggregate acquisition by foreigners (as explained below) exists and has been reached or exceeded, (8) acquisition of shares by direct investment under the Foreign Investment Promotion Law, (9) acquisition and disposal of shares on an overseas stock exchange market, if such shares are simultaneously listed on the KRX KOSPI Market or the KRX KOSDAQ Market of the Korea Exchange and such overseas stock exchange, and (10) arm's length transactions between foreigners in the event all such foreigners belong to an investment group managed by the same person. For over-the-counter transactions of shares listed on the Korea Exchange outside the Korea Exchange between foreigners of a class of shares for which a ceiling on aggregate acquisition by foreigners exists and has been reached or exceeded, a financial investment company with a brokerage license in Korea must act as an intermediary. Odd-lot trading of shares listed on the Korea Exchange outside the Korea Exchange must involve a financial investment company with a dealing license in Korea as the other party. Foreign investors are prohibited from engaging in margin transactions with respect to shares subject to a ceiling on acquisition by foreigners.

The Investment Rules require a foreign investor who wishes to invest in or dispose of shares on the Korea Exchange (including Converted Shares) to register his/her identity with the Financial Supervisory Service prior to making any such investment or disposal unless he/she had previously registered. However, such registration requirement does not apply to foreign investors who acquire Converted Shares with the intention of selling them within three months from the date they were acquired. Upon registration, the Financial Supervisory Service will issue to the foreign investor an Investment Registration Card which must be presented each time the foreign investor opens a brokerage account with a financial investment company or financial institution in Korea. Foreigners eligible to obtain an Investment Registration Card include any foreign nationals who are individuals (with residence abroad for six months or more), foreign governments, foreign municipal authorities, foreign

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public institutions, international financial institutions or similar international organizations, corporations incorporated under foreign laws and any person in any additional category designated by the Decree of the Financial Services and Capital Markets Act. All Korean branches of a foreign corporation as a group are treated as a separate foreigner from the head office of the foreign corporation. However, a foreign branch of a Korean securities company, a foreign corporation or a depository issuing depository receipts may obtain one or more Investment Registration Cards in its name in certain circumstances as described in the relevant regulations.

Upon a foreign investor's purchase of shares through the Korea Exchange, no separate report by the investor is required because the Investment Registration Card system is designed to control and oversee foreign investment through a computer system. However, a foreign investor's acquisition or sale of shares outside the Korea Exchange (as discussed above) must be reported by the foreign investor or his standing proxy to the Governor of the Financial Supervisory Service at the time of each acquisition or sale. However, a foreign investor must ensure that any acquisition or sale by it of shares outside the Korea Exchange in the case of trades in connection with a tender offer, odd-lot trading of shares or trades of a class of shares for which the aggregate foreign ownership limit has been reached or exceeded, is reported to the Governor of the Financial Supervisory Service by the Korea Securities Depository, financial investment companies with a dealing or brokerage license or securities finance companies engaged to facilitate such transactions. In the event a foreign investor desires to acquire or sell shares outside the Korea Exchange and the circumstances in connection with such sale or acquisition do not fall within the exceptions made for certain limited circumstances described above, then the foreign investor must obtain the prior approval of the Governor. In addition, in the event a foreign investor acquires or sells shares outside the Korea Exchange, a prior report to the Bank of Korea may also be required in certain circumstances. A foreign investor may appoint one or more standing proxies from among the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and certain eligible foreign custodians which will exercise shareholders' rights or perform any matters related to the foregoing activities if the foreign investor does not perform these activities himself. However, a foreign investor may be exempted from complying with these standing proxy rules with the approval of the Governor of the Financial Supervisory Service in cases deemed inevitable by reason of conflict between the laws of Korea and those of the home country of the foreign investor.

Certificates evidencing shares of Korean companies must be kept in custody with an eligible custodian in Korea, the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and certain eligible foreign custodians are eligible to be a custodian of shares for a non-resident or foreign investor. A foreign investor must ensure that his custodian deposits his shares with the Korea Securities Depository. Generally, a foreign investor may not permit any person, other than his/her standing proxy, to exercise rights relating to his shares or perform any tasks related thereto on his behalf. However, a foreign investor may be exempted from complying with this deposit requirement with the approval of the Governor of the Financial Supervisory Service in circumstances where compliance is made impracticable, including cases where such compliance would contravene the laws of the home country of the foreign investor.

Under the Investment Rules, with certain exceptions, a foreign investor may acquire shares of a Korean company without being subject to any single or aggregate foreign investment ceiling. However, certain designated public corporations are subject to a 40.0% ceiling on acquisitions of shares by foreigners in the aggregate and a ceiling on acquisitions of shares by a single foreign investor provided in the Articles of Incorporation of such corporations. Of the Korean companies listed on the Korea Exchange, we are so designated. The Financial Services Commission may increase or decrease these percentages if it deems it necessary for the public interest, protection of investors or industrial policy. Generally, the ownership of Converted Shares constitutes foreign ownership for purposes of such aggregate foreign ownership limit. However, the acquisition of Converted Shares is one of the exceptions under which foreign investors may acquire shares of designated corporations in excess of the 40.0% ceiling.

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In addition to the aggregate foreign investment ceiling set by the Financial Services Commission under authority of the Financial Investment Services and Capital Markets Act, our Articles of Incorporation set a 3% ceiling on acquisition by a single investor (whether domestic or foreign) of the shares of our common stock. Any person (with certain exceptions) who holds more than 3% of our issued and outstanding shares cannot exercise voting rights with respect to our shares in excess of this 3% limit.

The ceiling on aggregate investment by foreigners applicable to us may be exceeded in certain limited circumstances, including as a result of acquisition of:

shares by a depositary issuing depositary receipts representing such shares (whether newly issued shares or outstanding shares);

Converted Shares;

shares from the exercise of shareholders' rights; or

shares by gift, inheritance or bequest.

A foreigner who has acquired shares in excess of any ceiling described above may not exercise his voting rights with respect to the shares exceeding such limit and the Financial Services Commission may take necessary corrective action against him.

Under the Foreign Exchange Transaction Laws, a foreign investor who intends to acquire shares must designate a foreign exchange bank at which he must open a foreign currency account and a Won account exclusively for stock investments. No approval is required for remittance into Korea and deposit of foreign currency funds in the foreign currency account. Foreign currency funds may be transferred from the foreign currency account at the time required to place a deposit for, or settle the purchase price of, a stock purchase transaction to a Won account opened at a securities company. Funds in the foreign currency account may be remitted abroad without any governmental approval.

Dividends on shares of our common stock are paid in Won. No governmental approval is required for foreign investors to receive dividends on, or the Won proceeds of the sale of, any shares to be paid, received and retained in Korea. Dividends paid on, and the Won proceeds of the sale of, any shares held by a non-resident of Korea must be deposited either in a Won account with the investor's securities company or the investor's Won account. Funds in the investor's Won account may be transferred to his foreign currency account or withdrawn for local living expenses, provided that any withdrawal of local living expenses in excess of a certain amount is reported to the tax authorities by the foreign exchange bank at which Won account is maintained. Funds in the investor's Won account may also be used for future investment in shares or for payment of the subscription price of new shares obtained through the exercise of preemptive rights.

Financial investment companies with a securities dealing, brokerage or collective investment license are allowed to open foreign currency accounts with foreign exchange banks exclusively for accommodating foreign investors' stock investments in Korea. Through these accounts, these securities companies and asset management companies may enter into foreign exchange transactions on a limited basis, such as conversion of foreign currency funds and Won funds, either as a counterparty to or on behalf of foreign investors without the foreign investors having to open their own accounts with foreign exchange banks.

## **Item 10E. Taxation**

### **Korean Taxes**

The following summary describes the material Korean tax consequences of ownership of the Registered Debt Securities and ADSs. Persons considering the purchase of the Registered Debt Securities or ADSs should consult their own tax advisors with regard to the application of the Korean income tax laws to their particular situations as well as any tax consequences arising under the laws of any other taxing jurisdiction. Reference is

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also made to a tax treaty between the Republic and the United States entitled Convention Between the Government of The Republic of Korea and the Government of the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and the Encouragement of International Trade and Investment, signed on June 4, 1976 and entered into force on October 20, 1979.

The following summary of Korean tax considerations applies to you so long as you are not:

a resident of Korea;

a corporation having its head office, principal place of business or place of effective management in Korea; or

engaged in a trade or business in Korea through a permanent establishment or a fixed base to which the relevant income is attributable or with which the relevant income is effectively connected.

***Registered Debt Securities***

*Taxation of Interest*

Pursuant to the Special Tax Treatment Control Law ( STTCL ), when we make payments of interest to you on the Registered Debt Securities, no amount will be withheld from such payments for, or on account of, any income taxes of any kind imposed, levied, withheld or assessed by Korea or any political subdivision or taxing authority thereof or therein, provided that Registered Debt Securities are deemed to be foreign currency denominated bonds issued outside of Korea for the purpose of the STTCL.

If the tax exemption under the STTCL referred to above were to cease to be in effect, the rate of income tax or corporation tax applicable to the interest on the Registered Debt Securities would be 14% of income for a non-resident without a permanent establishment in Korea. In addition, a tax surcharge called a local income surtax would be imposed at the rate of 10.0% of the income tax or corporation tax (which would increase the total tax rate to 15.4%), unless reduction is available under an applicable income tax treaty. If you are a qualified resident in a country that has entered into a tax treaty with Korea, you may qualify for an exemption or a reduced rate of Korean withholding tax. See the discussion under

Shares or ADSs Tax Treaties below for an additional explanation on treaty benefits.

In order to obtain the benefits of an exemption or a reduced withholding tax rate under a tax treaty, you must submit to us, prior to the interest payment date, such evidence of tax residence as may be required by the Korean tax authorities in order to establish your entitlement to the benefits of the applicable tax treaty.

Furthermore, the Korean tax laws require the beneficial owner to submit an application for entitlement to a preferential tax rate together with evidence of tax residence (including a certificate of tax residence of the beneficial owner issued by a competent authority of the country of tax residence of the beneficial owner) to a withholding obligor paying Korean source income in order to benefit from the available reduced tax rate pursuant to the relevant tax treaty. Subject to certain exceptions, the Korean tax laws also require an overseas investment vehicles (which is defined as an organization established in a foreign jurisdiction that manages funds collected through investment solicitation by way of acquiring, disposing or otherwise investing in proprietary targets and then distributes the outcome of such management to investors) to obtain the application for entitlement to a preferential tax rate from the beneficial owners and submit a report of overseas investment vehicle to the withholding obligor, together with a detailed statement on the beneficial owner of the income.

*Taxation of Capital Gains*

Korean tax laws currently exclude from Korean taxation gains made by a non-resident without permanent establishment in Korea from the sale of a Registered Debt Security to another non-resident (except where a non-

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resident sells Registered Debt Securities to another non-resident who has permanent establishments in Korea, if any). In addition, capital gains realized from the transfer of Registered Debt Securities outside Korea by non-residents with or without permanent establishments in Korea are currently exempt from taxation by virtue of the STTCL, provided that the issuance of such Registered Debt Securities is deemed to be an overseas issuance of foreign currency denominated bonds under the STTCL. If you sell or otherwise dispose of a Registered Debt Security through other ways than those mentioned above, any gain realized on the transaction will be taxable at ordinary Korean withholding tax rates (which is the lesser of 22.0% (including local income surtax) of the net gain or 11.0% (including local income surtax) of the gross sale proceeds, subject to the production of satisfactory evidence of the acquisition cost of such Registered Debt Securities and certain direct transaction costs attributable to the disposal of such Registered Debt Securities), unless an exemption is available under an applicable income tax treaty. See the discussion under *Shares or ADSs Tax Treaties* below for an additional explanation on treaty benefits.

*Inheritance Tax and Gift Tax*

If you die while you are the holder of Registered Debt Securities, the subsequent transfer of the Registered Debt Securities by way of succession will be subject to Korean inheritance tax. Similarly, if you transfer Registered Debt Securities as a gift, the donee will be subject to Korean gift tax and you may be required to pay the gift tax if the donee fails to do so.

At present, Korea has not entered into any tax treaty relating to inheritance or gift taxes.

*Shares or ADSs*

*Dividends on the Shares of Common Stock or ADSs*

We will deduct Korean withholding tax from dividends (whether in cash or in shares) paid to you at a rate of 22% (inclusive of local income surtax). If you are a qualified resident in a country that has entered into a tax treaty with Korea, you may qualify for a reduced rate of Korean withholding tax. See the discussion under *Tax Treaties* below for an additional explanation on treaty benefits.

In order to obtain the benefits of a reduced withholding tax rate under a tax treaty, you must submit to us, prior to the dividend payment date, such evidence of tax residence as may be required by the Korean tax authorities in order to establish your entitlement to the benefits of the applicable tax treaty. Evidence of tax residence may be submitted to us through the ADS depository. If we distribute to you free shares representing a transfer of certain capital reserves or asset revaluation reserves into paid-in capital, such distribution may be subject to Korean withholding tax.

*Taxation of Capital Gains*

As a general rule, capital gains earned by non-residents upon the transfer of the common shares or ADSs would be subject to Korean income tax at a rate equal to the lesser of (i) 11.0% (including local income surtax) of the gross proceeds realized or (ii) 22.0% (including local income surtax) of the net realized gain (subject to the production of satisfactory evidence of the acquisition costs and certain direct transaction costs arising out of the transfer of such common shares or ADSs), unless such non-resident is exempt from Korean income taxation under an applicable Korean tax treaty into which Korea has entered with the non-resident's country of tax residence. Please see the discussion under *Tax Treaties* below for an additional explanation on treaty benefits. Even if you do not qualify for any exemption under a tax treaty, you will not be subject to the foregoing income tax on capital gains if you qualify for the relevant Korean domestic tax law exemptions discussed in the following paragraphs.

You will not be subject to Korean income taxation on capital gains realized upon the transfer of our common stocks or ADSs through the Korea Exchange if you (i) have no permanent establishment in Korea and

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(ii) did not own or have not owned (together with any shares owned by any entity which you have a certain special relationship with and possibly including the shares represented by the ADSs) 25.0% or more of our total issued and outstanding shares at any time during the calendar year in which the sale occurs and during the five calendar years prior to the calendar year in which the sale occurs.

It should be noted that (i) capital gains earned by you (regardless of whether you have a permanent establishment in Korea) from the transfer of ADSs outside Korea will be exempted from Korean income taxation provided that ADSs are deemed to have been issued overseas under the STTCL, but (ii) if and when an owner of the underlying shares of stock transfers ADSs after conversion of the underlying shares into ADSs, the exemption described in (i) is not applicable.

If you are subject to tax on capital gains with respect to the sale of ADSs, or of shares of common stock which you acquired as a result of a withdrawal, the purchaser or, in the case of the sale of shares of common stock on the Korea Exchange or through an investment dealer or investment broker under the Financial Investment Services and Capital Markets Act, an investment dealer or investment broker is required to withhold Korean tax from the sales price in an amount equal to 11.0% (including local income surtax) of the gross realization proceeds and to make payment of these amounts to the Korean tax authority, unless you establish your entitlement to an exemption under an applicable tax treaty or domestic tax law or produce satisfactory evidence of your acquisition cost and transaction costs for the shares of common stock or the ADSs.

However, if you transfer the ADSs following an exchange of the underlying shares of stock owned by you for ADSs, you are obligated to file an income tax return and pay tax on gain realized from such transfer unless a purchaser or an investment dealer or investment broker, as the case may be, withholds and remits the tax on capital gains derived from transfer of ADSs, as discussed above. Further, if you transfer the shares of common stock outside of Korea (excluding a transfer on a foreign exchange) to non-residents or foreign companies without having permanent establishments in Korea, you are obligated to file an income tax return and pay income tax on capital gain realized from such transfer unless exempt under an applicable tax treaty or domestic law. If a purchaser or an investment dealer or investment broker, as the case may be, withhold and remits the tax on capital gains derived from transfer of shares of common stock or ADSs, your obligation to file an income tax return and pay income tax will be exempt.

To obtain the benefit of an exemption from tax pursuant to a tax treaty, you must submit to the purchaser or the investment dealer or the investment broker, or through the ADS depository, as the case may be, prior to or at the time of payment, such evidence of your tax residence as the Korean tax authorities may require in support of your claim for treaty benefits. Please see the discussion under *Tax Treaties* below for an additional explanation on claiming treaty benefits.

*Tax Treaties*

Korea has entered into a number of income tax treaties with other countries (including the United States), which would reduce or exempt Korean withholding tax on dividends on, and capital gains on transfer of, shares of our common stock or ADSs. For example, under the Korea-United States income tax treaty, reduced rates of Korean withholding tax of 16.5% or 11.0% (respectively, including local income surtax, depending on your shareholding ratio) on dividends and an exemption from Korean withholding tax on capital gains are available to residents of the United States that are beneficial owners of the relevant dividend income or capital gains. However, under Article 17 (Investment of Holding Companies) of the Korea-United States income tax treaty, such reduced rates and exemption do not apply if (i) you are a United States corporation, (ii) by reason of any special measures, the tax imposed on you by the United States with respect to such dividends or capital gains is substantially less than the tax generally imposed by the United States on corporate profits, and (iii) 25.0% or more of your capital is held of record or is otherwise determined, after consultation between competent authorities of the United States and Korea, to be owned directly or indirectly by one or more persons who are not individual residents of the United States. Also, under Article 16 (Capital Gains) of the Korea-United States

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income tax treaty, the exemption on capital gains does not apply if you are an individual, and (a) you maintain a fixed base in Korea for a period or periods aggregating 183 days or more during the taxable year and your ADSs or shares of common stock giving rise to capital gains are effectively connected with such fixed base or (b) you are present in Korea for a period or periods of 183 days or more during the taxable year.

You should inquire for yourself whether you are entitled to the benefit of an income tax treaty with Korea. It is the responsibility of the party claiming the benefits of an income tax treaty in respect of dividend payments or capital gains to submit to us, the purchaser or the investment dealer or the investment broker, as applicable, a certificate as to his tax residence. In the absence of sufficient proof, we, the purchaser or the investment dealer or the investment broker, as applicable, must withhold tax at the normal rates. Further, in order for you to obtain the benefit of a tax exemption on certain Korean source income (e.g., interest, dividends and capital gains) under an applicable tax treaty, Korean tax law requires you (or your agent) to submit the application for tax exemption along with a certificate of your tax residency issued by a competent authority of your country of tax residence, subject to certain exceptions. Such application should be submitted to the relevant district tax office by the ninth day of the month following the date of the first payment of such income.

Furthermore, the Korean tax laws require the beneficial owner to submit an application for entitlement to a preferential tax rate together with evidence of tax residence (including a certificate of tax residence of the beneficial owner issued by a competent authority of the country of tax residence of the beneficial owner) to a withholding obligor paying Korean source income in order to benefit from the available reduced tax rate pursuant to the relevant tax treaty. Subject to certain exceptions, the Korean tax laws also require an overseas investment vehicles (which is defined as an organization established in a foreign jurisdiction that manages funds collected through investment solicitation by way of acquiring, disposing or otherwise investing in proprietary targets and then distributes the outcome of such management to investors) to obtain the application for entitlement to a preferential tax rate from the beneficial owners and submit a report of overseas investment vehicle to the withholding obligor, together with a detailed statement on the beneficial owner of the income.

*Inheritance Tax and Gift Tax*

If you die while holding an ADS or donate an ADS, it is unclear whether, for Korean inheritance and gift tax purposes, you will be treated as the owner of the shares of common stock underlying the ADSs. If the tax authority interprets depositary receipts as the underlying share certificates, you may be treated as the owner of the shares of common stock and your heir or the donee (or in certain circumstances, you as the donor) will be subject to Korean inheritance or gift tax presently at the rate of 10.0% to 50.0%, depending on the value of the ADSs or shares of common stock.

If you die while holding a share of common stock or donate a share of common stock, your heir or donee (or in certain circumstances, you as the donor) will be subject to Korean inheritance or gift tax at the same rate as indicated above.

At present, Korea has not entered into any tax treaty relating to inheritance or gift taxes.

*Securities Transaction Tax*

If you transfer shares of common stock on the Stock Market of the Korea Exchange, you will be subject to securities transaction tax at the rate of 0.15% and an agriculture and fishery special surtax at the rate of 0.15% of the sale price of the shares of common stock. If your transfer of the shares of common stock is not made on the Stock Market of the Korea Exchange, subject to certain exceptions you will be subject to securities transaction tax at the rate of 0.5% and will not be subject to an agriculture and fishery special surtax.

Under the Securities Transaction Tax Law, depositary receipts (such as ADSs) constitute share certificates subject to the securities transaction tax. However, a transfer of depositary receipts listed on the New York Stock



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Exchange, NASDAQ National Market or other qualified foreign exchanges will be exempt from the securities transaction tax although depositary receipts, including ADSs, constitute share certificates subject to the securities transaction tax.

In principle, the securities transaction tax, if applicable, must be paid by the transferor of the shares or rights. When the transfer is effected through the Korea Securities Depository, the Korea Securities Depository is generally required to withhold and pay the tax to the tax authorities. When such transfer is made through an investment dealer or investment broker under the Financial Investment Services and Capital Markets Act only, such investment dealer or investment broker is required to withhold and pay the tax. Where the transfer is effected by a non-resident without a permanent establishment in Korea, other than through the Korea Securities Depository or an investment dealer or investment broker, the transferee is required to withhold the securities transaction tax for payment to the Korean tax authority.

**U.S. Federal Income and Estate Tax Considerations for U.S. Persons**

The following is a summary of certain U.S. Federal income and estate tax consequences for beneficial owners of the Registered Debt Securities, common stock and ADSs that are U.S. Persons. For purposes of this summary, you are a U.S. Person if you are any of the following for U.S. Federal income tax purposes:

an individual citizen or resident of the United States;

a corporation, or other entity treated as a corporation for U.S. Federal income tax purposes, created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. Federal income taxation regardless of its source; or

a trust if (1) it is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (2) it has a valid election in effect under applicable United States Treasury regulations to be treated as a United States person.

This summary is based on current law, which is subject to change (perhaps retroactively), is for general purposes only and should not be considered tax advice. This summary does not represent a detailed description of the federal income and estate tax consequences to you in light of your particular circumstances. The discussion set forth below is applicable to you if (i) you are a resident of the United States for purposes of the current income tax treaty between the United States and Korea (the Treaty), (ii) your Registered Debt Securities, common stock or ADSs are not, for purposes of the Treaty, effectively connected with a permanent establishment in Korea and (iii) you otherwise qualify for the full benefits of the Treaty. Except where noted, it deals only with Registered Debt Securities, common stock or ADSs held as capital assets, and it does not represent a detailed description of the U.S. Federal income and estate tax consequences applicable to you if you are subject to special treatment under the U.S. Federal income tax laws (including if you are a dealer in securities or currencies, a financial institution, a regulated investment company, a real estate investment trust, an insurance company, a tax exempt organization, a person holding the Registered Debt Securities, common stock or ADSs as part of a hedging, integrated or conversion transaction, constructive sale or straddle, a person owning 10.0% or more of our voting stock, a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings, a person liable for the alternative minimum tax, an investor in a pass-through entity, or a U.S. Person whose functional currency is not the U.S. dollar). We cannot assure you that a change in law will not alter significantly the tax considerations that we describe in this summary.

If a partnership holds the Registered Debt Securities, common stock or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our Registered Debt Securities, common stock, or ADSs, you should consult your tax advisor.

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Because of the 100 year maturity of the One Hundred Year 7.95% Zero-to-Full Debentures, due April 1, 2096 (the ZTF Debentures ), it is not certain whether the ZTF Debentures will be treated as debt for U.S. Federal income tax purposes. The discussion below assumes that the ZTF Debentures (as well as the other Registered Debt Securities) will be treated as debt, except that a summary of the consequences to you if the ZTF Debentures were not treated as debt is provided under Tax Consequences with Respect to Registered Debt Securities Generally ZTF Debentures Treated as Equity below.

The discussion of the tax consequences of ownership of common stock and ADSs below, is based, in part, upon representations made by the Depository to us and assumes that the deposit agreement, and all other related agreements, will be performed in accordance with their terms.

**You should consult your own tax advisor concerning the particular U.S. Federal income and estate tax consequences to you of the ownership of the Registered Debt Securities, common stock and ADSs, as well as the consequences to you arising under the laws of any other taxing jurisdiction.**

### *Tax Consequences with Respect to Registered Debt Securities Generally*

#### *Payments*

Except as provided below with regard to original issue discount on the ZTF Debentures, interest payments on a Registered Debt Security will generally be taxable to you as ordinary income at the time it is paid or accrued in accordance with your method of accounting for tax purposes. Principal payments on an amortizing Registered Debt Security generally will constitute a tax-free return of capital to you.

Although interest payments to you are currently exempt from Korean taxation, if the Korean law providing for the exemption is repealed, then, in addition to interest payments on the Registered Debt Securities and original issue discount (as defined below) on the ZTF Debentures, you will be required to include in income any additional amounts and any Korean tax withheld from interest payments notwithstanding that you in fact did not receive such withheld tax. You may be entitled to deduct or credit such Korean tax (up to the Treaty rate), subject to applicable limitations in the Internal Revenue Code of 1986, as amended (the Code ). Your election to deduct or credit foreign taxes will apply to all of your foreign taxes for a particular taxable year. Interest income on a Registered Debt Security (including additional amounts and any Korean taxes withheld in respect thereof) and original issue discount on a ZTF Debenture generally will constitute foreign source income and generally will be considered passive category income for purposes of computing the foreign tax credit. You may be denied a foreign tax credit for Korean taxes imposed with respect to the Registered Debt Securities where you do not meet a minimum holding period requirement during which you are not protected from risk of loss. The rules governing the foreign tax credit are complex. Investors are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

#### *Original Issue Discount*

The ZTF Debentures were issued with original issue discount, or OID, for U.S. Federal income tax purposes equal to the difference between (i) the sum of all scheduled amounts payable on the ZTF Debentures (including the interest payable on such ZTF Debentures) and (ii) the issue price of the ZTF Debentures. The issue price of each ZTF Debenture is the first price at which a substantial amount of the ZTF Debentures was sold to the public (other than to an underwriter, broker, placement agent or wholesaler). If you hold ZTF Debentures, then you generally must include OID in gross income in advance of the receipt of cash attributable to that income, regardless of your method of accounting. However, you generally will not be required to include separately in income cash payments received on the ZTF Debentures, even if denominated as interest.

The amount of OID includible in income by the initial holder of a ZTF Debenture is the sum of the daily portions of OID with respect to the ZTF Debenture for each day during the taxable year or portion of the taxable

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year in which such holder held such ZTF Debenture, or accrued OID (for a discussion relevant to subsequent purchasers, see *Market Discount* and *Bond Premium*, below). The daily portion is determined by allocating to each day in any accrual period a pro rata portion of the OID allocable to that accrual period. The accrual period for a ZTF Debenture may be of any length and may vary in length over the term of the ZTF Debenture, provided that each accrual period is no longer than one year and each scheduled payment of principal or interest occurs on the first day or the final day of an accrual period. The amount of OID allocable to any accrual period other than the final accrual period is an amount equal to the product of the ZTF Debenture's adjusted issue price at the beginning of such accrual period and its yield to maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period). OID allocable to a final accrual period is the difference between the amount payable at maturity and the adjusted issue price at the beginning of the final accrual period. The adjusted issue price of a ZTF Debenture at the beginning of any accrual period is equal to its issue price increased by the accrued OID for each prior accrual period (for subsequent purchasers, determined without regard to the amortization of any acquisition or bond premium, as described below) and reduced by any payments previously made on such ZTF Debenture. Under these rules, you will have to include in income increasingly greater amounts of OID in successive accrual periods. We are required to provide information returns stating the amount of OID accrued on ZTF Debentures held of record by persons other than corporations and other exempt holders.

As discussed above, although interest payments to you are currently exempt from Korean taxation, if the Korean law providing for the exemption is repealed, then Korean withholding tax may be imposed at times that differ from the times at which you are required to include interest or OID in income for U.S. Federal income tax purposes and this disparity may limit the amount of foreign tax credit available.

*Market Discount*

If you purchase a Registered Debt Security other than a ZTF Debenture for an amount that is less than its stated redemption price at maturity, or, in the case of a ZTF Debenture, its adjusted issue price, the amount of the difference will be treated as *market discount* for U.S. Federal income tax purposes, unless that difference is less than a specified de minimis amount. Under the market discount rules, you will be required to treat any payment, other than qualified stated interest (as defined in the Code), on, or any gain on the sale, exchange, retirement or other disposition of, a Registered Debt Security as ordinary income to the extent of the market discount that you have not previously included in income and are treated as having accrued on the Registered Debt Security at the time of its payment or disposition. In addition, you may be required to defer, until the maturity of the Registered Debt Security or its earlier disposition in a taxable transaction, the deduction of all or a portion of the interest expense on any indebtedness attributable to the Registered Debt Security.

Any market discount will be considered to accrue ratably during the period from the date of acquisition to the maturity date of the Registered Debt Security, unless you elect to accrue on a constant interest method. Your election to accrue market discount on a constant interest method is to be made for the taxable year in which you acquired the Registered Debt Security, applies only to that Registered Debt Security and cannot be revoked. You may elect to include market discount in income currently as it accrues, on either a ratable or constant interest method, in which case the rule described above regarding deferral of interest deductions will not apply. Your election to include market discount in income currently, once made, applies to all market discount obligations acquired by you on or after the first taxable year to which your election applies and may not be revoked without the consent of the Internal Revenue Service ( IRS ). You should consult your own tax advisor before making this election.

*Bond Premium*

If you purchase a ZTF Debenture for an amount that is greater than its adjusted issue price but equal to or less than the sum of all amounts payable on the ZTF Debenture after the purchase date, you will be considered to have purchased that ZTF Debenture at an *acquisition premium*. Under the acquisition premium rules, the

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amount of OID that you must include in gross income with respect to a ZTF Debenture for any taxable year will be reduced by the portion of the acquisition premium properly allocable to that year.

If you purchase a Registered Debt Security for an amount in excess of the sum of all amounts payable on the Registered Debt Security after the purchase date other than qualified stated interest, you will be considered to have purchased the Registered Debt Security at a premium and, if such Registered Debt Security is a ZTF Debenture, you will not be required to include any OID in income. You generally may elect to amortize the premium over the remaining term of the Registered Debt Security on a constant yield method as an offset to interest when includible in income under your regular accounting method. In the case of instruments that provide for alternative payment schedules, bond premium is calculated by assuming that (a) you will exercise or not exercise options in a manner that maximizes your yield, and (b) we will exercise or not exercise options in a manner that minimizes your yield (except that we will be assumed to exercise call options in a manner that maximizes your yield). If you do not elect to amortize bond premium, that premium will decrease the gain or increase the loss you would otherwise recognize on disposition of a Registered Debt Security. Your election to amortize premium on a constant yield method will also apply to all debt obligations held or subsequently acquired by you on or after the first day of the first taxable year to which the election applies. You may not revoke the election without the consent of the IRS. You should consult your own tax advisor before making this election.

*Sale, Exchange and Retirement of Registered Debt Securities*

When you sell, exchange or retire a Registered Debt Security, you will recognize gain or loss equal to the difference between the amount you receive (not including an amount equal to any accrued qualified stated interest, which will be taxable as ordinary income to the extent not previously included in income) and your adjusted tax basis in the Registered Debt Security. Your tax basis in a Registered Debt Security other than a ZTF Debenture will generally be your cost of obtaining the Registered Debt Security increased by any market discount included in income and reduced by payments of principal you receive and any bond premium that you elect to amortize. Your adjusted tax basis in a ZTF Debenture will, in general, be your cost therefor, increased by any market discount and OID previously included in income and reduced by any cash payments on the ZTF Debentures and any bond premium that you elect to amortize. Your gain or loss realized on selling, exchanging or retiring a Registered Debt Security will generally be treated as United States source income. Consequently, you may not be able to use the foreign tax credit arising from any Korean tax imposed on the disposition of Registered Debt Securities unless such credit can be applied (subject to applicable limitations) against tax due on other income treated as derived from foreign sources. Except as described above with respect to market discount, your gain or loss will be capital gain or loss and will be long-term capital gain or loss if, at the time of the sale, exchange or retirement of a Registered Debt Security, you have held the Registered Debt Security for more than one year. If you are an individual and the Registered Debt Security being sold, exchanged or retired is a capital asset that you held for more than one year, you may be eligible for reduced rates of taxation on any capital gain recognized. Your ability to deduct capital losses is subject to limitations.

*ZTF Debentures Treated as Equity*

If the ZTF Debentures were treated as equity for U.S. Federal income tax purposes, amounts deemed paid with respect to the ZTF Debentures would be deemed dividends for U.S. Federal income tax purposes to the extent paid out of our current or accumulated earnings and profits (as determined for U.S. Federal income tax purposes).

You would include the amounts deemed paid by us on the ZTF Debentures (before reduction for Korean withholding tax, if any) as dividend income when actually or constructively paid by KEPCO. Section 305 of the Code, which would apply to the ZTF Debentures if they were treated as equity for U.S. Federal income tax purposes, requires current accrual of dividends under principles similar to the accrual of OID. Amounts treated as dividends will not be eligible for the dividends received deduction generally allowed to U.S. corporations.

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**Table of Contents*****Tax Consequences with Respect to Common Stock and ADSs***

In general, for U.S. Federal income tax purposes, holders of ADSs will be treated as the owners of the underlying common stock that is represented by such ADSs. Accordingly, deposits or withdrawals of common stock by holders of ADSs will not be subject to U.S. Federal income tax. However, the U.S. Treasury has expressed concerns that intermediaries in the chain of ownership between the holder of an ADS and the issuer of the security underlying the ADS may be taking actions that are inconsistent with the claiming of foreign tax credits by the holders of ADSs. Such actions would also be inconsistent with the claiming of the reduced rate of tax applicable to dividends received by certain non-corporate holders. Accordingly, the analysis of creditability of Korean taxes and the availability of the reduced tax rate for dividends received by certain non-corporate holders, each described below, could be affected by future actions that may be taken by such intermediaries.

***Distributions on Common Stock or ADSs***

The gross amount of distributions (other than certain distributions of common stock or rights to subscribe for common stock) to holders of common stock or ADSs (including amounts withheld in respect of Korean withholding taxes) will be treated as dividend income to such holders, to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. Federal income tax principles. Such income (including withheld taxes) will be includable in the gross income of a holder as ordinary income on the day actually or constructively received by the holder, in the case of common stock, or by the Depositary, in the case of ADSs. Such dividends will not be eligible for the dividends received deduction allowed to corporations under the Code.

With respect to non-corporate U.S. Persons, certain dividends paid by a qualified foreign corporation and received by such holders may be subject to reduced rates of taxation. A qualified foreign corporation includes a foreign corporation that is eligible for the benefits of an income tax treaty with the United States, if such treaty contains an exchange of information provision and the United States Treasury Department had determined that the treaty is satisfactory for purposes of the legislation. The United States Treasury Department has determined that the Treaty, which contains an exchange of information provision, is (in the absence of additional guidance) satisfactory for these purposes. In addition, we believe we are eligible for the benefits of the United States-Korean income tax treaty. However, a foreign corporation is also treated as a qualified foreign corporation with respect to dividends paid by that corporation on shares (or ADSs backed by such shares) that are readily tradable on an established securities market in the United States. Shares of our common stock will generally not be considered readily tradable for these purposes. However, United States Treasury Department guidance indicates that our ADSs, which are listed on the New York Stock Exchange, are readily tradable on an established securities market in the United States. There can be no assurance that our ADSs will be considered readily tradable on an established securities market in later years. Non-corporate U.S. Persons that do not meet a minimum holding period requirement during which they are not protected from a risk of loss or that elect to treat the dividend income as investment income pursuant to Section 163(d)(4) of the Code will not be eligible for the reduced rates of taxation regardless of our status as a qualified foreign corporation. In addition, the rate reduction will not apply to dividends if the recipient of a dividend is obligated to make related payments with respect to positions in substantially similar or related property. This disallowance applies even if the minimum holding period has been met. Holders should consult their own tax advisors regarding the application of the foregoing rules to their particular circumstances.

The amount of any dividend paid in Won will equal the United States dollar value of the Won received calculated by reference to the exchange rate in effect on the date the dividend is received by the holder, in the case of common stock, or by the Depositary, in the case of ADSs, regardless of whether the Won are converted into U.S. dollars. If the Won received as a dividend are not converted into U.S. dollars on the date of receipt, a holder will have a basis in the Won equal to their U.S. dollar value on the date of receipt. Any gain or loss realized on a subsequent conversion or other disposition of the Won will be treated as United States source ordinary income or loss. The amount of any distribution of property other than cash will be the fair market value of such property on the date of distribution.

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The maximum rate of withholding tax on dividends paid to you pursuant to the Treaty is 16.5%. You will be required to properly demonstrate to us and the Korean tax authorities your entitlement to the reduced rate of withholding under the Treaty. Subject to certain conditions and limitations, Korean withholding taxes (up to the Treaty rate) will be treated as foreign taxes eligible for credit against your U.S. Federal income tax liability. For purposes of calculating the foreign tax credit, dividends paid on the common stock or ADSs will be treated as foreign source income and will generally constitute passive category income. Further, in certain circumstances, if you have held common stock or ADSs for less than a specified minimum period during which you are not protected from risk of loss, or are obligated to make payments related to the dividends, you will not be allowed a foreign tax credit for foreign taxes imposed on dividends paid on common stock or ADSs. The rules governing the foreign tax credit are complex. Investors are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances including the possible adverse impact on creditability to the extent you are entitled to a refund of any Korean tax withheld or a reduced rate of withholding.

To the extent that the amount of any distribution exceeds our current and accumulated earnings and profits for a taxable year, as determined under U.S. Federal income tax principles, the distribution will first be treated as a tax-free return of capital, causing a reduction in the adjusted basis of the common stock or ADSs (thereby increasing the amount of gain, or decreasing the amount of loss, to be recognized by the investor on a subsequent disposition of the common stock or ADSs), and the balance in excess of adjusted basis will be taxed as capital gain recognized on a sale or exchange of property. Consequently, such distributions in excess of our current and accumulated earnings and profits would not give rise to foreign source income and you generally would not be able to use the foreign tax credit arising from any Korean withholding tax imposed on such distributions unless such credit can be applied (subject to applicable limitations) against U.S. tax due on other foreign source income in the appropriate category for foreign tax credit purposes. However, we do not expect to keep earnings and profits in accordance with U.S. Federal income tax principles. Therefore, you should expect that a distribution will generally be treated as a dividend (as discussed above).

Distributions of common stock or rights to subscribe for common stock that are received as part of a pro rata distribution to all of our shareholders generally will not be subject to U.S. Federal income tax. Consequently such distributions will not give rise to foreign source income and you generally will not be able to use the foreign tax credit arising from any Korean withholding tax unless such credit can be applied (subject to applicable limitations) against U.S. tax due on other income derived from foreign sources. The basis of the new common stock or rights so received will be determined by allocating your basis in the old common stock between the old common stock and the new common stock or rights received, based on their relative fair market value on the date of distribution. However, the basis of the rights will be zero if (i) the fair market value of the rights is less than 15% of the fair market value of the old common stock at the time of distribution, unless the taxpayer elects to determine the basis of the old common stock and of the rights by allocating between the old common stock and the rights the adjusted basis of the old common stock or (ii) the rights are not exercised and thus expire.

*Sale, Exchange or Other Disposition of ADSs or Common Stock*

Upon the sale, exchange or other disposition of ADSs or common stock, you generally will recognize capital gain or loss equal to the difference between the amount realized upon the sale, exchange or other disposition and your adjusted tax basis in the ADSs or common stock. The capital gain or loss will be long-term capital gain or loss if at the time of sale, exchange or other disposition, the ADSs or common stock have been held by you for more than one year. Under current law, long-term capital gains of individuals are, under certain circumstances, taxed at lower rates than items of ordinary income. The deductibility of capital losses is subject to limitations. Any gain or loss recognized by you will generally be treated as U.S. source gain or loss. Consequently, you may not be able to use the foreign tax credit arising from any Korean tax imposed on the disposition of ADSs or common stock unless such credit can be applied (subject to applicable limitations) against tax due on other income treated as derived from foreign sources.

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You should note that any Korean securities transaction tax will not be treated as a creditable foreign tax for U.S. Federal income tax purposes, although you may be entitled to deduct such taxes, subject to applicable limitations under the Code.

### ***Estate and Gift Taxation***

As discussed above in *Korean Taxes Registered Debt Securities Inheritance Tax and Gift Tax* and *Korean Taxes Shares or ADSs Inheritance Tax and Gift Tax*, Korea may impose an inheritance tax on your heir who receives ADSs and will impose an inheritance tax on an heir who receives common stock or Registered Debt Securities. The amount of any inheritance tax paid to Korea may be eligible for credit against the amount of U.S. Federal estate tax imposed on your estate. Prospective purchasers should consult their personal tax advisors to determine whether and to what extent they may be entitled to such credit. Korea also imposes a gift tax on the donation of any property located within Korea. The Korean gift tax generally will not be treated as a creditable foreign tax for United States tax purposes.

### ***Information Reporting and Backup Withholding***

In general, information reporting requirements will apply to principal, interest, OID and premium payments on Registered Debt Securities and dividend payments in respect of the common stock or ADSs or the proceeds received on the sale, exchange or redemption of the Registered Debt Securities, common stock or ADSs paid within the United States (and in certain cases, outside of the United States) to holders other than certain exempt recipients, and a backup withholding may apply to such amounts if you fail to provide an accurate taxpayer identification number or to report interest and dividends required to be shown on your U.S. Federal income tax returns. The amount of any backup withholding from a payment to you will be allowed as a refund or a credit against your U.S. Federal income tax liability, provided the required information is furnished to the IRS.

### **Item 10F. Dividends and Paying Agents**

Not Applicable

### **Item 10G. Statements by Experts**

Not Applicable

### **Item 10H. Documents on Display**

We are subject to the information requirements of the Exchange Act, and, in accordance therewith, are required to file reports, including annual reports on Form 20-F, and other information with the U.S. Securities and Exchange Commission. You may inspect and copy these materials, including this report and the exhibits thereto, at SEC's Public Reference Room 100 Fifth Street, N.E., Washington, D.C. 20549. Please call the Commission at 1-800-SEC-0330 for further information on the public reference rooms. As a foreign private issuer, we are also required to make filings with the Commission by electronic means. Any filings we make electronically will be available to the public over the Internet at the Commission's web site at <http://www.sec.gov>.

### **Item 10I. Subsidiary Information**

Not Applicable

**Table of Contents****ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Our primary market risk exposures are to fluctuations in exchange rates, interest rates and fuel prices. We are exposed to foreign exchange risk related to foreign-currency denominated liabilities. As of December 31, 2012, approximately 21.4% of our long-term debt (including the current portion but excluding issue discounts and premium) before accounting for swap transactions was denominated in foreign currencies, principally in the U.S. dollar. However, substantially all of our revenues are denominated in Won. As a result, changes in exchange rates, particularly between the Won and the U.S. dollar, significantly affect us due to our significant amounts of foreign-currency denominated debt and the effect of such changes on the amount of funds required by us to make interest and principal payments on such debt. In order to reduce the impact of foreign exchange rate fluctuations on our results of operations, we have recently been reducing and plan to continue to reduce the proportion of our debt which is denominated in foreign currencies and the proportion of its foreign currency debt which is denominated in U.S. dollars.

We are also exposed to foreign exchange risk related to our purchases of fuels since we obtain substantially all of our fuel materials (other than anthracite coal) directly or indirectly from sources outside Korea. Prices for such fuel materials are quoted based on prices stated in, and in many cases are paid for in, currencies other than Won. In 2012, fuel costs represented 48.5% of our sales.

We are exposed to interest rate risk due to significant amounts of debt. Upward fluctuations in interest rates increase the cost of additional debt and the interest cost of outstanding floating rate borrowings. We are also exposed to fluctuations in prices of fuel materials. In 2012, for electricity generation, uranium accounted for 33.6% of our fuel requirements, coal accounted for 44.2%, LNG accounted for 17.6% and oil accounted for 3.5%. In 2011, measured on the same basis, uranium accounted for 34.9% of our fuel requirements, coal accounted for 45.0%, LNG accounted for 16.7% and oil accounted for 2.4%, measured in each case by the amount of electricity we generated.

For additional discussions of our market risks, see Item 3D. Risk Factors and Item 5B. Liquidity and Capital Resources Liquidity.

We have entered into various swap contracts to hedge exchange rate risks arising from foreign currency-denominated debts. Details of currency swap contracts outstanding as of December 31, 2012 are as follows:

Type	Counterparty	Contract year	Settlement year	Contract amounts		Contract interest rate		Contract exchange rate
				Pay	Receive	Pay	Receive	
Trading	Barclays	2008	2013	KRW 187,020	USD 200,000	7.50%	7.75%	935.10
	Credit Suisse	2008	2013	KRW 140,265	USD 150,000	6.94%	7.75%	935.10
	Shinhan Bank	2010	2014	KRW 84,615	USD 75,000	6.83%	5.50%	1,128.20
	RBS	2010	2014	KRW 141,125	USD 125,000	6.78%	5.50%	1,129.00
	Morgan Stanley	2010	2014	KRW 112,320	USD 100,000	6.71%	5.50%	1,123.20
	HSBC	2010	2014	KRW 112,320	USD 100,000	6.71%	5.50%	1,123.20
	BOA	2010	2015	KRW 110,310	USD 100,000	6.93%	5.50%	1,103.10
	UBS	2010	2015	KRW 220,356	USD 200,000	3.90%	3.00%	1,101.78
	RBS	2010	2015	KRW 110,110	USD 100,000	3.90%	3.00%	1,101.10
	Barclays	2010	2015	KRW 108,390	USD 100,000	3.78%	3.00%	1,083.90
	Credit Suisse	2010	2015	KRW 108,390	USD 100,000	3.22%	3.00%	1,083.90
	Morgan Stanley	2010	2015	KRW 63,006	USD 60,000	4.06%	3.00%	1,050.10
	Goldman Sachs	2010	2015	KRW 156,643	USD 140,000	3.92%	3.00%	1,118.88
	Morgan Stanley	2010	2015	KRW 118,800	USD 100,000	4.61%	Libor 3M + 1.64%	1,188.00



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Type	Counterparty	Contract year	Settlement year	Contract amounts		Contract interest rate		Contract exchange rate
				Pay	Receive (KRW in millions, USD in thousands)	Pay	Receive	
	M-UFJ	2010	2015	KRW 116,100	USD 100,000	4.00%	Libor 3M + 1.00%	1,161.00
	DBS	2011	2014	KRW 56,150	USD 50,000	4.21%	Libor 3M + 1.00%	1,123.00
	SMBC	2011	2014	KRW 56,150	USD 50,000	4.21%	Libor 3M + 1.00%	1,123.00
	Mizuho	2011	2014	KRW 112,800	USD 100,000	3.86%	Libor 3M + 0.80%	1,128.00
	DBS	2011	2014	KRW 109,500	USD 100,000	3.80%	Libor 3M + 0.85%	1,095.00
	Deutsche Bank	2009	2014	KRW 126,610	USD 100,000	5.39%	6.25%	1,266.10
	Nomura Securities	2009	2014	KRW 126,610	USD 100,000	5.35%	6.25%	1,266.10
	Nomura Securities	2009	2014	KRW 126,610	USD 100,000	5.33%	6.25%	1,266.10
	Morgan Stanley	2009	2014	KRW 126,610	USD 100,000	5.32%	6.25%	1,266.10
	Morgan Stanley	2010	2014	KRW 126,610	USD 100,000	5.30%	6.25%	1,266.10
	Barclays	2010	2014	KRW 126,610	USD 100,000	5.29%	6.25%	1,266.10
	CITI	2010	2014	KRW 126,610	USD 100,000	5.27%	6.25%	1,266.10
	JP Morgan	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
	Deutsche Bank	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
	RBS	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
	DBS	2010	2013	KRW 226,900	USD 200,000	3.70%	Libor 3M + 0.25%	1,134.50
	SMBC	2010	2013	KRW 113,400	USD 100,000	3.92%	Libor 3M + 0.90%	1,134.00
	BTMU	2010	2013	KRW 56,525	USD 50,000	3.92%	Libor 3M + 0.90%	1,130.50
	Mizuho	2010	2013	KRW 56,750	USD 50,000	3.92%	Libor 3M + 0.90%	1,135.00
	CITI	2010	2015	KRW 116,080	USD 100,000	3.97%	3.13%	1,160.80
	Deutsche Bank	2010	2015	KRW 116,080	USD 100,000	3.98%	3.13%	1,160.80
	RBS	2010	2015	KRW 116,080	USD 100,000	3.97%	3.13%	1,160.80
	HSBC	2010	2015	KRW 116,080	USD 100,000	3.23%	3.13%	1,160.80
	UBS	2010	2015	KRW 116,080	USD 100,000	3.23%	3.13%	1,160.80
	CITI	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
	JP Morgan	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
	BOA	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
	Goldman Sachs	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
	HSBC	2012	2022	KRW 111,770	USD 100,000	2.89%	3.00%	1,117.70
	Hana Bank	2012	2022	KRW 111,770	USD 100,000	2.87%	3.00%	1,117.70
	SC	2012	2022	KRW 111,770	USD 100,000	2.89%	3.00%	1,117.70
	Deutsche Bank	2012	2022	KRW 55,885	USD 50,000	2.79%	3.00%	1,117.70
Cash flow hedge	Credit Suisse	2009	2013	KRW 194,750	USD 150,000	4.75%	5.00%	1,298.33
	CITI	2006	2016	KRW 113,200	USD 100,000	1.05%	6.00%	1,132.00
	Barclays	2006	2016	KRW 113,200	USD 100,000	1.05%	6.00%	1,132.00
	Credit Suisse	2006	2016	KRW 113,200	USD 100,000	1.05%	6.00%	1,132.00
	Goldman Sachs	2011	2017	KRW 105,260	USD 100,000	3.99%	3.63%	1,052.60
	Barclays	2011	2017	KRW 105,260	USD 100,000	3.99%	3.63%	1,052.60
	CITI	2011	2017	KRW 105,260	USD 100,000	3.99%	3.63%	1,052.60
	HSBC	2012	2014	KRW 45,264	USD 40,000	3.25%	Libor 3M + 1.50%	1,131.60

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Type	Counterparty	Contract year	Settlement year	Contract amounts		Contract interest rate		Contract exchange rate
				Pay	Receive (KRW in millions, USD in thousands)	Pay	Receive	
	CITI	2012	2014	KRW 33,948	USD 30,000	3.25%	Libor 3M +1.50%	1,131.60
	RBS	2012	2014	KRW 22,632	USD 20,000	3.25%	Libor 3M +1.50%	1,131.60
	UOB	2012	2014	KRW 33,948	USD 30,000	3.25%	Libor 3M +1.50%	1,131.60
	DBS	2012	2014	KRW 56,580	USD 50,000	3.20%	Libor 3M +1.50%	1,131.60
	ANZ	2012	2014	KRW 22,632	USD 20,000	3.20%	Libor 3M +1.50%	1,131.60
	CITI	2012	2014	KRW 20,369	USD 18,000	3.20%	Libor 3M +1.50%	1,131.60
	Credit Suisse	2012	2014	KRW 45,264	USD 40,000	2.77%	Libor 3M +1.50%	1,131.60
	RBS	2012	2014	KRW 58,843	USD 52,000	2.77%	Libor 3M +1.50%	1,131.60
	UBS AG	2006	2016	KRW 98,100	USD 100,000	5.48%	5.50%	981.00
	Credit Suisse	2006	2016	KRW 98,100	USD 100,000	5.48%	5.50%	981.00
	CITI	2008	2013	KRW 113,304	USD 120,000	4.96%	5.38%	944.20
	Goldman Sachs	2008	2013	KRW 113,304	USD 120,000	4.96%	5.38%	944.20
	Barclays	2008	2013	KRW 56,652	USD 60,000	4.96%	5.38%	944.20
	Barclays	2006	2016	KRW 71,888	USD 75,000	4.81%	5.50%	958.51
	Deutsche Bank	2006	2016	KRW 71,888	USD 75,000	4.81%	5.50%	958.51
	RBS	2012	2017	KRW 142,500	USD 125,000	3.83%	3.13%	1,140.00
	Barclays	2012	2017	KRW 142,500	USD 125,000	3.83%	3.13%	1,140.00
	JP Morgan	2012	2017	KRW 142,500	USD 125,000	3.83%	3.13%	1,140.00
	Morgan Stanley	2012	2017	KRW 142,500	USD 125,000	3.83%	3.13%	1,140.00
	Barclays	2004	2014	KRW 172,875	USD 150,000	5.10%	5.75%	1,152.50
	RBS	2008	2013	KRW 149,040	USD 150,000	5.03%	5.38%	993.60
	Deutsche Bank	2008	2013	KRW 149,040	USD 150,000	5.03%	5.38%	993.60
	BTMU	2010	2013	KRW 113,200	USD 100,000	4.11%	Libor 3M +0.80%	1,132.00
	BTMU	2010	2015	KRW 55,900	USD 50,000	4.03%	Libor 3M +1.20%	1,118.00
	RBS	2012	2017	KRW 115,140	USD 100,000	3.38%	2.50%	1,151.40
	BNP Paribas	2012	2017	KRW 115,140	USD 100,000	3.38%	2.50%	1,151.40
	Hana Bank	2012	2017	KRW 115,140	USD 100,000	3.38%	2.50%	1,151.40
	Barclays	2012	2017	KRW 57,570	USD 50,000	3.38%	2.50%	1,151.40
	SC	2012	2017	KRW 57,570	USD 50,000	3.38%	2.50%	1,151.40
	Nomura Securities	2012	2017	KRW 57,570	USD 50,000	3.38%	2.50%	1,151.40
	Credit Agricole	2012	2017	KRW 57,570	USD 50,000	3.38%	2.50%	1,151.40

Under these currency swap contracts, we recognized a valuation loss of Won 539,883 million in 2012, net.

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Details of interest rate contracts outstanding as of December 31, 2012 are as follows:

Type	Counterparty	Contract year	Settlement year	Notional amount (KRW in millions,  JOD, USD in thousands)	Contract interest rate per annum	
					Pay	Receive
Trading	Korea Exchange Bank	2010	2013	KRW 100,000	4.18%	3M CD + 0.58%
	Nonghyup Bank	2010	2015	KRW 100,000	4.90%	3M CD + 1.05%
	Nonghyup Bank	2010	2015	KRW 100,000	4.83%	3M CD + 0.90%
	Nonghyup Bank	2010	2015	KRW 50,000	4.77%	3M CD + 0.90%
	KDB	2012	2016	KRW 200,000	3.57%	3M CD + 0.26%
	Nonghyup Bank	2012	2016	KRW 100,000	3.49%	3M CD + 0.25%
	KDB	2012	2016	KRW 50,000	3.49%	3M CD + 0.25%
	HSBC	2012	2016	KRW 50,000	3.49%	3M CD + 0.25%
	SC	2012	2016	KRW 200,000	3.55%	3M CD + 0.26%
	SC	2012	2017	KRW 160,000	3.57%	3M CD + 0.32%
	Korea Exchange Bank	2011	2014	KRW 100,000	4.08%	3M CD + 0.03%
	Korea Exchange Bank	2011	2014	KRW 100,000	3.89%	3M CD + 0.05%
	Korea Exchange Bank	2011	2013	KRW 100,000	3.89%	3M CD + 0.07%
	Shinhan Bank	2011	2014	KRW 100,000	3.63%	3M CD + 0.18%
	Korea Exchange Bank	2011	2013	KRW 100,000	3.85%	3M CD + 0.43%
	Woori Bank	2011	2013	KRW 150,000	3.92%	3M CD + 0.43%
	Kookmin Bank	2011	2013	KRW 100,000	3.84%	3M CD + 0.44%
	Hana Bank	2011	2013	KRW 50,000	3.67%	3M CD + 0.25%
	Korea Exchange Bank	2011	2014	KRW 200,000	3.66%	3M CD + 0.24%
	Korea Exchange Bank	2011	2013	KRW 100,000	3.53%	3M CD + 0.14%
	Korea Exchange Bank	2011	2013	KRW 100,000	3.56%	3M CD + 0.19%
	Korea Exchange Bank	2012	2015	KRW 100,000	3.58%	3M CD + 0.15%
	Korea Exchange Bank	2012	2015	KRW 200,000	3.65%	3M CD + 0.10%
	Korea Exchange Bank	2012	2015	KRW 100,000	2.86%	3M CD + 0.05%
Woori Bank	2012	2013	KRW 200,000	3.88%	3M CD + 0.54%	
Korea Exchange Bank	2010	2013	KRW 100,000	4.11%	3M CD + 0.25%	
Cash flow hedge	BNP Paribas	2009	2027	JOD 112,421	4.16%	6M USD Libor
	KFW	2009	2027	JOD 112,421	4.16%	6M USD Libor
	Credit Agricole				1.33% ~	
						1 ~ 6M USD Libor
		2012	2033	USD 126,712	4.10%	
	SMBC				1.33% ~	
						1 ~ 6M USD Libor
		2012	2033	USD 126,712	4.18%	Libor

Under these interest rate swap contracts, we recognized a valuation loss of Won 21,384 million in 2012, net.

The following analysis sets forth the sensitivity of our consolidated net income before income taxes (our pre-tax income) to changes in exchange rates, interest rates, electricity rates and fuel costs. For purposes of this section, we and the generation subsidiaries will be deemed one entity. The range of changes in such risk categories represents our view of the changes that are reasonably possible over a one-year period, although it is difficult to predict such changes as a result of adverse economic developments in Korea. See Item 3D. Risk Factors Risks Relating to Korea and the Global Economy Unfavorable financial and economic conditions in Korea and globally may have a material adverse impact on us. The following discussion only addresses material market risks faced by us and does not discuss other risks which we face in the normal course of business, including country risk, credit risk and legal risk. Unless otherwise specified, all calculations are made under IFRS.

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We engage in transactions denominated in foreign currencies and consequently, we become exposed to fluctuations in exchange rates. The carrying amounts of our foreign currency denominated monetary assets and monetary liabilities as of December 31, 2011 and 2012 were as follows (USD, EUR, GBP, Other foreign currency in thousands):

Type	Assets		Liabilities	
	2012	2011	2012	2011
AUD	1,188	1,140	152,692	156,196
CAD	2,314	164	4	18
CNY	1	1		
EUR	9,091	8,076	18,792	1,441
IDR	711,304	1,074,528	1,726	
MXN	703			
PHP	1,043,932	232,281	31,675	21,073
SAR	1,309	1,037		
USD	292,256	374,193	9,866,661	9,459,038
INR	417,544	282,510	52,755	68,966
PKR	63,445	25,475	277	4,503
MGA	240,233	2,223,307	92,979	
JPY	520	520	20,006,730	30,012,000
KZT	720,121	722,691		
GBP	6		253	160
CHF			223	
AED	220	247	1,829	1,383
SEK			1,105	457

If Won depreciates against U.S. dollar and all other foreign currencies held by us by 10% and all other variables are held constant from their levels as of December 31, 2012, we estimate that our unrealized foreign exchange translation losses will increase by Won 1,065 billion in 2013. Such sensitivity analysis is conducted for monetary assets and liabilities denominated in foreign currencies other than functional currency as of December 31, 2012 and 2011, before accounting for swap transactions. To manage our foreign currency risk related to foreign currency denominated receivables and payables, we have a policy of entering into currency forward agreements. In addition, to manage our foreign currency risk related to foreign currency denominated expected sales transactions and purchase transactions, we enter into cross-currency swap agreements.

We are exposed to interest rate risk due to its borrowing with floating interest rates. If interest rates increase by 1% on all of our borrowings and debentures bearing variable interest and all other variables are held constant as of December 31, 2012, we estimate that our income before income taxes will decrease by Won 78 billion (not reflecting the fact that a portion of such interest may be capitalized under IFRS) in 2013. Such sensitivity analysis does not take into consideration interest rate swap transactions. To manage our interest rate risks, we, in addition to maintaining an appropriate mix of fixed and floating rate loans, have entered into certain interest rate swap agreements.

We are exposed to electricity rates risk due to the rate regulation by the Government, which considers the effect of electricity rate changes on the national economy. If the electricity rate rises by 1% and all other variables are held constant as of December 31, 2012, we estimate that our income before income taxes will increase by Won 460 billion in 2013.

We are exposed to fuel price risks due to the heavy influence of fuel costs on our sales and cost of sales. If the fuel prices of anthracite and bituminous coal, oil, LNG and others rise by 1% and all other variables are held constant as of December 31, 2012, we estimate that our income before income taxes will decrease by Won 238 billion in 2013.

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The above discussion and the estimated amounts generated from the sensitivity analyzes referred to above include forward-looking statements, which assume for analytical purposes that certain market conditions may occur. Accordingly, such forward-looking statements should not be considered projections by us of future events or losses.

See Note 43 of the notes to our consolidated financial statements for further related information.

**ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES****Item 12A. Debt Securities**

Not applicable.

**Item 12B. Warrants and Rights**

Not applicable.

**Item 12C. Other Securities**

Not applicable.

**Item 12D. American Depositary Shares**

Under the terms of the Deposit Agreement in respect of our ADSs, the holder and beneficiary owners of ADSs, any party depositing or withdrawing or surrendering ADSs or ADRs, whichever applicable, may be required to pay the following fees and charges to JPMorgan Chase Bank acting as depositary for our ADSs:

<b>Item</b>	<b>Services</b>	<b>Fees</b>
1	Taxes and other governmental charges	As applicable
2	Registration of transfer of common shares generally on our shareholders' register, any institution authorized under the applicable law to effect book-entry transfers of securities (including Korea Securities Depository), or any entity that presently carries out the duties of registrar for the common shares, and applicable to transfers of common shares to the name of the Depository or its nominee on the making of deposits or withdrawals	A fee of \$1.50 or less per ADS
3	Cable, telex and facsimile transmission expenses	As applicable
4	Expenses incurred by the Depository in the conversion of foreign currency	As applicable
5	Execution and delivery of ADRs and the surrender of ADRs	Fee of \$0.05 or less per ADS
6	Cash distribution made by the Depository or its agent	Fee of \$0.02 or less per ADS

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<b>Item</b>	<b>Services</b>	<b>Fees</b>
7	Fee for the distribution of proceeds of sales of securities or rights for distribution other than cash, common shares or rights to subscribe for shares, distribution in shares or distribution in rights to subscribe for shares	Lesser of (i) the fee for the execution and delivery of ADRs referred to above which would have been charged as a result of the deposit by the holders of securities or common shares received in exercise of rights distributed to them, but which securities or rights are instead sold by the Depository and the net proceeds distributed and (ii) the amount of such proceeds
8	Depository services performed in administering the ADRs (which fee shall be assessed against holders of ADSs as of the record date or dates and shall be payable at the sole discretion of the Depository by billing such holders or by deducting such charge from one or more cash dividends or other cash distributions)	Fee of US\$0.02 or less per ADS per calendar year

Depository fees payable upon the issuance and cancellation of ADSs are typically paid to the depository by the brokers (on behalf of their clients) receiving the newly-issued ADSs from the depository and by the brokers (on behalf of their clients) delivering the ADSs to the depository for cancellation. The brokers in turn charge these transaction fees to their clients.

Depository fees payable in connection with distributions of cash or securities to ADS holders and the depository services fee are charged by the depository to the holders of record of ADSs as of the applicable ADS record date. The depository fees payable for cash distributions are generally deducted from the cash being distributed. In the case of distributions other than cash (i.e., stock dividends, rights offerings), the depository charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or un-certificated in direct registration), the depository sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts via the central clearing and settlement system, The Depository Trust Company ( DTC ), the depository generally collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depository.

In the event of refusal to pay the depository fees, the depository may, under the terms of the Deposit Agreement, refuse the requested service until payment is received or may set-off the amount of the depository fees from any distribution to be made to the ADS holder.

The fees and charges the ADS holders may be required to pay may vary over time and may be changed by us and by the depository. The ADS holders will receive prior notice of such changes.

**Table of Contents*****Depository Payments for the Fiscal Year 2012***

The following table sets forth our expenses incurred in 2012, which were reimbursed by JPMorgan Chase Bank, N.A., acting as depository for our ADSs:

	<b>In thousands of U.S. dollars)</b>	
Reimbursement of listing fees on the New York Stock Exchange	US\$	112
Reimbursement of legal fees		411
Reimbursement of accounting fees		110
Contributions towards our investor relations and other financing efforts (including investor conferences, non-deal roadshows and market information services)		624
Other		18
Total	US\$	1,275

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**PART II**

**ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

Not applicable.

**ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

Not applicable.

**ITEM 15. CONTROLS AND PROCEDURES**

**Disclosure Control**

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2012. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives. Based upon our evaluation, our chief executive officer and chief financial officer concluded that the design and operation of our disclosure controls and procedures as of December 31, 2012 were effective to provide reasonable assurance that information required to be disclosed by us in the reports we file and submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decision regarding required disclosure.

**Management's Annual Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, for our company. Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we have evaluated the effectiveness of our internal control over financial reporting as of December 31, 2012 based on the framework established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of a company's assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that a company's receipts and expenditures are being made only in accordance with authorizations of a company's management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of a company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance with respect to consolidated financial statement preparation and presentation and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.



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As required by Section 404 of the Sarbanes-Oxley Act of 2002 and related rules as promulgated by the Securities and Exchange Commission, management assessed the effectiveness of our internal control over financial reporting as of December 31, 2012 using criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2012 based on the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The effectiveness of internal control over financial reporting has been audited by Deloitte Anjin LLC, an independent registered public accounting firm, who has also audited our consolidated financial statements for the year ended December 31, 2012.

### **Attestation Report of the Independent Registered Public Accounting Firm**

Deloitte Anjin LLC has issued an attestation report on the effectiveness of our internal control over financial reporting under Auditing Standard No. 5 of the Public Company Accounting Oversight Board, which is included elsewhere in this report.

### **Changes in Internal Controls**

There were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

We operate an integrated ERP system for a transparent and efficient management of the core ERP components, including personnel, accounting, procurement, construction and facilities maintenance. In addition, we also operate a strategic enterprise management system that includes business warehouse, management information and business planning and simulation systems. We continue to upgrade and improve the ERP system, which is being used as our core information infrastructure.

### **ITEM 16. [RESERVED]**

#### **ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT**

Our board of directors has determined that we have at least one audit committee financial expert as such term is defined by the regulations of the Securities and Exchange Commission issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002. Our audit committee financial expert is Nam, Dong-Kyoon. Such member currently remains a member of the audit committee and is independent within the meaning of the Korea Stock Exchange listing standards, the regulations promulgated under the Enforcement Decree of the Korean Commercial Code and the New York Stock Exchange listing standards. For biographic information of our audit committee financial expert, Nam, Dong-Kyoon, see Item 6A.

Directors and Senior Management.

#### **ITEM 16B. CODE OF ETHICS**

We have adopted a code of ethics for our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions as required under Section 406 of the Sarbanes-Oxley Act of 2002, together with an insider reporting system in compliance with Section 301 of the Sarbanes-Oxley Act. The code of ethics is available on our website [www.kepcoco.kr](http://www.kepcoco.kr). We have not granted any waiver, including an implicit waiver, from a provision of the code of ethics to any of the above-mentioned officers during our most recently completed fiscal year.

**Table of Contents****ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The following table sets forth the aggregate fees billed for each of the years ended December 31, 2011 and 2012 for professional services rendered by our principal accountants for such year, for various types of services and a brief description of the nature of such services. Deloitte Anjin LLC, a member firm of Deloitte Touche Tohmatsu, was our principal accountant for the years ended December 31, 2011 and 2012, and we currently expect them to serve as our principal accountant for the year ended December 31, 2013.

Type of services	Aggregate fees billed during the Year Ended December 31,		Nature of services
	2011 (Deloitte Anjin)	2012 (Deloitte Anjin)	
	(In millions of Won)		
Audit Fees	3,100	3,109	Audit service for KEPCO and its subsidiaries.
Audit-Related Fees	87	355	Accounting advisory service.
Tax Fees	5		Tax return and consulting advisory service.
All Other Fees			All other services which do not meet the three categories above.
<b>Total</b>	<b>3,192</b>	<b>3,464</b>	

United States law and regulations in effect since May 6, 2003 generally require all engagements of the principal accountants be pre-approved by an independent audit committee or, if no such committee exists with respect to an issuer, by the entire board of directors. We have adopted the following policies and procedures for consideration and approval of requests to engage our principal accountants to perform audit and non-audit services. If the request relates to services that would impair the independence of our principal accountants, the request must be rejected. If the engagement request relates to audit and permitted non-audit services for us and our subsidiaries, it must be forwarded to our audit committee and receive pre-approval.

In addition, United States law and regulations permit the pre-approval requirement to be waived with respect to engagements for non-audit services aggregating no more than five percent of the total amount of revenues we paid to our principal accountants, if such engagements were not recognized by us at the time of engagement and were promptly brought to the attention of our audit committee or a designated member thereof and approved prior to the completion of the audit.

**ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEE**

Not applicable.

**ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

Neither we nor any affiliated purchaser, as defined in Rule 10b-18(a)(3) of the Exchange Act, purchased any of our equity securities during the period covered by this report.

**ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANTS**

Not applicable.

**ITEM 16G. CORPORATE GOVERNANCE**

We are committed to high standards of corporate governance. We are in compliance with the corporate governance provisions of the KEPCO Act, the Public Agencies Management Act, the Korean Commercial Code,



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the Financial Investment Services and Capital Markets Act of Korea and the Listing Rules of the Korea Exchange. We, like all other companies in Korea, must comply with the corporate governance provisions under the Korean Commercial Code, except to the extent the KEPCO Act and the Public Agencies Management Act otherwise require. In addition, as a listed company, we are subject to the Financial Investment Services and Capital Markets Act of Korea, unless the Financial Investment Services and Capital Markets Act of Korea otherwise provides.

### **The Public Agencies Management Act**

On April 1, 2007, the Government-Invested Enterprise Management Basic Act, which was enacted in 1984, was abolished and the Public Agencies Management Act took effect. Unless stated otherwise, the Public Agencies Management Act takes precedence over any other laws and regulations in the event of inconsistency. Under this Act, the minister of the Ministry of Strategy and Finance designated us as a market-oriented public enterprise, as defined under this Act, on April 2, 2007, and we became subject to this Act accordingly.

The Public Agencies Management Act requires a number of changes in the appointment process for our executive officers, which we have incorporated in our amendment to our Articles of Incorporation in September 2007. A senior non-standing director appointed by the minister of the Ministry of Strategy and Finance becomes our chairman of the board following the review and resolution of the Public Agencies Operating Committee. Our president is appointed by the President of the Republic upon the motion of the Ministry of Trade, Industry and Energy following the nomination by our director nomination committee, the review and resolution of the Public Agencies Operating Committee pursuant to the Public Agencies Management Act and an approval at the general meeting of our shareholders. Standing directors other than our president must be appointed by our president with the approval at the general meeting of our shareholders from a pool of candidates recommended by our director nomination committee. Prior to the enactment of the Act, standing directors were appointed directly by the minister of the Ministry of Trade, Industry and Energy. The non-standing directors must be appointed by the minister of the Ministry of Strategy and Finance following the review and resolution of the Public Agencies Operating Committee from a pool of candidates recommended by the director nomination committee and must have ample knowledge and experience in business management. Government officials that are not part of the teaching staff in national and public schools are ineligible to become our non-standing directors.

Under the Public Agencies Management Act and our Articles of Incorporation, the term of office for directors that are appointed after the effective date of such act, or April 1, 2007, is three years for the president and two years for other directors. The directors may be reappointed for an additional term of one year. In order to be reappointed, the president must be evaluated on the basis of his management performance; a standing director, on the basis of the performance of the duties for which he was elected to perform, or if the standing director has executed an incentive bonus contract, on the basis of his performance under the contract; and a non-standing director, on the basis of his performance of the duties for which he was elected to perform.

Under the Public Agencies Management Act and our Articles of Incorporation, a recommendation from the director nomination committee is required for the appointment of our executive officers, except in the case of reappointments. The director nomination committee consists of five to fifteen members, including private-sector members appointed by the board of directors. Non-standing directors must comprise at least the majority of the director nomination committee. One of the private-sector members must be able to represent our opinion and must not be currently employed by us. As required under the Public Agencies Management Act, we established an audit committee. At least two-thirds of the audit committee members must be non-standing directors, and at least one committee member must be an expert in finance or accounting. According to the Public Agencies Management Act, our president's term cannot be terminated unless done so by the President of the Republic pursuant to the Public Agencies Management Act or upon an event as specified in our Articles of Incorporation.

As required under Public Agencies Management Act, we submit to the Government by October 31 every year a report on our medium- to long-term management goals. Under the Public Agencies Management Act, we

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are also required to give separate public notice of important management matters, such as our budget and financial statements, status of directors and annual reports. In addition, for purposes of providing a comparison of the management performances of government agencies, we are required to post on a designated website a notice on a standard form detailing our management performance. Following consultation with the minister of the Ministry of Trade, Industry and Energy and the review and resolution of the operating committee, the Ministry of Strategy and Finance must examine the adequacy and competency of government agencies and establish plans on merger, abolishment, restructuring and privatization of public agencies. In such case, the minister of the Ministry of Trade, Industry and Energy must execute these plans and submit a performance report to the Ministry of Strategy and Finance.

The Korea Electric Power Corporation Act and other laws that had conflicted with the Public Agencies Management Act were amended on May 17, 2010. We amended our Articles of Incorporation to reflect the relevant provisions of the Public Agencies Management Act at a general meeting of our shareholders resolution on September 7, 2007. We also revised our internal regulations as necessary to comply with the Public Agencies Management Act.

On January 24, 2011, the Ministry of Trade, Industry and Energy changed the designation of our generation subsidiaries from other public institutions to market-oriented public enterprise. As other public institutions under the provisions of the Public Agencies Management Act, our generation subsidiaries were not subject to the same regulations applicable to us with regards to corporate governance matters such as the appointment and dismissal of directors and the composition of the boards of directors. However, as market-oriented public enterprises, our generation subsidiaries are currently subject to the same corporate governance rules applicable to us. All of our generation subsidiaries accordingly amended their respective articles of incorporation in 2011 and are subject to the same system of regulations applicable to us.

**Differences in Korean/New York Stock Exchange Corporate Governance Practices**

We are a foreign private issuer (as such term is defined in Rule 3b-4 under the Exchange Act), and our ADSs are listed on the New York Stock Exchange, or NYSE. Under Section 303A of the NYSE Listed Company Manual, NYSE-listed companies that are foreign private issuers are permitted to follow home country practice in lieu of the corporate governance provisions specified by the NYSE with limited exceptions. Under the NYSE Listed Company Manual, we as foreign private issuers are required to disclose significant differences between NYSE's corporate governance standards and those we follow under Korean law. The following summarizes some significant ways in which our corporate governance practices differ from those followed by U.S. companies listed on the NYSE under the listing rules of the NYSE:

***Majority of Independent Directors on the Board***

Under the NYSE listing rules, U.S. companies listed on the NYSE must have a board the majority of which is comprised of independent directors satisfying the requirements of independence as set forth in Rule 10A-3 under the Exchange Act. No director qualifies as independent unless the board of directors affirmatively determines that the director has no material relationship with the listed company (either directly or as a partner, shareholder or officer of an organization that has a relationship with us). The NYSE rules include detailed tests for determining director independence. While as a foreign private issuer, we are exempt from this requirement, our board of directors is in compliance with this requirement as it currently consists of 15 directors, of which eight directors satisfy the requirements of independence as set forth in Rule 10A-3 under the Exchange Act. U.S. companies listed on the NYSE are required to adopt and disclose corporate governance guidelines. Under the Public Agencies Management Act, more than one-half of our directors must be non-standing directors. The Financial Investment Services and Capital Markets Act of Korea deems a non-standing director nominated pursuant to other applicable laws (such as the Public Agencies Management Act) as an outside or non-executive director. Under the Public Agencies Management Act, a non-standing director is appointed by the Ministry of Strategy and Finance following the review and resolution of the Public Agencies Operating

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Committee from a pool of candidates recommended by the director nomination committee and must have ample knowledge and experience in business management. Government officials that are not part of the teaching staff in national and public schools are ineligible to become our non-standing directors.

### ***Executive Session***

Under the NYSE listing rules, non-management directors of U.S. companies listed on the NYSE are required to meet on a regular basis without management present and independent directors must meet separately at least once per year. While no such requirement currently exists under applicable Korean law, listing standards or our Articles of Incorporation, exclusive sessions were held quarterly in 2012 in order to promote the exchange of diverse opinions by non-standing directors.

### ***Audit Committee***

Under the NYSE listing rules, listed companies must have an audit committee that has a minimum of three members, and all audit committee members must satisfy the requirements of independence set forth in Section 303A.02 of the NYSE Listed Company Manual and Rule 10A-3 under the Exchange Act. We are in compliance with this requirement as our audit committee is comprised of three outside directors meeting the requirements of independence set forth in Section 303A.02 of the NYSE Listed Company Manual and Rule 10A-3 under the Exchange Act. The audit committee must be directly responsible for the appointment, compensation, retention and oversight of the work of the independent registered public accountants. Consistent with the application of the legal requirements then in effect, in June 2005, we amended our Articles of Incorporation, among others, to comply with the general exemptions provided under the audit committee requirements of the Sarbanes-Oxley Act, embodied in Rule 10A-3 of the Exchange Act and established a board of auditors, consisting of one standing auditor and two non-standing auditors. Beginning in the second half of 2005, our board of auditors performed the roles and responsibilities required of an audit committee under the Sarbanes-Oxley Act, including the supervision of the audit by the independent registered public accountants. Under the Korea Exchange listing rules and the Korean Commercial Code, a large listed company must also establish an audit committee of which at least two-thirds of its members must be outside directors and whose chairman must be an outside director. In addition, at least one member of the audit committee who is an outside director must also be an accounting or financial expert. Currently, our audit committee consists of three independent directors, and our audit committee is in compliance with the foregoing requirements under the NYSE listing rules, the Sarbanes-Oxley Act, the Korea Exchange listing rules and the Korean Commercial Code.

### ***Nomination/Corporate Governance Committee***

Under the NYSE listing rules, U.S. companies listed on the NYSE must have a nomination/corporate governance committee composed entirely of independent directors. In addition to identifying individuals qualified to become board members, this committee must develop and recommend to the board a set of corporate governance principles. Under the Public Agencies Management Act, we are required to have a director nomination committee which consists of non-standing directors and ad hoc members appointed by our Board of Directors. Our standing directors and executives as well as governmental officials that are not part of the teaching staff in national and public schools are ineligible to become a member of our director nomination committee. There is no requirement to establish a corporate governance committee under applicable Korean law.

Pursuant to the NYSE listing standards, non-management directors must meet on a regular basis without management present and independent directors must meet separately at least once per year. No such requirement currently exists under applicable Korean law.

### ***Compensation Committee***

Under the NYSE listing rules, U.S. companies listed on the NYSE are required to have a compensation committee which is composed entirely of independent directors. In January 2013, the SEC approved amendments

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to the listing rules of NYSE and NASDAQ regarding the independence of compensation committee members and the appointment, payment and oversight of compensation consultants. The listing rules were adopted as required by Section 952 of the Dodd-Frank Act and rule 10C-1 of the Securities Exchange Act of 1934, as amended, which direct the national securities exchanges to prohibit the listing of any equity security of a company that is not in compliance with the rules compensation committee director and advisor independence requirements. Certain elements of the listing rules will become effective on July 1, 2013.

No such requirement currently exists under applicable Korean law or listing standards, and we currently do not have a compensation committee.

### ***Corporate Governance Guidelines and Code of Business Conduct and Ethics***

Under the NYSE listing rules, U.S. companies listed on the NYSE are required to establish corporate governance guidelines and to adopt a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. As a foreign private issuer, we are exempt from this requirement. Pursuant to the requirements of the Sarbanes-Oxley Act, we have adopted a code of ethics applicable to our President & Chief Executive Officer and all other directors and executive officers including the Chief Financial Officer and the Chief Accounting Officer, as well as all financial, accounting and other officers that are involved in the preparation and disclosure of our consolidated financial statements and internal control of financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. We have also adopted an insider reporting system in compliance with Section 301 of the Sarbanes-Oxley Act. The code of ethics applicable to our executive officers as well as the financial officers of the holding company and its subsidiaries are available on [www.kepcoco.kr](http://www.kepcoco.kr).

### ***Shareholder Approval of Equity Compensation Plans***

Under the NYSE listing rules, shareholders of U.S. companies listed on the NYSE are required to approve all equity compensation plans. Under Korean law and regulations, stock options can be granted to employees to the extent expressly permitted by the articles of incorporation. We currently do not have any equity compensation plans.

### ***Annual Certification of Compliance***

Under the NYSE listing rules, a chief executive officer of a U.S. company listed on the NYSE must annually certify that he or she is not aware of any violation by the company of NYSE corporate governance standards. As a foreign private issuer, we are not subject to this requirement. However, in accordance with rules applicable to both U.S. companies and foreign private issuers, we are required to promptly notify the NYSE in writing if any executive officer becomes aware of any material noncompliance with the NYSE corporate governance standards applicable to us. In addition, foreign private issuers, including us, are required to submit to the NYSE an annual written affirmation relating to compliance with Sections 303A.06 and 303A.11 of the NYSE listed company manual, which are the NYSE corporate governance standards applicable to foreign private issuers. All written affirmations must be executed in the form provided by the NYSE, without modification. An annual written affirmation is required to be submitted to the NYSE within 30 days of filing with the SEC our annual report on Form 20-F. We have been in compliance with this requirement in all material respects and plan to submit such affirmation within the prescribed time line.

### ***Whistle Blower Protection***

On May 25, 2011, the SEC adopted final rules to implement whistleblower provisions of the Dodd-Frank Act, which are applicable to foreign private issuers with securities registered under the U.S. securities laws. The final rules provide that any eligible whistleblower who voluntarily provides the SEC with original information that leads to the successful enforcement of an action brought by the SEC under U.S. securities laws must receive

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an award of between 10 and 30 percent of the total monetary sanctions collected if the sanctions exceed \$1,000,000. An eligible whistleblower is defined as someone who provides information about a possible violation of the securities laws that he or she reasonably believes has occurred, is ongoing, or is about to occur. The possible violation does not need to be material, probably or even likely, but the information must have a facially plausible relationship to some securities law violation ; frivolous submissions would not qualify. The final rules also prohibit retaliation against the whistleblower. While the final rules do not require employees to first report allegations of wrongdoing through a company s corporate compliance system, they do seek to incentivize whistleblowers to utilize internal corporate compliance first by, among other things, (i) giving employees who first report information internally the benefit of the internal reporting date for purposes of the SEC program so long as the whistleblower submits the same information to the SEC within 120 days of the initial disclosure; (ii) clarifying that the SEC will consider, as part of the criteria for determining the amount of a whistleblower s award, whether the whistleblower effectively utilized the company s corporate compliance program or hindered the function of the program; and (iii) crediting a whistleblower who reports internally first and whose company passes the information along to the SEC, which would mean the whistleblower could receive a potentially higher award for information gathered in an internal investigation initiated as a result of the whistleblower s internal report.

In addition, the final rules address concerns that the whistleblower rules incentivize officers, directors and those with legal, audit, compliance or similar responsibilities to abuse these positions by making whistleblower complaints to the SEC with respect to information they obtained in these roles by generally providing that information obtained through a communication subject to attorney-client privilege or as a result of legal representation would not be eligible for a whistleblower award unless disclosure would be permitted by attorney conduct rules. Accordingly, officers and directors, auditors and compliance personnel and other persons in similar roles would not be eligible to receive awards for information received in these positions unless (x) they have a reasonable basis to believe that (1) disclosure of the information is necessary to prevent the entity from engaging in conduct that is likely to cause substantial injury to the financial interests of the entity or investors; or (2) the entity is engaging in conduct that will impede an investigation of the misconduct, for example, destroying documents or improperly influencing witnesses; or (y) 120 days has passed since the whistleblower provided the information to senior responsible persons at the entity or 120 days has passed since the whistleblower received the information at a time when these people were already aware of the information.

In Korea, there is no corresponding law or regulation.

**ITEM 16H. MINE SAFETY DISCLOSURE**

Not applicable.



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**PART III**

**ITEM 17. FINANCIAL STATEMENTS**

Not applicable.

**ITEM 18. FINANCIAL STATEMENTS**

Reference is made to Item 19 Exhibits for a list of all financial statements and schedules filed as part of this report.

**ITEM 19. EXHIBITS**

**(a) Financial Statements filed as part of this Annual Report**

See Index to Financial Statements on page F-1 of this report.

**(b) Exhibits filed as part of this Annual Report**

See Index of Exhibits beginning on page E-1 of this report.

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**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

**KOREA ELECTRIC POWER CORPORATION**

By: /s/ Cho, Hwan-Eik  
Name: Cho, Hwan-Eik  
Title: President and Chief Executive Officer  
Date: April 30, 2013

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**REPORT OF INDEPENDENT REGISTERED PUBLIC**

**ACCOUNTING FIRM ON CONSOLIDATED FINANCIAL STATEMENTS**

To the Shareholders and Board of Directors of

Korea Electric Power Corporation:

We have audited the accompanying consolidated statements of financial position of Korea Electric Power Corporation and subsidiaries (collectively referred to as the Company ) as of December 31, 2012, December 31, 2011, and the related consolidated statements of comprehensive income, changes in equity and cash flows, all expressed in Korean Won, for each of the three years in the period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We did not audit the financial statements of certain consolidated subsidiaries whose financial statements reflect 4.7 and 4.4 percent of consolidated total assets as of December 31, 2012 and 2011, respectively, and 9.5, 10.1 and 10.5 percent of consolidated total revenue for each of the three years in the period ended December 31, 2012. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Korea South-East Power Co., Ltd., is based solely on the report of the other auditors.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits and the report of the other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audits and the report of the other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Korea Electric Power Corporation and subsidiaries as of December 31, 2012 and 2011 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012, in conformity with the International Financial Reporting Standards as issued by International Accounting Standard Board.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company s internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 30, 2013 expressed an unqualified opinion on the Company s internal control over financial reporting based on our audit and the report of the other auditors.

/s/ Deloitte Anjin LLC

Seoul, Korea

April 30, 2013

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON  
INTERNAL CONTROL OVER FINANCIAL REPORTING**

To the Shareholders and Board of Directors of

Korea Electric Power Corporation:

We have audited Korea Electric Power Corporation and subsidiaries (collectively referred to as the Company) internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We did not examine the effectiveness of internal control over financial reporting of certain subsidiaries whose financial statements reflect total assets and revenues constituting 4.7 percent and 9.5 percent, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2012. The effectiveness of certain consolidated subsidiaries internal control over financial reporting was audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the effectiveness of certain consolidated subsidiaries internal control over financial reporting, is based solely on the report of the other auditors.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit and the report of other auditors provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, based on our audit and the report of the other auditors, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2012, all expressed in Korean won, of the Company and our report dated April 30, 2013 expressed an unqualified opinion on those financial statements based on our audit and report of the other auditors.

/s/ Deloitte Anjin LLC

Seoul, Korea

April 30, 2013

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**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholder

Korea South-East Power Co., Ltd.

We have audited the accompanying consolidated statements of financial position of Korea South-East Power Co., Ltd. (the Company) as of December 31, 2012 and 2011, and the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Korea South-East Power Co., Ltd. as at December 31, 2012 and 2011 and the consolidated results of its financial performance, and their cash flows for each of the three years in the period ended December 31, 2012, in conformity with International Financial Reporting Standards as issued by International Accounting Standard Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Korea South-East Power Co., Ltd.'s internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 29, 2013 expressed an unqualified opinion thereon.

/s/ Ernst & Young Han Young

April 29, 2013

Seoul, Republic of Korea

This audit report is effective as at April 29, 2013 the independent auditors' report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the auditors' report date to the time this audit report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

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**Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting**

To the Board of Directors and Stockholder of

Korea South-East Power Co., Ltd.

We have audited Korea South-East Power Co., Ltd.'s (the Company) internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Korea South-East Power Co., Ltd.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Korea South-East Power Co., Ltd. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the COSO criteria.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the accompanying consolidated statements of financial position of Korea South-East Power Co., Ltd. as of December 31, 2012 and 2011, and the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2012 and our report dated April 29, 2013 expressed an unqualified opinion thereon.

/s/ Ernst & Young Han Young

April 29, 2013

Seoul, Republic of Korea



**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF FINANCIAL POSITION****AS OF DECEMBER 31, 2012 AND 2011**

	Notes	Dec. 31, 2012 (KRW in millions)	Dec. 31, 2011
<b>ASSETS</b>			
<b>CURRENT ASSETS:</b>			
Cash and cash equivalents	5,6,7,43	1,954,949	1,387,921
Current financial assets, net	5,10,11,12,43	656,217	770,539
Accounts and other receivables, net	5,8,14,20,43,45	7,184,625	7,274,148
Inventories, net	13	3,440,341	3,851,751
Income tax receivables	39	30,476	35,801
Current non-financial assets	15	664,047	447,393
Non-current assets held for sale and discontinued operations	40	2,828	
		13,933,483	13,767,553
<b>NON-CURRENT ASSETS:</b>			
Non-current financial assets, net	5,6,9,10,11,12,43	1,873,676	2,199,032
Non-current accounts and other receivables, net	5,8,14,43,45	1,254,330	1,284,532
Property, plant and equipment, net	18,47	122,376,140	112,384,881
Investment properties, net	19	590,223	517,149
Intangible assets, net	21	883,814	848,709
Investments in joint ventures	4,17	908,593	767,202
Investments in associates	4,17	3,982,340	3,718,154
Deferred tax assets	39	209,783	372,478
Non-current non-financial assets	15	140,438	608,160
		132,219,337	122,700,297
Total Assets	4	146,152,820	136,467,850
<b>LIABILITIES</b>			
<b>CURRENT LIABILITIES:</b>			
Accounts and other payables, net	5,22,24,43,45	6,418,464	6,576,158
Short-term borrowings	5,23,43	689,310	1,173,568
Current financial liabilities, net	5,11,23,43,45	7,099,509	5,852,342
Income tax payables	39	334,053	505,154
Current non-financial liabilities	20,27,28	4,117,440	3,541,562
Current provisions	26,43	158,303	92,383
		18,817,079	17,741,167
<b>NON-CURRENT LIABILITIES:</b>			
Non-current accounts and other payables, net	5,22,24,43,45	4,173,691	4,178,137
Non-current financial liabilities, net	5,11,23,43,45	46,050,766	39,403,578
Non-current non-financial liabilities	27,28	6,298,650	5,611,010
Employee benefits obligations, net	25,43	2,144,334	1,942,994
Deferred tax liabilities, net	39	5,433,292	6,786,779
Non-current provisions	26,43	12,170,806	7,000,235

		76,271,539	64,922,733
Total Liabilities	4	95,088,618	82,663,900

(Continued)

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**KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (CONTINUED)**

**AS OF DECEMBER 31, 2012, DECEMBER 31, 2011**

	Notes	Dec. 31, 2012	Dec. 31, 2011
		(KRW in millions)	
<b><u>EQUITY</u></b>			
<b>CONTRIBUTED CAPITAL:</b>			
Shares issued	1,29	3,209,820	3,209,820
Share premium	29	843,758	843,758
		4,053,578	4,053,578
<b>RETAINED EARNINGS:</b>			
Legal reserves	30	1,603,919	1,603,919
Voluntary reserves	30	25,961,315	21,766,678
Retained earnings before appropriations	30,31	4,999,049	12,398,497
		32,564,283	35,769,094
<b>OTHER COMPONENTS OF EQUITY:</b>			
Other capital surpluses	32	705,448	639,028
Cumulative other comprehensive income	32	11,957	255,095
Treasury stocks	32	(741,489)	(741,489)
Other equity	32	13,294,990	13,294,990
		13,270,906	13,447,624
<b>EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY</b>		<b>49,888,767</b>	<b>53,270,296</b>
<b>NON-CONTROLLING INTERESTS</b>		<b>1,175,435</b>	<b>533,654</b>
<b>Total Equity</b>	<b>43</b>	<b>51,064,202</b>	<b>53,803,950</b>
<b>Total Liabilities and Equity</b>		<b>146,152,820</b>	<b>136,467,850</b>

See accompanying notes to consolidated financial statements.

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**KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
**FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010**

	Notes	2012 (KRW in millions except per share amounts)	2011	2010
<b>SALES</b>				
Sales of goods	4,33,43,45	46,906,587	41,397,469	38,004,325
Sales of service	4,33,43,45	357,877	322,616	747,044
Sales of construction contracts	4,20,33,43,45	1,856,045	1,455,132	755,213
		49,120,509	43,175,217	39,506,582
<b>COST OF SALES</b>				
Cost of sales of goods	4,13,25,41,45	46,293,591	40,926,543	35,021,668
Cost of sales of service	4,13,25,41,45	470,453	393,049	414,672
Cost of sales of construction contracts	4,13,25,41,45	1,695,218	1,405,302	750,897
		48,459,262	42,724,894	36,187,237
<b>GROSS PROFIT</b>				
		661,247	450,323	3,319,345
<b>OTHER OPERATING INCOME</b>				
	35	675,000	598,302	536,915
<b>SELLING AND ADMINISTRATIVE EXPENSES</b>				
	4,34,41,45	1,780,168	1,751,696	1,644,760
<b>OTHER OPERATING EXPENSES</b>				
	4,35	74,567	147,595	69,787
<b>OTHER PROFIT (LOSS)</b>				
	36	(1,781,835)	165,703	118,207
<b>OPERATING INCOME (LOSS)</b>				
	4	(2,300,323)	(684,963)	2,259,920
<b>FINANCE INCOME</b>				
	5,11,37	1,128,357	607,592	591,491
<b>FINANCE EXPENSES</b>				
	5,11,38	3,068,321	2,518,850	2,558,425
<b>PROFITS OF ASSOCIATES AND JOINT VENTURES USING EQUITY METHOD</b>				
Share in income of associates and joint ventures	17	205,987	162,513	160,314
Gain on disposal of associates and joint ventures			3,147	25,975
Share in loss of associates and joint ventures	17	(20,127)	(42,115)	(56,246)
Loss on disposal of associates and joint ventures		(162)	(450)	(53,417)
Impairment loss on associates and joint ventures		(8,757)		
<b>LOSS BEFORE INCOME TAX</b>				
		(4,063,346)	(2,473,126)	369,612
<b>INCOME TAX EXPENSE (BENEFIT)</b>				
	39	(985,377)	819,871	438,779
<b>NET LOSS FOR THE YEAR</b>				
		(3,077,969)	(3,292,997)	(69,167)

(Continued)

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**KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (CONTINUED)**  
**FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010**

	2012	2011	2010
	(KRW in millions except per share amounts)		
<b>OTHER COMPREHENSIVE INCOME (LOSS)</b>			
Other comprehensive income(loss) that will not be reclassified subsequently to profit(loss)			
Actuarial losses on retirement benefit Obligations, net of tax	25,30	(41,310)	(152,196)
Share in other comprehensive income(loss) of associates and joint ventures, net of tax	30	(846)	(5,002)
Other comprehensive income(loss) that will be reclassified subsequently to profit(loss)			
Net change in fair value of available-for- sale financial assets, net of tax	32	2,245	(174,958)
Loss on valuation of derivatives using of cash flow hedge accounting, net of tax	5,11,32	(63,850)	(27,999)
Foreign currency translation of foreign operations, net of tax	32	(121,892)	47,135
Share in other comprehensive income(loss) of associates and joint ventures, net of tax	32	(96,060)	50,862
<b>TOTAL COMPREHENSIVE LOSS FOR THE YEAR</b>	<b>(3,399,682)</b>	<b>(3,555,155)</b>	<b>(111,734)</b>
<b>NET INCOME(LOSS) ATTRIBUTABLE TO;</b>			
Owners of the Company	(3,166,616)	(3,370,464)	(119,931)
Non-controlling interests	88,647	77,467	50,764
	<b>(3,077,969)</b>	<b>(3,292,997)</b>	<b>(69,167)</b>
<b>TOTAL COMPREHENSIVE INCOME(LOSS) ATTRIBUTABLE TO;</b>			
Owners of the Company	(3,447,949)	(3,627,669)	(151,472)
Non-controlling interests	48,267	72,514	39,738
	<b>(3,399,682)</b>	<b>(3,555,155)</b>	<b>(111,734)</b>
<b>EARNINGS(LOSSES) PER SHARE(IN KOREAN WON);</b>			
Basic earnings per share	42	(5,083)	(5,411)
Diluted earnings per share	42	(5,083)	(5,411)

See accompanying notes to consolidated financial statements.

**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY****FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010**

	Contributed capital	Retained earnings	Other components of equity (KRW in millions)	Equity attributable to owners of the Company	Non- controlling interest	Total Equity
Balance at January 1, 2010	4,042,979	39,497,095	13,331,454	56,871,528	415,810	57,287,338
Total comprehensive income						
Net (income) loss for the year		(119,931)		(119,931)	50,764	(69,167)
Other comprehensive income(loss) that will not be reclassified subsequently to profit(loss)						
Actuarial losses on retirement benefit obligations, net of tax		(78,876)		(78,876)	(6,729)	(85,605)
Share in other comprehensive income(loss) of a associates and joint ventures, net of tax		(2,056)		(2,056)		(2,056)
Other comprehensive income(loss) that will be reclassified subsequently to profit(loss)						
Net change in fair value of available-for-sale financial assets, net of tax			124,322	124,322	142	124,464
Loss on valuation of derivatives using cash flow hedge accounting, net of tax			(35,005)	(35,005)		(35,005)
Foreign currency translation of foreign operations, net of tax			(7,685)	(7,685)	(4,439)	(12,124)
Share in other comprehensive income(loss) of a associates and joint ventures, net of tax			(32,241)	(32,241)		(32,241)
Dividends paid					(35,740)	(35,740)
Capital increase					16,476	16,476
Change due to acquisition and disposal of subsidiaries			97,922	97,922	22,299	120,221
Others					(24)	(24)
Balance at December 31, 2010	4,042,979	39,296,232	13,478,767	56,817,978	458,559	57,276,537

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**KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (CONTINUED)**  
**FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010**

	Contributed capital	Retained earnings	Other components of equity (KRW in millions)	Equity attributable to owners of the Company	Non- controlling interest	Total Equity
Balance at January 1, 2011	4,042,979	39,296,232	13,478,767	56,817,978	458,559	57,276,537
Total comprehensive income						
Net (income) loss for the period		(3,370,464)		(3,370,464)	77,467	(3,292,997)
Other comprehensive income(loss) that will not be reclassified subsequently to profit(loss)						
Actuarial losses on retirement benefit obligations, net of tax		(151,672)		(151,672)	(524)	(152,196)
Share in other comprehensive income(loss) of a associates and joint ventures, net of tax		(5,002)		(5,002)		(5,002)
Other comprehensive income(loss) that will be reclassified subsequently to profit(loss)						
Net change in fair value of available-for-sale financial assets, net of tax			(174,937)	(174,937)	(21)	(174,958)
Loss on valuation of derivatives using cash flow hedge accounting, net of tax			(18,648)	(18,648)	(9,351)	(27,999)
Foreign currency translation of foreign operations, net of tax			42,173	42,173	4,962	47,135
Share in other comprehensive income(loss) of a associates and joint ventures, net of tax			50,881	50,881	(19)	50,862
Dividends paid					(44,663)	(44,663)
Capital increase	10,599			10,599	3,187	13,786
Change due to acquisition and disposal of subsidiaries			69,388	69,388	42,991	112,379
Others					1,066	1,066
Balance at December 31, 2011	4,053,578	35,769,094	13,447,624	53,270,296	533,654	53,803,950

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**KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (CONTINUED)**  
**FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010**

	Contributed capital	Retained earnings	Other components of equity (KRW in millions)	Equity attributable to owners of the Company	Non- controlling interest	Total Equity
Balance at January 1, 2012	4,053,578	35,769,094	13,447,624	53,270,296	533,654	53,803,950
Total comprehensive income						
Net (income) loss for the period		(3,166,616)		(3,166,616)	88,647	(3,077,969)
Other comprehensive income(loss) that will not be reclassified subsequently to profit(loss)						
Actuarial losses on retirement benefit obligations, net of tax		(37,349)		(37,349)	(3,961)	(41,310)
Share in other comprehensive income(loss) of associates and joint ventures, net of tax		(846)		(846)		(846)
Other comprehensive income(loss) that will be reclassified subsequently to profit(loss)						
Net change in fair value of available-for-sale financial assets, net of tax			2,255	2,255	(10)	2,245
Loss on valuation of derivatives using cash flow hedge accounting, net of tax			(44,909)	(44,909)	(18,941)	(63,850)
Foreign currency translation of foreign operations, net of tax			(104,595)	(104,595)	(17,297)	(121,892)
Share in other comprehensive income(loss) of associates and joint ventures, net of tax			(95,889)	(95,889)	(171)	(96,060)
Dividends paid					(55,254)	(55,254)
Capital increase in subsidiaries					115,346	115,346
Change due to acquisitions and disposals of subsidiaries			66,420	66,420	31,003	97,423
Issuance of hybrid bonds					498,660	498,660
Others					3,759	3,759
Balance at December 31, 2012	4,053,578	32,564,283	13,270,906	49,888,767	1,175,435	51,064,202

See accompanying notes to consolidated financial statements.



**Table of Contents****KOREA ELECTRIC POWER CORPORATION SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CASH FLOWS****FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010**

	2012	2011 (KRW in millions)	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net loss for the year	(3,077,969)	(3,292,997)	(69,167)
Adjustments for:			
Income tax expense	(985,377)	819,871	438,779
Depreciation	6,903,350	6,782,661	6,579,220
Amortization of intangible assets	93,360	94,729	117,444
Retirement benefit expense, net	364,913	341,902	341,210
Bad debt expense	41,440	15,136	13,569
Interest expense	2,344,328	2,123,579	2,045,684
Loss on disposal of property, plant, and equipment	67,910	31,228	46,882
Loss on abandonment of property, plant, and equipment	253,985	296,557	219,911
Impairment loss on intangible assets	459	221	451
Loss on disposal of intangible assets	44		
Accretion expense to provisions, net	788,371	433,374	139,969
Loss (gain) on foreign currency translation, net	(766,863)	226,012	(110,158)
Valuation and transaction loss (gain) on derivative instrument, net	597,628	(75,307)	196,334
Share in income of associates and joint ventures, net	(185,860)	(120,398)	(104,068)
Gain on disposal of financial assets	(189)		
Gain on disposal of property, plant and equipment	(32,797)	(38,776)	(42,037)
Gain on disposal of intangible assets	(15)		
Loss on disposal of other non-current assets	584		
Loss (gain) on disposal of associates and joint ventures, net	162	(2,699)	27,443
Impairment loss on associates and joint ventures	8,757		
Interest income	(204,123)	(291,625)	(120,422)
Dividends income	(10,452)	(18,894)	(3,341)
Impairment loss on available-for-sale financial assets	40,156		
Impairment loss on other non-current assets	1,877,371		
Other losses (gains), net	(21,434)	47,998	55,308
	11,175,708	10,665,569	9,842,178
Changes in operating assets and liabilities:			
Increase in accounts receivables	(781,099)	(664,696)	(539,781)
Increase in non-trade receivables	(103,028)	(45,009)	(24,369)
Decrease(increase) in accrued income	(66,504)	26,205	(6,038)
Decrease(increase) in other receivables	377		(2,936)
Increase in other current assets	(384,765)	(154,062)	(111,388)
Increase in inventories	(672,979)	(1,411,785)	(875,476)
Decrease(increase) in other non-current assets	(1,521,249)	(335,262)	431,576
Increase in trade payables	154,341	710,831	511,311
Increase(decrease) in non-trade payables	573,517	(7,882)	113,467
Increase(decrease) in accrued expenses	(126,857)	30,386	154,231
Increase in other current liabilities	1,865,301	1,204,974	262,503
Increase(decrease) in other non-current liabilities	(262,590)	525,996	97,803
Decrease in associates and joint ventures	48,429	62,169	35,488
Decrease in provisions	(74,638)	(289,237)	(330,195)

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Payments of retirement benefit obligations	(186,274)	(345,774)	(401,143)
Increase in plan assets	(94,763)	(291,339)	(96,751)
	(1,632,781)	(984,485)	(781,698)
	6,464,958	6,388,087	8,991,313

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**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)****FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010**

	2012	2011 (KRW in millions)	2010
Interest received	153,414	247,711	168,014
Interest paid	(2,386,125)	(2,196,429)	(2,272,028)
Dividends received	10,452	18,894	3,427
Income tax paid	(325,866)	(313,534)	(150,636)
<b>Net cash provided by operating activities</b>	<b>3,916,833</b>	<b>4,144,729</b>	<b>6,740,090</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Disposal of associates and joint ventures	8,988	10,136	35,412
Acquisition of associates and joint ventures	(404,761)	(491,293)	(756,443)
Disposal of property, plant and equipment	100,573	50,578	100,325
Acquisition of property, plant and equipment	(11,446,834)	(10,610,402)	(10,184,037)
Disposal of intangible assets	1,448	467	198
Acquisition of intangible assets	(67,715)	(42,599)	(470,413)
Disposal of investment properties		523	
Disposal of financial assets	650,757	856,021	295,844
Acquisition of financial assets	(637,620)	(840,852)	(564,832)
Decrease (increase) in loans, net	46,984	(29,574)	(203,545)
Increase (decrease) in deposits received, net	(53,755)	(53,042)	91
Receipt of government grants	45,932	47,903	27,589
Net cash inflow (outflow) from acquisition of subsidiaries	10,022	(65,147)	(40,862)
Other cash inflow (outflow) from investing activities, net	26,785	(28,412)	(233,476)
<b>Net cash provided by investing activities</b>	<b>(11,719,196)</b>	<b>(11,195,693)</b>	<b>(11,994,149)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Proceeds from short-term borrowings, net	(476,192)	114,015	(348,216)
Proceeds from long-term borrowings and debentures	14,202,095	12,100,107	11,654,394
Repayment of long-term borrowings and debentures	(5,895,384)	(5,880,330)	(5,786,761)
Payment of financial lease	(122,320)	(136,760)	(123,773)
Settlement of derivative instruments, net	(247)	51,916	350,404
Proceeds on disposal of partial interest in a subsidiary that does not involve loss of control	109,589	100,691	149,579
Change in non-controlling interest	116,020	36,142	16,071
Proceeds from hybrid bonds	498,660		
Dividends paid	(55,254)	(44,663)	(35,740)
Other cash inflow (outflow) from financing activities, net	(1,480)	297	(6,290)
<b>Net cash provided by financing activities</b>	<b>8,375,487</b>	<b>6,341,415</b>	<b>5,869,668</b>
EFFECTS OF EXCHANGE RATE CHANGES	(6,096)	7,419	(1,242)
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>567,028</b>	<b>(702,130)</b>	<b>614,367</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF THE PERIOD</b>	<b>1,387,921</b>	<b>2,090,051</b>	<b>1,475,684</b>
<b>CASH AND CASH EQUIVALENTS, END OF THE PERIOD</b>	<b>1,954,949</b>	<b>1,387,921</b>	<b>2,090,051</b>

See accompanying notes to consolidated financial statements.

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**KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010**

**1. GENERALS**

Korea Electric Power Corporation ( KEPCO ) was incorporated on January 1, 1982 in accordance with the Korea Electric Power Corporation Act (the KEPCO Act ) to engage in the generation, transmission and distribution of electricity and development of electric power resources in the Republic of Korea. The Company s stock was listed on the Korea Stock Exchange on August 10, 1989 and the Company listed its Depository Receipts (DR) on the New York Stock Exchange on October 27, 1994.

As of December 31, 2012, the Government of the Republic of Korea (the Government ), Korea Finance Corporation (the KoFC ) which is wholly owned by the Government, and foreign investors held 21.17%, 29.94%, and 25.18% respectively, of the Company s shares.

In accordance with the restructuring plan by the Ministry of Trade, Industry and Energy (the MTIE , formerly the Ministry of Knowledge Economy) (the Restructuring Plan ) on January 21, 1999, on April 2, 2001, KEPCO spun off its power generation divisions, resulting in the establishment of six power generation subsidiaries.

In addition, the Government established a Tripartite Commission consisting of representatives of the Government, leading businesses and labor unions in Korea to deliberate on ways to introduce competition in electricity distribution, such as by forming and privatizing new distribution subsidiaries. Meanwhile, on June 30, 2004, the privatization initiatives were ceased, instead independent business divisions for distribution within the Company were created to improve operational efficiency through internal competition. These business divisions have separate management structures, financial accounting systems and performance evaluation systems, but with a common focus on maximizing profitability.

**2. SIGNIFICANT ACCOUNTING POLICIES**

**(1) Basis of Preparation**

The Company maintains its official accounting records in Republic of Korean won ( Won ) and prepares consolidated financial statements in conformity with International Financial Reporting Standards ( IFRS ) as issued by International Accounting Standard Board ( IASB ).

The significant accounting policies under IFRS followed by the Company in the preparation of its consolidated financial statements are summarized below. Unless stated otherwise, these accounting policies have been applied consistently to the financial statements for the current period and accompanying comparative periods.

The consolidated financial statements have been prepared on the historical cost basis except for certain non-current assets and financial instruments that are measured at revalued amounts or fair values, as explained in the accounting policies below. Historical cost is based on the fair value of the consideration given in exchange for assets.

**1) Amendments to IFRSs that are mandatorily effective for the year ended December 31, 2012**

The following amendments to IFRSs have been applied in the current year but do not have affected the amounts reported in these financial statements.

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*Amendments to IFRS 7 Financial Instruments: Disclosures*

The Company may have transferred financial assets in such a way that part or all of the transferred financial assets do not qualify for derecognition. The amendments to IFRS 7 increase the disclosure requirements for transactions involving transfers of financial assets in order to provide greater transparency around the nature of the transferred assets, the nature of the risks and rewards of ownership to which the Company is exposed, description of the nature of the relationship between the transferred assets and the associated liabilities and carrying value of the associated liabilities. When the Company continues its involvement on the transferred assets although the transferred assets are derecognized in their entirety, the Company discloses the carrying amounts of the transferred assets and the associated liabilities and information showing how the maximum exposure to loss. The amendments do not have impact on the Company's financial statements.

*Amendments to IAS 12 Deferred Tax Recovery of Underlying Assets*

The Company has applied the amendments to IAS 12 *Income Taxes* in the current year. Under the amendments, investment properties that are measured using the fair value model in accordance with IAS 40 *Investment Property* are presumed to be recovered entirely through sale for the purpose of measuring deferred taxes unless the presumption is rebutted. Also, the Company recognizes deferred income tax assets and deferred income tax liabilities on investment properties that were revalued in accordance with IFRS 16 *Property, Plant and Equipments*, under a business model whose objective is to consume substantially all of the economic benefits embodied through sales. The amendments do not have impact on the Company's financial statements.

*The amendments to IFRIC 14 The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interpretation*

These amendments require the Company to recognize net defined benefit liability (asset), deficit or surplus, adjusted for any effect of limiting a net defined benefit asset to the asset ceiling. The amendments do not have impact on the Company's financial statements.

2) New and revised IFRSs that have been issued and are not yet effective, but have been early adopted

*Amendments to IAS 1 Presentation of Financial Statements*

The amendments to IAS 1 require items of other comprehensive income to be grouped into two categories in the other comprehensive income section: (a) items that will not be reclassified subsequently to profit or loss and (b) items that may be reclassified subsequently to profit or loss when specific conditions are met. The accompanying financial statements have been prepared with the application of the early adopted amendments.

*Amendments to IAS 1 Presentation of Financial Statements (as part of the Annual Improvements to IFRSs 2009-2011 cycle issued in May 2012)*

The Company has applied the amendments to IAS 1 as part of the Annual Improvements to IFRSs 2009-2011 Cycle in advance of the effective date (annual periods beginning on or after January 1, 2013).

IAS 1 requires an entity that changes accounting policies retrospectively, or makes a retrospective restatement or reclassification to present a statement of financial position as at the beginning of the preceding period (third statement of financial position). The amendments to IAS 1 clarify that an entity is required to present a third statement of financial position only when the retrospective application, restatement or reclassification has a material effect on the information in the third statement of financial position and that related notes are not required to accompany the third statement of financial

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position. In accordance with the amendments to IAS 1, the Company has not presented a third statement of financial position and related notes as of January 1, 2011 in relation to the retrospective reclassification as further described in Note 2 - (24).

3) New and revised IFRSs that have been issued but are not yet effective, and not have been early adopted.  
*Amendments to IAS 19 Employee Benefits*

The amendments to IAS 19 require the recognition of changes in defined benefit obligations and in fair value of plan assets when they occur, and hence eliminate the corridor approach permitted under the previous version of IAS 19 and the accelerate the recognition of past service costs. The amendments to IAS 19 are effective for annual periods beginning on or after January 1, 2013. The Company is in the process of evaluating the impact on the financial statements upon the adoption of amendments.

*Amendments to IAS 32 Offsetting Financial Assets and Financial Liabilities and the related disclosures*

The amendments to IAS 32 clarify existing application issue relating to the offset of financial assets and financial liabilities requirements. Specifically, the amendments clarify the meaning of currently has a legally enforceable right of set-off and simultaneous realization and settlement .

The Company s right to offset must not be conditional on the occurrence of future events but enforceable anytime during the contract periods, during the ordinary course of business with counterparty, a default of counterparty and master netting agreement or in some forms of non-recourse debt. The amendments to IAS 32 are effective for annual periods beginning on January 1, 2014. The Company is in the process of evaluating the impact on the financial statements upon the adoption of amendments.

*Amendments to IFRS 7 Financial Instruments: Disclosures*

The amendments to IFRS 7 are mainly focusing on presentation of the offset between financial assets and financial liabilities. The amendments to IFRS 7 are effective for annual periods beginning on or after January 1, 2013. The Company is in the process of evaluating the impact on the financial statements upon the adoption of amendments.

*IFRS 10 Consolidated Financial Statements*

The amendments to IFRS 10 include a new definition of control that contains three elements: (a) power over an investee, (b) exposure, or rights, to variable returns from its involvement with the investee, and (c) the ability to use its power over the investee to affect the amount of the investor s return. This standard is effective for annual periods beginning on or after January 1, 2013. The Company is in the process of evaluating the impact on the financial statements upon the adoption of amendments.

*IFRS 11 Joint Arrangements*

IFRS 11 deals with how a joint arrangement of which two or more parties have joint control should be classified. Under IFRS 11, joint arrangements are classified as joint operations or joint ventures, depending on the rights and obligations of the parties to the arrangements. If the Company is a joint operator, the Company is to recognize assets, liabilities, revenues and expenses proportionally to its investment and if the Company is joint ventures, the Company is to account for that investment using the equity method accounting. This standard is effective for annual periods beginning on or after January 1, 2013. The Company is in the process of evaluating the impact on the financial statements upon the adoption of amendments.

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### *IFRS 12 Disclosure of Interest in Other Entities*

IFRS 12 is a disclosure standard and is applicable to entities that have interests in subsidiaries, joint arrangements, associates, or unconsolidated structured entities. This standard is effective for annual periods beginning on or after January 1, 2013. The Company is reviewing the impact of the application of this standard on the Company's financial statements.

### *IFRS 13 Fair Value Measurement*

IFRS 13 establishes a single source of guidance for fair value measurements and disclosure about fair value measurements. The standard defines fair value, establishes a framework for measuring fair value, and requires disclosures about fair value measurements. This standard is effective for annual periods beginning on or after January 1, 2013. The Company is reviewing the impact of the application of this standard on the financial statements.

### *IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine*

The interpretation provides accounting for the costs from waste removal activity (stripping). This interpretation is effective for annual periods beginning on or after January 1, 2013. The Company does not anticipate the application of the interpretation will have no effect to the Company's financial statements as the Company does not engage in such activities.

### (2) Basis of Consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities (including special purpose entities) controlled by the Company (or its subsidiary). Control is achieved where the Company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

Income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the effective date of acquisition and up to the effective date of disposal, as appropriate. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used the Company.

All intra-group transactions, balances, income and expenses are eliminated in full upon consolidation for the years ended December 31, 2012, 2011 and 2010.

Changes in the Company's ownership interests in a subsidiary that do not result in the Company losing control over the subsidiary are accounted for as equity transactions. The carrying amounts of the Company's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to owners of the Company.

When the Company loses control of a subsidiary, the income or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognized in other comprehensive income and accumulated in equity, the amounts previously recognized in other comprehensive income and accumulated in equity are accounted for as if the Company had directly disposed of the relevant assets (i.e. reclassified to income or loss or transferred directly to retained earnings). The fair value of any investment retained in the former subsidiary



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at the date when control is lost is recognized as the fair value on initial recognition for subsequent accounting under IAS 39 *Financial Instruments: Recognition and Measurement* or, when applicable, the cost on initial recognition of an investment in an associate or a jointly controlled entity.

(3) Business Combination

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Company, liabilities incurred by the Company to the former owners of the acquiree and the equity interests issued by the Company in exchange for control of the acquiree. Acquisition-related costs are generally recognized in income or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value at the acquisition date, except that:

deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognized and measured in accordance with IAS 12 *Income Taxes* and IAS 19 *Employee Benefits* respectively;

Assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in income or loss as a bargain purchase gain.

Non-controlling interest that is present on acquisition day and if it entitles the holder to a proportionate share of the entity's net assets in an event of a liquidation, the non-controlling interest may be initially measured either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of the acquiree's identifiable net assets. The choice of measurement can be elected on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in other IFRSs

When the consideration transferred by the Company in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates in accordance with IAS 39 *Financial Instruments: Recognition and Measurement*, or IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, as appropriate, with the corresponding gain or loss being recognized in income or loss.

When a business combination is achieved in stages, the Company's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (i.e. the date when the Company obtains control)

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and the resulting gain or loss, if any, is recognized in income or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognized in other comprehensive income are reclassified to income or loss where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Company reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

(4) Investments in associates (Equity-accounted investees)

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but does not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*. Under the equity method, an investment in an associate is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Company's share of the income or loss and other comprehensive income of the associate. When the Company's share of losses of an associate exceeds the Company's interest in that associate (which includes any long-term interests that, in substance, form part of the Company's net investment in the associate), the Company discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the associate.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Company's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in income or loss.

The requirements of IAS 39 *Financial Instruments: Recognition and Measurement* are applied to determine whether it is necessary to recognize any impairment loss with respect to the Company's investment in an associate. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 *Impairment of Assets* as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount, any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

Upon disposal of an associate that results in the Company losing significant influence over that associate, any retained investment is measured at fair value at that date and the fair value is regarded as its fair value on initial recognition as a financial asset in accordance with IAS 39. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. In addition, the Company accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognized in other comprehensive income by that associate would be reclassified to income or loss on the disposal of the related assets or liabilities, the Company reclassifies the gain or loss from equity to income or loss (as a reclassification adjustment) when it loses significant influence over that associate.

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When a group entity transacts with its associate, incomes and losses resulting from the transactions with the associate are recognized in the Company's consolidated financial statements only to the extent of interests in the associate that are not related to the Company.

### (5) Investments in joint ventures

A joint venture is a contractual arrangement whereby the Company and other parties undertake an economic activity that is subject to joint control (i.e. when the strategic financial and operating policy decisions relating to the activities of the joint venture require the unanimous consent of the parties sharing control). Joint venture arrangements that involve the establishment of a separate entity in which each venturer has an interest are referred to as jointly controlled entities.

The Company reports its interests in jointly controlled entities using the equity method, except when the investment is classified as held for sale, in which case it is accounted for in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*. Any goodwill arising on the acquisition of the Company's interest in a jointly controlled entity is accounted for in accordance with the Company's accounting policy for goodwill arising in a business combination. When the Company transacts with its jointly controlled entity, income and loss resulting from jointly controlled entities are recognized in the Company's consolidated financial statements only to the extent of interests in the jointly controlled entity that are not related to the Company.

### (6) Non-current Assets Held for Sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Company is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Company will retain a non-controlling interest in its former subsidiary after the sale.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

### (7) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

#### (a) Sale of goods Electricity sales

The Korean government approves the rates the Company charges to the customers, for the Company's power transmission and distribution division. The Company's utility rates are designed to recover the Company's reasonable costs plus a fair investment return. The Company's power generation subsidiaries' rates are determined in the market.

The Company recognizes electricity sales revenue based on power sold (transferred to the customer) up to the reporting date. To determine the amount of power sold, the Company estimates daily power volumes for residential, commercial, general, etc electricity. The differences between the current month's estimated amount and actual (meter-read) amount, is adjusted for (trued-up) during the next month period.

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(b) Rendering of services

Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract. Refer to Note 2 (8) below for Construction contract related revenue recognition.

(c) Dividend income and interest income

Dividend income from investments is recognized when the shareholder's right to receive payment has been established (provided that it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably).

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

(d) Rental income

The Company's policy for recognition of revenue from operating leases is described in Note 2 (9) below.

(e) Deferral of revenue Transfer of assets from customers

The Company recovers a substantial amount of the cost related to its electric power distribution facilities from customers through transfer of assets, while the remaining portion is recovered through electricity sales from such customers in the future. As such, the Company believes there exists a continued service obligation to the customers in accordance with IFRIC 18 *Transfer of Assets from Customers*, when the Company receives an item of property, equipment, or cash for constructing or acquiring an item of a property or equipment, in exchange for supplying electricity to customers. The Company defers the amounts received, which are then recognized as revenue over the transferred asset's useful life.

(8) Construction contracts

The Company provides services related to construction of power plant related to facilities to its customers, mostly in foreign countries.

When the outcome of a construction contract can be estimated reliably, revenue and costs are recognized based on the stage of completion of the contract activity at the end of the reporting period, measured based on the proportion of contract costs incurred for work performed to date relative to the estimated total contract costs, except where this would not be representative of the stage of completion. Variations in contract work, claims and incentive payments are included to the extent that the amount can be measured reliably and its receipt is considered probable.

When the outcome of a construction contract cannot be estimated reliably, contract revenue is recognized to the extent of contract costs incurred that it is probable will be recoverable. Contract costs are recognized as expenses in the period in which they are incurred. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

When contract costs incurred to date plus recognized income less recognized losses exceed progress billings, the surplus is shown as amounts due from customers for contract work. For contracts where progress billings exceed contract costs incurred to date plus recognized income less recognized losses, the surplus is shown as the amounts due to customers for contract work. Amounts received before the related

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work is performed are included in the consolidated statement of financial position, as a liability, as advances received. Amounts billed for work performed but not yet paid by the customer are included in the consolidated statement of financial position under account and other receivables.

### (9) Lease

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

#### (a) The Company as lessor

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Company's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

#### (b) The Company as lessee

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Assets held under finance leases are initially recognized as assets of the Company at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation.

Lease payments are apportioned between finance expenses and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance expenses are recognized immediately in income or loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Company's general policy on borrowing costs. Contingent rentals are recognized as expenses in the periods in which they are incurred.

Operating lease payments are recognized as an expense on a straight-line basis over the lease term, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are recognized as an expense in the period in which they are incurred.

In the event that lease incentives are received to enter into operating leases, such incentives are recognized as a liability. The aggregate benefit of incentives is recognized as a reduction of rental expense on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

### (10) Foreign currencies

The individual financial statements of each subsidiary are presented in the currency of the primary economic environment in which the entity operates (its functional currency). For the purpose of the consolidated financial statements, the results and financial position of each Company entity are expressed in KRW which is the functional currency of the Company and the presentation currency for the consolidated financial statements.

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In preparing the financial statements of the individual entities, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences are recognized in income or loss in the period in which they arise except for:

- (a) exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- (b) exchange differences on transactions entered into in order to hedge certain foreign currency risks (see Note 2 (23) below for hedging accounting policies); and
- (c) exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to income or loss on disposal or partial disposal of the net investment.

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Company's foreign operations are expressed in KRW using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

On the disposal of a foreign operation (i.e. a disposal of the Company's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, loss of joint control over a jointly controlled entity that includes a foreign operation, or loss of significant influence over an associate that includes a foreign operation), all of the accumulated exchange differences in respect of that operation attributable to the Company are reclassified to income or loss. Any exchange differences that have previously been attributed to non-controlling interests are derecognized, but they are not reclassified to income or loss.

In addition, in relation to a partial disposal of a subsidiary that does not result in the Company losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognized in income or loss. For all other partial disposals (i.e. partial disposals of associates or jointly controlled entities that do not result in the Company losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to income or loss.

Goodwill and fair value adjustments on identifiable assets and liabilities acquired arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognized in equity.

(11) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

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Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

All other borrowing costs are recognized in income or loss in the period in which they are incurred.

### (12) Government grants

Government grants are not recognized until there is reasonable assurance that the Company will comply with the conditions attached to the grants and that the receipt of the grants are probable.

Government grants are recognized in the consolidated statement of comprehensive income over the periods in which the Company recognizes the related costs, for which the grants are intended to compensate as expense. Specifically, government grants, which are conditional to the Company purchasing, constructing or otherwise acquiring non-current assets, are recognized as deductions for related assets in the consolidated statement of financial position and transferred to income or loss over the estimated useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Company with no future related costs are recognized in income or loss in the period in which they become receivable.

In addition, a benefit from a government loan at a below-market interest rate is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

### (13) Retirement benefit obligation

Payments to defined contribution plans are expensed as incurred, which is as the related employee service is rendered.

For defined benefit pension plans and other post-employment benefits, the net periodic pension expense is actuarially determined on an annual basis by independent actuaries using the projected unit credit method.

The asset or liability recognized in the statement of financial position is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets, together with adjustments for unrecognized past service costs. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating the terms of the related pension liability.

All actuarial gains and losses that arise in calculating the present value of the defined benefit obligation and the fair value of plan assets are recognized immediately in retained earnings and included in the statement of comprehensive income.

For the purpose of calculating the expected return on plan assets, the assets are valued at fair value. Actual results will differ from results which are estimated based on assumptions. The vested portion of past service cost arising from plan amendments is recognized immediately in the income statement. The unvested portion is amortized on a straight-line basis over the average remaining period until the benefits become vested.

The retirement benefit obligation recognized in the consolidated statement of financial position represents the present value of the defined benefit obligation as adjusted for unrecognized actuarial gains and losses and unrecognized past service cost, and as reduced by the fair value of plan assets. Any asset resulting from this calculation is limited to unrecognized actuarial losses and past service cost, plus the present value of available refunds and reductions in future contributions to the plan.

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(14) Income tax

Income tax consists of current tax and deferred tax.

(a) Current tax

The tax currently payable is based on taxable income for the year. Taxable income differs from income as reported in the consolidated statement of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

(b) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable income. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable income will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable income nor the accounting income.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable income against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the asset to be recovered. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

(c) Current and deferred tax for the year

Current and deferred tax are recognized in income or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

(15) Property, plant and equipment

Property, plant and equipment are stated at cost less subsequent accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment is directly attributable to their purchase or construction, which includes any costs directly attributable to bringing the asset to the location



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and condition necessary for it to be capable of operating in the manner intended by management. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized in carrying amount of an asset or as an asset if it is probable that future economic benefits associated with the assets will flow into the Company and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

The Company does not depreciate land. Depreciation expense is computed using the straight-line method based on the estimated useful years of the assets as follows:

	<b>Estimated Useful Years</b>
Buildings	8 ~ 40
Structures	8 ~ 50
Machinery	6 ~ 32
Vehicles	4
Loaded heavy water	30
Asset retirement costs	18, 30, 40
Finance lease assets	20
Ships	9
Others	4 ~ 9

For loaded nuclear fuel (PWR) and asset retirement costs related to long-term raw materials, the Company uses the production method to measure and recognize as expense the economic benefits of the assets.

If the cost of a part of property, plant and equipment is significant compared to the overall total cost of the property, plant and equipment, the cost of the part is separately depreciated from the related property, plant and equipment.

The Company reviews the depreciation method, the estimated useful lives and residual values of property, plant and equipment at the end of each annual reporting period. If expectation differs from previous estimates, the changes were accounted for as a change in an accounting estimate. During the current period, the Company changed the estimated useful lives of the certain buildings. In result of the change in accounting estimate, depreciation expenses were reduced by KRW 85,388 million for the current year and expected to be reduced by KRW 57,378 million, KRW 31,979 million and KRW 22,158 million for each of the three years following the current year, respectively.

Property, plant and equipment are derecognized on disposal, or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of a property, plant and equipment, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in income or loss when the asset is derecognized.

**(16) Investment property**

Investment properties are properties held to earn rentals and/or for capital appreciation (including property under construction for such purposes). Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at initial acquisition cost less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

Additional costs incurred subsequent to the acquisition of an asset increase the carrying amount of the asset or recognized as a separate asset if it is probable that future economic benefits associated with the assets will flow into the Company and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

While land is not depreciated, all other investment property is depreciated based on the respective assets estimated useful lives ranging from 8 ~ 40 years using the straight-line method.

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The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An investment property is derecognized upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from the disposal. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in income or loss in the period in which the property is derecognized.

### (17) Intangible assets

#### (a) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost less accumulated impairment losses.

#### (b) Internally-generated intangible assets research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated:

the technical feasibility of completing the intangible asset so that it will be available for use or sale;

the intention to complete the intangible asset and use or sell it;

the ability to use or sell the intangible asset;

how the intangible asset will generate probable future economic benefits;

the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. When the development expenditure does not meet the criteria listed above, an internally-generated intangible asset cannot be recognized and the expenditure is recognized in income or loss in the period in which it is incurred.

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### (c) Intangible assets acquired in a business combination

Intangible assets that are acquired in a business combination are recognized separately from goodwill are initially recognized at their fair value at the acquisition date (which is regarded as their cost).

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

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## (d) Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in income or loss when the asset is derecognized.

## (e) Intangible assets useful lives

As of December 31, 2012, the estimated useful years and amortization method of intangible assets with finite useful lives are as follows (KRW in millions):

	Estimated Useful Years	Amortization method
Usage rights for donated assets	4 ~ 30	Straight-line method
Software	4, 5	Straight-line method
Industrial rights	5, 10	Straight-line method
Development expenses	5	Straight-line method
Dam usage right	50	Straight-line method
Mining right		Unit of production method
Others	4-20, 50	Straight-line method

## (18) Impairment of property, plant, equipment and intangible assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets with definite useful lives to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in income or loss, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

When an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in income or loss, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

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### (19) Inventories

Inventories are stated at the lower of cost and net realizable value. Cost of inventories, except for those in transit, are measured under the weighted average method and consists of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

The carrying amount of inventories sold in the period and the amount of any write-down of inventories to net realizable value and all losses of inventories in the period; less the amount of any reversal in the period of any write-down of the inventories, arising from an increase in net realizable value, is recognized as expense during the period.

### (20) Provisions

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

Increase in provisions due to passage of time is recognized as finance expense during the period. At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period.

Provisions for estimated future costs are discounted to present value, based on a discount rate which reflects the current market assessment of the time value of money, risks specific to the liability and pre-tax.

#### (a) Provision for decommissioning costs

The Company records the fair value of estimated decommissioning costs as a liability in the period in which the Company incurs a legal obligation associated with retirement of long-lived assets that result from acquisition, construction, development and/or normal use of the assets. The Company also recognizes a corresponding asset that is depreciated over the life of the asset. Accretion expense consists of period-to-period changes in the liability for decommissioning costs resulting from the passage of time and revisions to either the timing or the amount of the original estimate of undiscounted cash flows. Depreciation and accretion expenses are included in cost of sales of goods in the accompanying consolidated statements of comprehensive income.

Under the Korean Electricity Business Act (EBA) Article 94, the Company is required to record a liability for the dismantling (demolition) of nuclear power plants and disposal of spent fuel and low and intermediate radioactive wastes.

#### (b) Provision for Polychlorinated Biphenyls ( PCB )

Under the regulation of Persistent Organic Pollutants Management Act, enacted in 2007, the Company is required to remove polychlorinated biphenyls (PCBs), a toxin, from the insulating oil of its

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transformers by 2025. As a result of the enactments, the Company is required to inspect the PCBs contents of transformers and dispose of PCBs in excess of safety standards under the legally settled procedures. The Company's estimates and assumptions used to determine fair value can be affected by many factors, such as the estimated costs of inspection and disposal, inflation rate, discount rate, regulations and the general economy.

(c) Provisions for power plant regional support program

In accordance with regulations on nuclear and hydro-electric power plants' social responsibility to support the surrounding communities of the power plants sites; KHNP, the Company's nuclear generation subsidiary, accrues 0.25won per KWH of KHNP's generation volume from two periods prior, as a provision for power plant regional support program during the year. Power plant regional support programs consist of scholarship programs to local students, local economy support programs, local culture support programs, environment development programs, and local welfare programs.

(21) Financial assets

All financial assets are recognized and derecognized on the trade date where the purchase or sale of a financial asset is under a contract whose terms require delivery of the financial asset within the timeframe established by the market concerned, and are initially measured at fair value, plus transaction costs, except for those financial assets classified at fair value through profit or loss, which are initially measured at fair value.

Financial assets are classified into the following specified categories; financial assets at fair value through profit or loss (FVTPL), held-to-maturity investments, available-for-sale financial assets and loans and receivables. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

(a) Effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the debt instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition. Income is recognized on an effective interest basis for debt instruments other than those financial assets classified as FVTPL.

(b) Financial assets at fair value through profit or loss (FVTPL)

Financial assets are classified as FVTPL when the financial asset is either held for trading or it is designated as FVTPL.

A financial asset is classified as held for trading if:

it has been acquired principally for the purpose of selling it in the near term; or

on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or

it is a derivative, including an embedded derivative that is not designated and effective as a hedging instrument.

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A financial asset other than a financial asset held for trading may be designated as at FVTPL upon initial recognition if:

such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise;  
or

the financial asset forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

it forms part of a contract containing one or more embedded derivatives, and IAS 39 *Financial Instruments: Recognition and Measurement* permits the entire combined contract (asset or liability) to be designated as at FVTPL.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in income or loss. The net gain or loss recognized in income or loss incorporates any dividend or interest earned on the financial asset and is included in the finance income and finance expenses line item in the consolidated statement of comprehensive income.

(c) Held-to-maturity investments

Financial assets with fixed or determinable payments and fixed maturity dates that the Company has the positive intent and ability to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are measured at amortized cost using the effective interest method less any impairment, with revenue recognized on an effective yield basis.

(d) Available-for-sale financial assets ( AFS )

Financial assets that are not classified as at held-to-maturity; held-for-trading; designated as FVTPL; or loans and receivables are classified as financial assets AFS.

Gains and losses arising from changes in fair value are recognized in other comprehensive income and accumulated in the valuation reserve. However, impairment losses, interest calculated using the effective interest method, and foreign exchange gains and losses on monetary assets are recognized in income or loss. Unquoted equity investments which are not traded in an active market, whose fair value cannot be measured reliably are carried at cost. Where the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously accumulated in the valuation reserve is reclassified to income or loss. Dividends on AFS equity instruments are recognized in income or loss when the Company's right to receive the dividends is established.

The fair value of AFS monetary assets denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of the reporting period. The foreign exchange gains and losses that are recognized in income or loss are determined based on the amortized cost of the monetary asset. Other foreign exchange gains and losses are recognized in other comprehensive income.

(e) Loans and receivables

Trade receivables, loans, and other receivables that have fixed or determinable payments that are not traded in an active market are classified as loans and receivables. Loans and receivables are measured at amortized cost using the effective interest method, less any impairment. Interest income is recognized by applying the effective interest rate, except for short-term receivables whose period interest income is immaterial.

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### (f) Impairment of financial assets

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For listed and unlisted equity investments classified as AFS, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment in addition to the criteria mentioned below.

For all other financial assets, objective evidence of impairment could include:

significant financial difficulty of the issuer or counterparty; or

breach of contract, such as a default or delinquency in interest or principal payments; or

it becoming probable that the borrower will enter bankruptcy or financial re-organization; or

the disappearance of an active market for that financial asset because of financial difficulties.

For certain categories of financial asset, such as trade receivables, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. Objective evidence of impairment for a portfolio of receivables could include the Company's past experience of collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period and, as well as observable changes in national or local economic conditions that correlate with default on receivables.

For financial assets recorded at amortized cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

For financial assets carried at cost, the amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in income or loss.

When an AFS financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to income or loss in the period.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through income or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

In respect of AFS equity securities, impairment losses previously recognized in income or loss are not reversed through income or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income. In respect of AFS debt securities, impairment losses are subsequently reversed through income or loss if an increase in the fair value of the investment can be objectively related to an event occurring after the recognition of the impairment loss.





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### (g) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Company neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Company recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income and accumulated in equity is recognized in income or loss.

On derecognition of a financial asset other than in its entirety (e.g. when the Company retains an option to repurchase part of a transferred asset), the Company allocates the previous carrying amount of the financial asset between the part it continues to recognize under continuing involvement, and the part it no longer recognizes on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognized and the sum of the consideration received for the part no longer recognized and any cumulative gain or loss allocated to it that had been recognized in other comprehensive income is recognized in income or loss. A cumulative gain or loss that had been recognized in other comprehensive income is allocated between the part that continues to be recognized and the part that is no longer recognized on the basis of the relative fair values of those parts.

## (22) Financial liabilities and equity instruments issued by the Company

### (a) Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

### (b) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in income or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

### (c) Financial liabilities

Financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments. Financial liabilities are initially measured at fair value. Transaction cost that are directly attributable to the issue of financial liabilities are added to or deducted from the fair value of the financial liabilities, as appropriate, on initial recognition. Transaction cost directly attributable to acquisition of financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

Financial liabilities are classified as either financial liabilities at FVTPL or other financial liabilities.

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(d) Financial liabilities at FVTPL

Financial liabilities are classified as either financial liabilities at FVTPL or other financial liabilities. Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or it is designated as FVTPL.

A financial liability is classified as held for trading if:

- 1) it has been acquired principally for the purpose of repurchasing it in the near term; or
- 2) on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or
- 3) it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading may be designated as at FVTPL upon initial recognition if:

- 1) such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- 2) the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- 3) it forms part of a contract containing one or more embedded derivatives, and IAS 39 *Financial Instruments: Recognition and Measurement* permits the entire combined contract (asset or liability) to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in income or loss. The net gain or loss recognized in income or loss incorporates any interest paid on the financial liability and is included in finance income and finance expenses.

(e) Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis. The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

(f) Financial guarantee contract liabilities

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, are subsequently measured at the higher of: (a) the amount of the obligation under the contract, as determined in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*; or (b) the amount initially recognized less, cumulative amortization recognized in accordance with the IAS 18 *Revenue*.



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### (g) Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in income or loss.

### (23) Derivative financial instruments

The Company enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risk, including foreign exchange forward contracts, interest rate swaps and cross currency swaps and others.

Derivatives are initially recognized at fair value at the date the derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in income or loss immediately unless the derivative is designated and effective as a hedging instrument, in such case the timing of the recognition in income or loss depends on the nature of the hedge relationship.

A derivative with a positive fair value is recognized as a financial asset; a derivative with a negative fair value is recognized as a financial liability. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not expected to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

### (a) Embedded derivatives

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and when the host contracts are not measured at FVTPL.

An embedded derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the hybrid instrument to which the embedded derivative is part of, is more than 12 months and it is not expected to be realized or settled within 12 months. All other embedded derivatives are presented as current assets or current liabilities.

### (b) Hedge accounting

The Company designates certain hedging instruments, which include derivatives, embedded derivatives and non-derivatives in respect of foreign currency risk, as either fair value hedges or cash flow hedges. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Company documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item.

### (c) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in income or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The changes in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk relating to the hedged items are recognized in the consolidated statements of comprehensive income.

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Hedge accounting is discontinued when the Company revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized as income or loss as of that date.

(d) Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income and accumulated under the heading of reverse for gains (loss) on valuation of derivatives. The gain or loss relating to the ineffective portion is recognized immediately in income or loss, and is included in the finance income and expense .

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to income or loss in the periods when the hedged item is recognized in income or loss, in the same line of the consolidated statement of comprehensive income as the recognized hedged item. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

Hedge accounting is discontinued when the Company revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or it no longer qualifies for hedge accounting. Any gain or loss accumulated in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in income or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in income or loss.

(24) Correction of accounting for fuel cost pass-through adjustment

As of July 1, 2011, a new electricity tariff system approved by the Government took effect featuring a fuel cost pass-through adjustment ( FCPTA ). This system was intended to allow us to pass through fluctuations in fuel costs ultimately to the customers. The FCPTA amount is determined based on a prior three-months moving average of international fuel prices and other factors. On July 29, 2011, out of inflationary and other policy considerations, the Government issued a hold-order suspending us from billing or collecting the FCPTA amount from customers.

The Company's accounting policy was to recognize unbilled fuel cost adjustments as assets under the IFRS Conceptual Framework when the Company concluded that it is probable that future economic benefits would flow to the Company. The Company had concluded that it controlled a resource as a result of past events from which future economic benefits were expected to flow to the Company. The Regulation for Electricity Service, which regulate the FCPTA, provides a legal resource or right to bill where the costs the Company incurs will result in future cash flows. The operation of the FCPTA creates a right to charge rates in amounts that would permit the Company to recover the related costs, such amounts being subject to government approval. At December 31, 2011, the Company determined that it was probable that economic benefits associated with the unbilled fuel cost adjustments would be realizable based on the authority of the Ministry of Trade, Industry and Energy in setting and enforcing electricity rates for customers. Therefore, the Company concluded that at December 31, 2011 it was probable that its unbilled FCPTA amount would be collectible.

The Company previously recognized revenue and a receivable for the FCPTA amounts subject to the hold- order in the amount of KRW 357,085 million at December 31, 2011. The Company believes that its FCPTA rate regulatory scheme closely resembles a cost-of service scheme, and has therefore determined that the appropriate accounting for the unbilled FCPTA amounts was to reduce cost of sales by the unbilled FCPTA amounts and recognize a related non-financial asset by the same amount, which is more consistent with

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accounting policies for rate regulated assets of other standard setting bodies. In accordance with IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*, the Company used judgment in developing and applying an accounting policy that results in information that is relevant and reliable. In making that judgment, management considered pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices. The Company has concluded the aforementioned error is immaterial, and corrected the accounting for its unbilled FCPTA amounts in its consolidated financial statements as of and for the year ended December 31, 2011.

The following disclosure presents the corrected amounts reflected in our consolidated financial statements as of and for the year ended December 31, 2011 (KRW in millions).

	For the year ended December 31, 2011	
	As reported	As corrected
Sales	43,532,302	43,175,217
Cost of Sales	(43,081,979)	(42,724,894)

	As of December 31, 2011	
	As reported	As corrected
Accounts and other receivables, net	7,632,497	7,274,148
Non-current non-financial assets	249,811	608,160

During the fourth quarter of 2012, the Company had further consultations with the Ministry of Trade, Industry and Energy as to the outlook for the lifting the hold-order. Furthermore, on January 11, 2013, the Ministry Trade, Industry and Energy informed the Company that the FCPTA system needed to be reassessed because of the current circumstances such as the prolonged unbilled period since announcement of the FCPTA system. The Company has therefore concluded that considering the prolonged unbilled period and recent consultations with, and information from, the Ministry of Trade, Industry and Energy the Company would not be able to bill and collect the unbilled FCPTA amounts for the foreseeable future. As a result, the Company wrote off the entire unbilled FCPTA amounts of Won 1,877 billion recognized through December 31, 2012, including the unbilled FCPTA amounts as of December 31, 2011. As a result, there were no FCPTA amounts remaining in the consolidated statement of financial position as of December 31, 2012.

Furthermore, the Company will cease recording a regulatory asset prospectively related to the FCPTA unless and until the likelihood of recovery once again satisfies the probable threshold contained in the IFRS Conceptual Framework or enacted IFRSs at such time.

### 3. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Company accounting policies, which are described in Note 2, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

#### (1) Critical judgments in applying accounting policies

The following are the critical judgments, apart from those involving estimations that the directors have made in the process of applying the Company's accounting policies and have the significant effect on the amounts recognized in the consolidated financial statements.

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1) Continued operation of Wolsong #1 nuclear power plant

The Company owns Wolsong #1 nuclear power plant, which started its operation on November 21, 1982, finished its operation on November 20, 2012 maxing out its permitted operation period of 30 years. As of December 31, 2012, the Company is in the process of obtaining safety assessments to get an approval from the Nuclear Safety and Security Commission for resuming the plant's operating for the 2nd operation term. The Company has prepared the accompanying financial statements assuming that the plant will operate for the next 10 years.

(2) Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

1) Useful lives of property, plant and equipment

In accordance with IFRS, property, plant and equipment are stated at cost. The Company does not depreciate land. Depreciation is computed by the straight-line method (unit-of-production method for loaded nuclear fuel (PWR) and capitalized asset retirement cost of long-term raw materials) using rates based on the estimated useful lives. Net property, plant and equipment as of December 31, 2012 totaled KRW 122,376,140 million representing more than 84% of total assets. Given the significance of property, plant and equipment and the associated depreciation expense to our financial statements, the determination of an asset's economic useful life is considered to be a critical accounting estimate.

Economic useful life is the duration of time the asset is expected to be productively employed by us, which may be less than its physical life. Management's assumptions on the following factors, among others, affect the determination of estimated economic useful life: wear and tear, obsolescence, technical standards, changes in market demand and technological changes. The Company reviews the estimated useful lives of property, plant and equipment at the end of each annual reporting period.

2) Estimations on provision for decommissioning costs

The Company records the fair value of estimated decommissioning costs as a liability in the period in which the Company incurs a legal obligation associated with retirement of long-lived assets that result from acquisition, construction, development and/or normal use of the assets. Under the Korean Electricity Business Act (EBA) Article 94, the Company is required to record a liability for the dismantling (demolition) of nuclear power plants and disposal of spent fuel and low & intermediate radioactive wastes.

Significant management judgment is involved in determining the fair value of estimated decommissioning costs. The estimates and assumptions used by our management to determine fair value can be impacted by many factors, such as the estimated decommissioning costs based on engineering studies commissioned and approved by the Korean government, and changes in assumed dates of decommissioning, inflation rate, discount rate, decommissioning technology, regulation and the general economy.

As of December 31, 2012 and 2011, we recorded liability for decommissioning costs in the amounts of KRW 11,913 billion and KRW 6,727 billion, respectively. Changes in the estimated costs or timing of decommissioning, or changes in the assumptions and judgments by management underlying these estimates, may cause material revisions to the estimated total cost to decommission these facilities, which could have a material effect on the recorded liability. The Company used a discount rate of 4.49% and 4.36% and an inflation rate of 2.93% and 2.30% when calculating the decommissioning cost liability recorded as of December 31, 2012 and 2011. In addition, the following is a sensitivity analysis



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of the potential impact on decommissioning costs from a 0.10% increase or decrease in each of the inflation rate and the discount rate, assuming that all other aforementioned assumptions remain constant (KRW in millions)

TYPE	Accounts	Dec. 31, 2012		Dec. 31, 2011	
		Increase	Decrease	Increase	Decrease
Discount rate	Nuclear plants	(220,842)	227,158	(111,132)	114,140
	Spent fuel	(45,385)	47,128	(21,386)	21,946
Inflation rate	Nuclear plants	230,431	(224,364)	150,939	(146,083)
	Spent fuel	48,219	(46,492)	29,371	(28,439)

### 3) Provision for Polychlorinated Biphenyls ( PCBs )

The Company is required to inspect the PCBs contents of transformers and dispose of PCBs in excess of safety standards under the legally settled procedures. The Company's estimates and assumptions used to determine fair value can be affected by many factors, such as the estimated costs of inspection and disposal, inflation rate, discount rate, regulations and the general economy.

Changes in the estimated costs or changes in the assumptions and judgments underlying these estimates may cause material revisions to the estimated total costs, which could have a material effect on our recorded liability. The Company used a discount rate of 4.92%, 5.84% and an inflation rate of 3.10%, 3.34% when calculating the provision for the decontamination of transformers recorded as of December 31, 2012 and 2011.

In addition, the following is a sensitivity analysis of the potential impact on decontamination costs based on a 0.10% increase or decrease in each of the inflation rate and the discount rate, assuming that all other aforementioned assumptions remain constant (KRW in millions)

TYPE	Accounts	Dec. 31, 2012		Dec. 31, 2011	
		Increase	Decrease	Increase	Decrease
Discount rate	PCBs	(1,262)	1,273	(1,291)	1,302
Inflation rate	PCBs	1,295	(1,285)	1,332	(1,323)

### 4) Deferred tax asset

In assessing the realizability of the deferred tax assets, the Company considers whether it is probable that a portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent on whether the Company is able to generate future taxable income in specific tax jurisdictions during the periods in which temporary differences become deductible. The Company has scheduled the expected future reversals of the temporary differences and projected future taxable income in making this assessment. Based on these factors, the Company believes that it is probable that the Company will realize the benefits of these temporary differences as of December 31, 2012. However, the amount of deferred tax assets may be different if we do not realize estimated future taxable income during the carry forward periods as originally expected.

The Company recognizes deferred tax assets and liabilities based on the differences between the financial statement carrying amounts and the tax bases of assets and liabilities at each separate taxpaying entity. Under IFRS, a deferred tax asset is recognized for temporary difference that will result in deductible amounts in future years and for carry forwards. If, based on the weight of available evidence, it is probable that some or the entire portion of the deferred tax asset will not be realized, that portion is deducted directly from the deferred tax asset.

The Company believes that the accounting estimate related to realizability of deferred tax asset is a critical accounting estimate because: (i) it requires the Company to make assessments about the

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timing of future events, including the probability of expected future taxable income and available tax planning opportunities, and (ii) the difference between these assessments and the actual performance could have a material impact on the realization of tax benefits as reported in our results of operations. The Company's assumptions require significant judgment because actual performance has fluctuated in the past and may continue to do so.

### 5) Valuations of financial instruments at fair values

As stated in Note 43, the Company uses inputs that are not based on observable market data to estimate the fair value of certain types of financial instruments. Note 43 explains the details of assumptions used for valuations of financial instruments and sensitivity analysis of these assumptions. Management believes valuation techniques and assumptions are reliable and appropriate.

### 6) Retirement benefit costs

The Company offers defined benefit retirement plans. The cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the end of each reporting period. For actuarial valuations, discount rate, future salary increase and expected return on plan assets are estimated and these estimations are uncertain.

### 7) Unbilled revenue

Energy delivered but not yet metered, the quantities of energy delivered but not yet measured and not billed are calculated at the reporting date based on consumption statistics and selling price estimates. Determination of the unbilled revenues at the end of the year is sensitive to the estimated assumptions and prices based on statistics

## 4. SEGMENT INFORMATION

The Company's segments are classified at the business unit level, at which the Company generates separately identifiable revenue and costs, and the related information is reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance. The Company's reporting segments, in accordance with IFRS 8, are Electric power generation (nuclear), Electric power generation (non-nuclear), Transmission and distribution, and Others; others mainly represents the business unit that manages the Company's foreign operations.

Transactions that occur between the each segment are based on arms-length transactions priced at market price that would be applicable to an independent third-party. The accounting policies of the reportable segments are the same as the Company's accounting policies described in Note 2.

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- (1) The Company's revenue and income (loss) for each operating segment for the years ended December 31, 2012, 2011 and 2010, respectively, are as follows (KRW in millions):

	2012				
	Total segment revenue	Intersegment revenue	Revenue from external customer	Operating income (loss)	Depreciation and amortization
Electric power generation (Nuclear)	6,717,341	6,698,326	19,015	464,506	2,488,367
Electric power generation (Non-nuclear)	28,973,768	28,649,846	323,922	2,210,669	1,887,419
Transmission and distribution	49,033,869	1,121,920	47,911,949	(5,309,607)	2,562,128
Others	2,674,562	1,808,939	865,623	460,476	78,284
Adjustment	(38,279,031)	(38,279,031)		(126,367)	(19,488)
	49,120,509		49,120,509	(2,300,323)	6,996,710
2011					
	Total segment revenue	Intersegment revenue	Revenue from external customer	Operating income (loss)	Depreciation and amortization
Electric power generation (Nuclear)	6,611,936	6,597,515	14,421	1,079,762	2,422,121
Electric power generation (Non-nuclear)	25,349,726	25,078,788	270,938	1,151,171	1,858,736
Transmission and distribution	42,857,773	709,413	42,148,360	(3,555,876)	2,542,587
Others	2,490,709	1,749,211	741,498	395,952	69,424
Adjustment	(34,134,927)	(34,134,927)		(91,464)	(15,479)
	43,175,217		43,175,217	(1,020,455)	6,877,389
2010					
	Total segment revenue	Intersegment revenue	Revenue from external customer	Operating income (loss)	Depreciation and amortization
Electric power generation (Nuclear)	5,829,582	5,814,493	15,089	1,760,199	1,935,972
Electric power generation (Non-nuclear)	23,561,102	23,302,116	258,986	1,599,596	2,253,030
Transmission and distribution	39,291,282	655,972	38,635,310	(1,312,517)	2,459,644
Others	2,283,943	1,686,745	597,197	367,710	59,292
Adjustment	(31,459,327)	(31,459,326)		(155,068)	(11,274)
	39,506,582		39,506,582	2,259,920	6,696,664

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- (2) The Company's assets and liabilities for each operating segment as of December 31, 2012 and 2011 are as follows (KRW in millions):

	Dec. 31, 2012			
	Segment assets	Investments in associates and joint venture	Acquisition of non-current assets	Segment liabilities
Electric power generation (Nuclear)	45,061,851		2,928,345	24,638,944
Electric power generation (Non-nuclear)	31,214,058	986,343	3,735,111	14,640,938
Transmission and distribution	96,234,698	3,865,492	4,368,190	54,963,618
Others	7,655,810	39,098	718,966	2,637,369
Adjustment	(34,013,597)		(236,063)	(1,792,251)
	146,152,820	4,890,933	11,514,549	95,088,618

	Dec. 31, 2011			
	Segment assets	Investments in associates and joint venture	Acquisition of non-current assets	Segment liabilities
Electric power generation (Nuclear)	40,041,048		3,336,956	19,203,001
Electric power generation (Non-nuclear)	28,760,308	643,469	2,274,255	13,056,245
Transmission and distribution	94,769,898	3,804,910	4,704,812	50,330,593
Others	6,980,653	36,977	471,782	2,434,805
Adjustment	(34,084,057)		(134,804)	(2,360,744)
	136,467,850	4,485,356	10,653,001	82,663,900

- (3) Geographical information

The Company is engaged in the generation, transmission and distribution of electricity and development of electric power resources in the Republic of Korea. Geographical information on revenue from external and non-current assets is as follows:

	Revenue from external customer		Non-current assets(*2)	
	2012	2011	2012	2011
Domestic	46,981,903	41,493,983	124,433,063	114,481,700
Overseas(*1)	2,138,606	1,681,234	4,448,485	4,362,555
	49,120,509	43,175,217	128,881,548	118,844,255

(\*1) Middle East and Asia make up the majority of overseas income and non-current assets.

(\*2) Amount excludes financial assets and deferred tax assets.

(4) Information on key clients

There is no individual client who makes up more than 10% of the Company's revenue for years ended December 31, 2012 and 2011.

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**Table of Contents**5. CLASSIFICATION OF FINANCIAL INSTRUMENTS

(1) Classification of financial Assets as of December 31, 2012 and 2011 are as follows (KRW in millions):

	Dec. 31, 2012					Total
	FVTPL	Loans and receivables	Available-for-sale financial assets	Held-to-maturity Investments	Derivative assets (using hedge accounting)	
<b>Current Assets :</b>						
Cash and cash equivalents		1,954,949				1,954,949
<b>Current financial assets</b>						
Held-to-maturity investments				196		196
Derivative assets	52,061				63,945	116,006
Other financial assets, net		540,015				540,015
Accounts and other Receivables, net		7,184,625				7,184,625
	52,061	9,679,589		196	63,945	9,795,791
<b>Non-current Assets :</b>						
<b>Non-current financial assets</b>						
Available-for-sale financial assets			1,141,194			1,141,194
Held-to-maturity investments				2,020		2,020
Derivative assets	3,830				123,866	127,696
Other financial assets, net		602,766				602,766
Accounts and other Receivables, net		1,254,330				1,254,330
	3,830	1,857,096	1,141,194	2,020	123,866	3,128,006
	55,891	11,536,685	1,141,194	2,216	187,811	12,923,797

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	Dec. 31, 2011					Total
	FVTPL	Loans and receivables	Available-for-sale financial assets	Held-to-maturity Investments	Derivative assets (using hedge accounting)	
<b>Current Assets</b>						
Cash and cash equivalents		1,387,921				1,387,921
<b>Current financial assets</b>						
Held-to-maturity investments				334		334
Derivative assets	23,177					23,177
Other financial assets, net	10,121	736,907				747,028
Accounts and other Receivables, net		7,274,148				7,274,148
	33,298	9,398,976		334		9,432,608
<b>Non-current Assets</b>						
<b>Non-current financial assets</b>						
Available-for-sale financial assets			1,173,085			1,173,085
Held-to-maturity investments				1,986		1,986
Derivative assets	124,570				321,672	446,242
Other financial assets, net		577,719				577,719
Accounts and other Receivables, net		1,284,532				1,284,532
	124,570	1,862,251	1,173,085	1,986	321,672	3,483,564
	157,868	11,261,227	1,173,085	2,320	321,672	12,916,172

(2) Classification of financial liabilities as of December 31, 2012 and 2011 are as follow (KRW in millions):

	Dec. 31, 2012				Total
	FVTPL	Financial liabilities recorded at amortized cost	Derivative liabilities (using hedge accounting)	Others	
<b>Current Liabilities</b>					
Borrowings, net		2,215,961			2,215,961
Debentures, net		5,478,720			5,478,720
Derivative liabilities	46,939		47,199		94,138
Accounts and other Payables, net		6,418,464			6,418,464
	46,939	14,113,145	47,199		14,207,283
<b>Non-current Liabilities</b>					
Borrowings, net		4,674,935			4,674,935
Debentures, net		40,849,793			40,849,793
Derivative liabilities	322,199		203,839		526,038
Accounts and other Payables, net		4,173,691			4,173,691
	322,199	49,698,419	203,839		50,224,457
	369,138	63,811,564	251,038		64,431,740





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	FVTPL	Dec. 31, 2011		Total
		Financial liabilities recorded at Amortized cost	Derivative liabilities (using hedge accounting)	
<b>Current Liabilities</b>				
Borrowings, net		2,101,590		2,101,590
Debentures, net		4,904,455		4,904,455
Derivative liabilities	19,865			19,865
Accounts and other Payables, net		6,576,158		6,576,158
	19,865	13,582,203		13,602,068
<b>Non-current Liabilities</b>				
Borrowings, net		4,641,319		4,641,319
Debentures, net		34,557,179		34,557,179
Derivative liabilities	112,622		92,458	205,080
Accounts and other Payables, net		4,178,137		4,178,137
	112,622	43,376,635	92,458	43,581,715
	132,487	56,958,838	92,458	57,183,783

- (3) Classification of comprehensive income(loss) from financial instruments for the years ended December 31, 2012, 2011 and 2010 are as follows (KRW in millions):

		2012	2011	2010
Cash and cash equivalents	Interest income	86,722	72,534	63,518
Available-for-sale financial assets	Dividends income	10,452	18,894	3,341
	Impairment loss on available-for- sale financial assets	40,156		
Held-to-maturity investments	Interest income	69	85	90
Loans and receivables	Interest income	47,028	202,104	35,291
Accounts and other receivables	Interest income	70,304	16,902	21,523
Derivatives assets (trading) and trading financial assets	Gain (loss) on valuation of derivatives	(42,364)	98,006	(5,458)
	Gain (loss) on transaction of derivatives	7,500	(5,257)	(31,818)
	Gain on disposal of trading financial assets	189		
Derivative assets (using hedge accounting)	Gain (loss) on valuation of derivatives	(127,277)	52,491	(30,381)
	Gain (loss) on valuation of derivatives Other			
	comprehensive income(loss)	(85)	(3,295)	(63,447)
	Gain (loss) on transaction of derivatives	3,064	7,378	52,721
Financial liabilities recorded at amortized cost	Interest expense of borrowings and debentures	1,827,239	1,668,425	1,503,377
	Interest expense of accounts and other payables	517,089	455,154	542,307
	Gain (loss) on foreign currency transaction and translation, net	832,360	(175,364)	144,684



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		<b>2012</b>	<b>2011</b>	<b>2010</b>
Derivative liabilities (trading)	Gain (loss) on valuation of derivatives	(275,490)	(27,639)	(154,857)
	Gain (loss) on transaction of derivatives	(23,031)	(37,498)	(24,713)
Derivative liabilities (using hedge accounting)	Gain (loss) on valuation of derivatives	(129,417)	2,158	(17,111)
	Gain (loss) on valuation of derivatives			
	Other comprehensive income (loss)	(61,920)	(34,094)	5,164
	Gain (loss) on transaction of derivatives	(10,613)	(14,332)	15,283

**6. RESTRICTED DEPOSITS**

Restricted deposits as of December 31, 2012 and 2011 are as follows (KRW in millions):

		<b>Dec. 31, 2012</b>	<b>Dec. 31, 2011</b>
Cash and cash equivalents	Escrow accounts	72,979	79,370
Cash and cash equivalents	Collateral provided for lawsuit	329	328
Long-term financial instruments	Guarantee deposits for checking account	5	5
Long-term financial instruments	Guarantee deposits for banking accounts at oversea branches	303	326
		73,616	80,029

**7. CASH AND CASH EQUIVALENTS**

Cash and cash equivalents include cash on hand and in banks, net of outstanding bank overdrafts. The Company considers short-term financial instruments with maturities of three months or less at the acquisition date to be cash equivalents.

Cash and cash equivalents as of December 31, 2012 and 2011 are as follows (KRW in millions):

	<b>Dec. 31, 2012</b>	<b>Dec. 31, 2011</b>
Demand deposit(*)	705,245	671,038
Cash equivalents	1,249,704	716,883
	1,954,949	1,387,921

(\*) Demand deposits includes government grants for specified purpose in the amount of KRW 29,741 million and KRW 17,653 million as of December 31, 2012 and 2011, respectively.

**Table of Contents**8. ACCOUNTS AND OTHER RECEIVABLES

(1) Accounts and other receivables as of December 31, 2012 and 2011 are as follows (KRW in millions):

	Dec. 31, 2012			Book value
	Gross receivables	Allowance for doubtful accounts	Present value discount	
<b>Current Asset:</b>				
Accounts receivable	6,776,526	(47,312)	(416)	6,728,798
Other receivables	504,067	(45,791)	(2,449)	455,827
	7,280,593	(93,103)	(2,865)	7,184,625
<b>Non-current Asset:</b>				
Accounts receivable	451,179		(144)	451,035
Other receivables	989,445	(179,287)	(6,863)	803,295
	1,440,624	(179,287)	(7,007)	1,254,330
	8,721,217	(272,390)	(9,872)	8,438,955

	Dec. 31, 2011			Book value
	Gross receivables	Allowance for doubtful accounts	Present value discount	
<b>Current Asset:</b>				
Accounts receivable	5,934,119	(24,586)	(832)	5,908,701
Other receivables	1,413,654	(46,374)	(1,833)	1,365,447
	7,347,773	(70,960)	(2,665)	7,274,148
<b>Non-current Asset:</b>				
Accounts receivable	505,636		(560)	505,076
Other receivables	943,376	(156,824)	(7,096)	779,456
	1,449,012	(156,824)	(7,656)	1,284,532
	8,796,785	(227,784)	(10,321)	8,558,680

(2) Other receivables as of December 31, 2012 and 2011 are as follows (KRW in millions):

	Dec. 31, 2012			Book value
	Gross receivables	Allowance for doubtful accounts	Present value discount	
<b>Current Asset:</b>				

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Non-trade receivables	294,989	(45,791)		249,198
Accrued income	42,067			42,067
Deposits	160,801		(2,449)	158,352
Finance leases receivable	4,134			4,134
Others	2,076			2,076
	504,067	(45,791)	(2,449)	455,827
Non-current Asset:				
Non-trade receivables	57,386	(1,684)		55,702
Deposits	224,112		(6,863)	217,249
Finance leases receivable	389,326			389,326
Others	318,621	(177,603)		141,018
	989,445	(179,287)	(6,863)	803,295
	1,493,512	(225,078)	(9,312)	1,259,122

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	Dec. 31, 2011			
	Gross receivables	Allowance for doubtful accounts	Present value discount	Book value
<b>Current Asset:</b>				
Non-trade receivables	1,230,830	(46,374)		1,184,456
Accrued income	39,358			39,358
Deposits	130,473		(1,833)	128,640
Finance leases receivable	9,279			9,279
Others	3,714			3,714
	1,413,654	(46,374)	(1,833)	1,365,447
<b>Non-current Asset:</b>				
Non-trade receivables	11,937	(591)		11,346
Deposits	206,469		(7,096)	199,373
Finance leases receivables	366,263			366,263
Others	358,707	(156,233)		202,474
	943,376	(156,824)	(7,096)	779,456
	2,357,030	(203,198)	(8,929)	2,144,903

Accounts and other receivables are classified as loans and other accounts receivable, and are measured using the effective interest method. No interest is accrued for trade receivables for the duration between the billing date and the payment due dates. But once trade receivables are overdue, the Company imposes a 2.0% interest rate on the overdue trade receivables.

Receivables stated above include overdue receivables as of the reporting period end. However, certain overdue receivables are still considered to be reasonably collectable. As such, the Company does not record any allowances related to such overdue receivables considered to be reasonably collectable. Furthermore, the Company does not have any collateral, or received any other credit enhancement or hold any rights to offset with the counterparty. However, the Company holds deposits of three months expected electricity rate for customers requesting temporary usage and customers with past defaulted payment.

(3) Aging analysis of accounts receivable as of December 31, 2012 and 2011 are as follows (KRW in millions):

	2012	2011
Account receivables: (not overdue, not impaired)	7,125,836	6,389,978
Account receivables : (overdue, not impaired)		
60 ~ 90 days	33,124	17,631
90 ~ 120 days	9,853	5,216
120 days ~ 1 year	25,595	15,851
Over 1 year	30,969	8,641
Account receivables : (impaired)		
Less than 60 days	4	156
60 ~ 90 days	1	2
90 ~ 120 days		3
120 days ~ 1 year	25	247
Over 1 year	2,298	2,030
	7,227,705	6,439,755
Less allowance for doubtful accounts	(47,312)	(24,586)
Less present value discount	(560)	(1,392)



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The Company considers receivables as overdue if the receivables are outstanding 60 days after the maturity. The Company sets allowance based on historical collection rate.

- (4) Aging analysis of other receivables as of December 31, 2012 and 2011 are as follows (KRW in millions):

	2012	2011
Other receivables: (not overdue, not impaired)	1,252,525	2,136,076
Other receivables: (overdue, not impaired)		
60 ~ 90 days	7,430	2,134
90 ~ 120 days	1,870	1,721
120 days ~ 1 year	5,520	7,486
Over 1 year	9,964	13,221
Other receivables: (impaired)		
Less than 60 days		15
60 ~ 90 days		
90 ~ 120 days		
120 days ~ 1 year		24
Over 1 year	216,203	196,353
	1,493,512	2,357,030
Less allowance for doubtful accounts	(225,078)	(203,198)
Less present value discount	(9,312)	(8,929)
	1,259,122	2,144,903

- (5) Changes in allowance for doubtful accounts for the years ended December 31, 2012 and 2011 are as follows (KRW in millions):

	2012		2011	
	Accounts Receivable	Other Receivables	Accounts Receivable	Other Receivables
Beginning balance	24,586	203,198	29,298	124,622
Bad debt expense	37,447	3,994	14,270	867
Write off	(14,721)	(3,331)	(18,522)	(1,780)
Reversal		(152)	(460)	
Others		21,369		79,489
Ending balance	47,312	225,078	24,586	203,198



**Table of Contents**9. AVAILABLE-FOR-SALE FINANCIAL ASSETS

(1) Available-for-sale financial assets as of December 31, 2012 and 2011 are as follows (KRW in millions):

	Ownership (%)	Dec. 31, 2012		Dec. 31, 2011	
		Current	Non-Current	Current	Non-Current
Equity Securities					
Listed:					
Kwanglim Co., Ltd.	0.44%		168		176
Sungjee Construction. Co., Ltd.	0.01%		5		15
Korea District Heating Corp.(*1)	19.55%		167,541		141,504
Ssangyong Motor Co., Ltd.	0.03%		205		196
LG Uplus Corporation (*1)	8.80%		299,593		284,229
FISSION Energy Corporation	0.58%		533		802
Denison Mines Corporation	14.92%		76,765		83,217
Energy Fuel INC	9.39%		12,425		
PT Adaro Energy Tbk	1.50%		84,288		108,460
Cockatoo Coal Ltd.	4.91%		6,487		21,994
Korea Line Corporation	0.0002%				
Strathmore Minerals Corporation	11.79%		4,132		
			652,142		640,593
Unlisted:					
Construction Guarantee	0.02%		784		601
Global Dynasty overseas resource development private equity firm	7.14%		881		357
Plant & Mechanical Contractors Financial Cooperative of Korea	0.01%		36		36
Dongnam Co., Ltd	0.46%		72		
Mobo Co., Ltd	0.002%		14		
Fire Guarantee	0.02%		20		20
Korea Software Financial Cooperative	0.23%		301		301
C&Woobang ENC Co., Ltd.	0.0004%		22		22
Women s venture fund	10.00%		780		1,000
Engineering Financial Cooperative	0.10%		60		60
Intellectual Discovery, Ltd	11.17%		5,000		5,000
Electric Contractors Financial Cooperative	0.03%		152		152
Korea Specialty Contractor Financial Cooperative	0.01%		417		177
Information & Communication Financial Cooperative	0.01%		10		10
Troika overseas resource development private equity firm	3.75%		8,573		8,372
POSTECH Venture Capital Corporation	1.05%		240		240
POSTECH electric power fund	12.28%		2,800		2,800
Hydrogen Power. Co., Ltd	0.23%		38		
Korea Bio Fuel Co., Ltd	15.00%		1,500		
Korea Electric Engineers Association	0.26%		40		40

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	Ownership (%)	Dec. 31, 2012		Dec. 31, 2011	
		Current	Non-Current	Current	Non-Current
Korea electrical manufacturers Association	1.05%		240		240
Korea investment Korea EXIM Bank CERs private special asset Investment Trust I	14.18%		6,803		6,803
Hanwha Venture Capital Corporation	1.20%		180		180
Hanwha electric power venture Fund	15.20%		2,280		2,280
Hwan Young Steel Co., Ltd.	0.14%		97		97
IBK-AUCTUS green growth Private equity firm	6.29%		6,054		7,060
K&C- Gyeongnam youth job Creation investment fund	9.87%		1,420		1,660
Areva NC Expansion	13.49%		241,472		254,744
Green & Sustainable Energy Investment Corp.(*2)	20.00%		14		14
Kanan Hydroelectric Power Corp.(*2)	20.00%		19		19
SET Holdings	2.50%		169,637		238,561
3i Powergen Inc.,	15.00%		1,630		1,646
Navanakorn Electric Co., Ltd.(*2)	29.00%		14,948		
			466,534		532,492
<b>Debt securities</b>					
Ambre Energy Limited			22,518		
			1,141,194		1,173,085

(\*1) Among the listed securities, the fair values of the securities of Korea District Heating Corp. and LG Uplus Corporation were declined below costs for more than a year. As such, a cumulative loss of KRW 35,619 million that were previously recognized in other comprehensive loss has been reclassified to loss in the current period.

(\*2) Although the Company holds 20% or more of the equity shares of these investments, the Company cannot exercise significant influence by virtue of its contractual right to appoint directors to the board of directors of the entity.

(2) The fair value and acquisition cost of available-for-sale financial assets as of December 31, 2012 and 2011 are as follows (KRW in millions):

Type	Dec 31, 2012		Dec 31, 2011	
	Acquisition cost	Fair value	Acquisition cost	Fair value
Equity securities	1,195,466	1,141,194	1,229,203	1,173,085

#### 10. HELD-TO-MATURITY INVESTMENTS

Held-to-maturity investments as of December 31, 2012 and 2011 are as follows (KRW in millions):

	Dec. 31, 2012		Dec. 31, 2011	
	Current	Non-Current	Current	Non-Current
Government and municipal bonds	196	2,020	334	1,986



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(1) Derivatives as of December 31, 2012 and 2011 are as follows (KRW in millions):

	Dec. 31, 2012		Dec. 31, 2011	
	Current	Non-Current	Current	Non-Current
<b>DERIVATIVE ASSETS:</b>				
Currency forward	245	40	8,410	
Currency swap	115,761	127,652	10,756	438,900
Interest rate swap		4		
Other derivatives			4,011	7,342
	116,006	127,696	23,177	446,242
<b>DERIVATIVE LIABILITIES:</b>				
Currency forward	10,323	105	1,864	2,350
Currency swap	70,011	389,948	8,288	124,202
Interest rate swap	4,313	135,985	1,933	78,528
Other derivatives	9,491		7,780	
	94,138	526,038	19,865	205,080

(2) Currency swap contracts which are not designated as hedge instruments, as of December 31, 2012 are as follows (KRW in millions, USD in thousands):

Counterparty	Contract year		Contract amounts		Contract interest rate		Contract exchange rate
			Pay	Receive	Pay	Receive	
Barclays	2008	2013	KRW 187,020	USD 200,000	7.50%	7.75%	935.10
Credit Suisse	2008	2013	KRW 140,265	USD 150,000	6.94%	7.75%	935.10
Shinhan Bank	2010	2014	KRW 84,615	USD 75,000	6.83%	5.50%	1,128.20
RBS	2010	2014	KRW 141,125	USD 125,000	6.78%	5.50%	1,129.00
Morgan Stanley	2010	2014	KRW 112,320	USD 100,000	6.71%	5.50%	1,123.20
HSBC	2010	2014	KRW 112,320	USD 100,000	6.71%	5.50%	1,123.20
BOA	2010	2015	KRW 110,310	USD 100,000	6.93%	5.50%	1,103.10
UBS	2010	2015	KRW 220,356	USD 200,000	3.90%	3.00%	1,101.78
RBS	2010	2015	KRW 110,110	USD 100,000	3.90%	3.00%	1,101.10
Barclays	2010	2015	KRW 108,390	USD 100,000	3.78%	3.00%	1,083.90
Credit Suisse	2010	2015	KRW 108,390	USD 100,000	3.22%	3.00%	1,083.90
Morgan Stanley	2010	2015	KRW 63,006	USD 60,000	4.06%	3.00%	1,050.10
Goldman Sachs	2010	2015	KRW 156,643	USD 140,000	3.92%	3.00%	1,118.88
Morgan Stanley	2010	2015	KRW 118,800	USD 100,000	4.61%	3M USD Libor + 1.64%	1,188.00
M-UFJ	2010	2015	KRW 116,100	USD 100,000	4.00%	3M USD Libor + 1.00%	1,161.00
DBS	2011	2014	KRW 56,150	USD 50,000	4.21%	3M USD Libor + 1.00%	1,123.00
SMBC	2011	2014	KRW 56,150	USD 50,000	4.21%	3M USD Libor + 1.00%	1,123.00
Mizuho	2011	2014	KRW 112,800	USD 100,000	3.86%	3M USD Libor + 0.80%	1,128.00

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DBS	2011	2014	KRW 109,500	USD 100,000	3.80%	3M USD Libor + 0.85%	1,095.00
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Counterparty	Contract year		Contract amounts		Contract interest rate		Contract exchange rate
			Pay	Receive	Pay	Receive	
Deutsche Bank	2009	2014	KRW 126,610	USD 100,000	5.39%	6.25%	1,266.10
Nomura Securities	2009	2014	KRW 126,610	USD 100,000	5.35%	6.25%	1,266.10
Nomura Securities	2009	2014	KRW 126,610	USD 100,000	5.33%	6.25%	1,266.10
Mogan Stanley	2009	2014	KRW 126,610	USD 100,000	5.32%	6.25%	1,266.10
Mogan Stanley	2010	2014	KRW 126,610	USD 100,000	5.30%	6.25%	1,266.10
Barclays	2010	2014	KRW 126,610	USD 100,000	5.29%	6.25%	1,266.10
CITI	2010	2014	KRW 126,610	USD 100,000	5.27%	6.25%	1,266.10
JP Mogan	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
Deutsche Bank	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
RBS	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
DBS	2010	2013	KRW 226,900	USD 200,000	3.70%	Libor 3M + 0.25%	1,134.50
SMBC	2010	2013	KRW 113,400	USD 100,000	3.92%	Libor 3M + 0.90%	1,134.00
BTMU	2010	2013	KRW 56,525	USD 50,000	3.92%	Libor 3M + 0.90%	1,130.50
MISUHO	2010	2013	KRW 56,750	USD 50,000	3.92%	Libor 3M + 0.90%	1,135.00
CITI	2010	2015	KRW 116,080	USD 100,000	3.97%	3.13%	1,160.80
Deutsche Bank	2010	2015	KRW 116,080	USD 100,000	3.98%	3.13%	1,160.80
RBS	2010	2015	KRW 116,080	USD 100,000	3.97%	3.13%	1,160.80
HSBC	2010	2015	KRW 116,080	USD 100,000	3.23%	3.13%	1,160.80
UBS	2010	2015	KRW 116,080	USD 100,000	3.23%	3.13%	1,160.80
CITI	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
JP Morgan	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
Bank of America	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
Goldman Sachs	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
HSBC	2012	2022	KRW 111,770	USD 100,000	2.89%	3.00%	1,117.70
Hana Bank	2012	2022	KRW 111,770	USD 100,000	2.87%	3.00%	1,117.70
SC	2012	2022	KRW 111,770	USD 100,000	2.89%	3.00%	1,117.70
Deutsche Bank	2012	2022	KRW 55,885	USD 50,000	2.79%	3.00%	1,117.70

- (3) Currency swap contracts which are designated as hedge instruments, as of December 31, 2012 are as follows (KRW in millions, USD in thousands):

Counterparty	Contract year		Contract amounts		Contract interest rate		Contract exchange rate
			Pay	Receive	Pay	Receive	
Credit Suisse	2009	2013	KRW 194,750	USD 150,000	4.75%	5.00%	1,298.33
CITI	2006	2016	KRW 113,200	USD 100,000	1.05%	6.00%	1,132.00
Barclays	2006	2016					