KOREA ELECTRIC POWER CORP
Form 20-F
April 30, 2012
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As filed with the Securities and Exchange Commission on April 30, 2012

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

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2011

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)

Changyoung Ji, +822 3456 4264, cy_ji@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:	Name of each exchange on which registered:
Common stock, par value Won 5,000 per share	New York Stock Exchange*
American depositary shares, each representing one-half of share of common stock	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.

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:

7 3/4% Debentures due April 1, 2013

7.40% Amortizing Debentures, due April 1, 2016

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

6% Debentures due December 1, 2026

7% Debentures due February 1, 2027

6 3/4% 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 þ 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 þ

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.

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 þ 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 þ 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 þ 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 þ

(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 Compa 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 Knowledge Economy and the Ministry of Strategy and Finance include the respective predecessors thereof. 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 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.

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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 and 2011 have been derived from our audited consolidated financial statements which have been prepared in accordance with IFRS.

Prior to December 31, 2010, we prepared our consolidated financial information in accordance with the Korea Electric Power Corporation Act, the Accounting Regulations for Public Enterprise Associate Government Agency and the generally accepted accounting principles in Korea (Korean GAAP). A description of the principal differences between our previous accounting standards and IFRS and the impacts of transition to IFRS is provided in Note 4 to the consolidated financial statements included in this report.

Our consolidated financial statements as of and for the years ended December 31, 2010 and 2011 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.

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Consolidated Statement of Earnings Data

	2010	2011[1]	
	(in billions of Won and millions of US$, except per share data)		
Sales	(Won) 39,507	(Won) 43,532	$ 37,576
Cost of sales	36,188	43,082	37,188
Gross Profit	3,319	450	388
Other operating income (expense), net	467	451	389
Selling and administrative expenses	1,645	1,752	1,512
Other income (loss)	119	166	144
Operating income (loss)	2,260	(685)	(591)
Finance income (expense), net	(1,967)	(1,911)	(1,650)
Profits of affiliates and joint ventures using equity method	77	123	106
Income (loss) before income taxes	370	(2,473)	(2,135)
Income tax expenses	439	820	708
Net loss for the year	(69)	(3,293)	(2,843)
Other comprehensive loss	(43)	(262)	(226)
Total comprehensive loss	(112)	(3,555)	(3,069)
Net income (loss) attributable to:			
Owners of the Company	(120)	(3,370)	(2,909)
Non-controlling interests	51	77	66
Total comprehensive income (loss) attributable to:			
Owners of the Company	(152)	(3,628)	(3,131)
Non-controlling interests	40	73	62
Earnings (loss) per share			
Basic[2]	(193)	(5,411)	(4,671)
Diluted[3]	(193)	(5,411)	(4,671)
Earnings (loss) per ADS			
Basic[2]	(97)	(2,706)	(2,335)
Diluted[3]	(97)	(2,706)	(2,335)
Dividends per share			
Other Data:			
Ratio of earnings to fixed charges[4]:	0.9	(0.2)	(0.2)

Consolidated Statements of Financial Position Data

	As of December 31,		
	2010	2011[1]	
	(in billions of Won and millions of US$, except share and per share data)		
Net working capital surplus (deficit)[5]	(Won) (916)	(Won) (3,615)	$ (3,120)
Property, plant and equipment, net	107,406	112,385	97,009
Construction in progress	19,253	19,912	17,188
Total assets	129,518	136,468	117,797
Total shareholders equity	57,277	53,804	46,443
Controlling interest	56,818	53,270	45,982
Non-controlling interest	459	534	461
Common stock	3,208	3,210	2,771
Number of common shares as adjusted to reflect any changes in capital stock	641,567,712	641,964,077	641,964,077
Long-term debt (excluding current portion)	32,848	39,198	33,835
Other long term liabilities	25,321	25,725	22,205

Notes:

(1) The consolidated financial statements are expressed in Korean Won and, solely for the convenience of the reader, the consolidated financial statements as of and for the year ended December 31, 2011, have been translated into United States dollars at the rate of (Won)1,158.5 to USD1.00, the noon buying rate in New York

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City for cable transfers in Won as certified for customs purposes by the Federal Reserve Bank of New York as of December 30, 2011. The translation should not be construed as a representation that any or all of the amounts shown could be converted into U.S. dollars at this or any other rate.

(2) 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.

(3) Dilutive 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.

(4) For purposes of computing ratios of earnings to fixed charges, earnings consist of income before income taxes and fixed charges. Fixed charges consist of interest expense (including capitalized interest), amortization of bond discount and issue expenses and other ancillary expenses. We believe this ratio is helpful to understand our ability to service our debt with our earnings.

(5) 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 (Won) are to the currency of Korea, and all references to U.S. dollars, Dollars, $ or US$ are to the currency of the United States of America, all references to Euro or are references to the currency of the European Union, 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 1,158.5 to US$1.00, which was the noon buying rate of the Federal Reserve Board (the Noon Buying Rate) in effect as of December 30, 2011. 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 13, 2012, the Noon Buying Rate was Won 1,134.2 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.

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[1]	High	Low
		(Won per US$1.00)		
2007	935.8	929.0	950.2	903.2
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 (through April 13)	1,134.2	1,130.1	1,160.0	1,115.7
January	1,125.7	1,140.3	1,160.0	1,120.1
February	1,117.1	1,122.7	1,128.9	1,115.7
March	1,131.4	1,126.2	1,139.8	1,116.0
April (through April 13)	1,134.2	1,133.3	1,143.4	1,122.4

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

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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 48.2% and 48.7% of our sales and cost of sales, respectively, in 2011. 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 prevailing market prices in currencies other than Won. For example, most of the bituminous coal requirements (which accounted for approximately 43.5% of our entire fuel requirements in 2011 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 45.9%, 33.5%, 7.9% and 6.8%, respectively, of the annual bituminous coal requirements of our generation subsidiaries in 2011. Approximately 75.9% of the bituminous coal requirements of our generation subsidiaries in 2011 were purchased under long-term contracts and the remaining 24.1% from 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, resulting in a higher fuel cost to us. For example, the average free on board Newcastle coal price index ranged from US$72.4 per ton in 2009 to US$98.8 per ton in 2010 and to US$120.5 per ton in 2011, and decreased to US$104.0 per ton as of April 17, 2012. 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 fluctuated from US$61.7 per barrel in 2009 to US$78.1 per barrel in 2010 and US$106.2 per barrel in 2011, and was US$115.4 per barrel as of April 17, 2012. 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, resulting in an increase in fuel cost. We cannot assure you that the fuel prices will not significantly increase in the remainder of 2012 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 an operating loss in 2011 and a net loss in 2010 and 2011 under IFRS. We expect that a high level of fuel prices will continue to have a material adverse effect on our results of operation in 2012 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 significantly lower 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 seriously 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

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example, in August 2010, August 2011 and December 2011, the Government increased the electricity tariff by an average of 3.5%, 4.9% and 4.5%, 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 Knowledge Economy 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 will also have a third component of fuel cost-adjusted rate, which will be added to or subtracted from the sum of the base rate and the usage rate based on the movements of coal, LNG and oil prices. The fuel cost-related adjustment will be made on a monthly basis based on the three-month average fuel cost which is reflected as fuel-cost adjustment fees 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 Knowledge Economy has for the time being suspended applying the fuel cost-based adjustment, and such adjustment amount (which has been a positive amount since the adoption of the new tariff system due to the continued rise in coal, LNG and oil prices) is currently being recorded as accounts receivable pending the commencement of the application of the fuel cost-based adjustment. There is no assurance as to when the Government will commence applying the fuel cost-based adjustment and reflect the adjustment amount in the electricity tariff payable to us, or whether the new tariff system will undergo further 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 Implementation of the Fuel Cost-based Tariff System.

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

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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 Knowledge Economy 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, 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 Knowledge Economy 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 each such subsidiary is required to enter into a management contract directly with the minister of the Ministry of Knowledge Economy, performance evaluation of such subsidiaries is conducted by the Public Enterprise Management Evaluation Commission, and the president and the statutory auditor of each such subsidiary are appointed by the President of Korea while the selection of outside directors is subject to approval by the minister of the Ministry of Strategy and Finance. Previously, the president of each such subsidiary entered into a management contract with our president, performance evaluation of such subsidiaries was conducted by our evaluation committee, and the president and the statutory auditor of each such subsidiary were appointed by, and the selection of outside directors was subject to approval by, our president.

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 will be required to supply 2.0% and 10.0% of the total energy generated from such subsidiary in the form of renewable energy by 2012 and 2022, respectively, with fines being levied on any unit failing to do so in the prescribed timeline. We currently estimate that, if the RPS is implemented as currently planned, our generation subsidiaries will incur approximately Won 45 trillion in additional capital expenditure over the next 10 years. 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

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operations, may from time to time pursue policy initiatives with respect to our business and operations which may vary with 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 December 2010, the Government announced the fifth Basic Plan relating to the future supply and demand of electricity. The fifth Basic Plan, which is effective for the period from 2010 to 2024, focuses on, among other things, (i) ensuring that electricity generation conforms to the National Energy Basic Plan relating to the overall energy management policy for Korea, (ii) expanding the base-load generation capacity to promote economical supply of electricity, (iii) preparing contingency planning to cover for, among others, delayed construction of generation facilities, and otherwise ensure stable long-term balance between electricity supply and demand, (iv) tightening supply management from 2011 to 2014 in response to the short-term decrease in facility reserve margins, (v) fostering environmentally friendly electricity sources in line with the planned nationwide reduction in greenhouse gas emission, by giving priority in the construction of nuclear generation facilities and taking other green energy initiatives; (vi) appropriately adjusting the generation capacity expansion and (vii) improving transparency in planning and engaging a greater number of experts in the process of planning future basic plans. We cannot assure that the fifth 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 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.

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 the winter of 2010-2011 our electricity reserve level fell to a lower than normal level of 5.5% 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. 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. These circumstances may lead to increased end-user complaints and greater public scrutiny over our capacity levels, 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.

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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 recent global financial crisis, including the ongoing fiscal and financial instability surrounding several European countries. 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 and the cost of servicing our foreign currency-denominated debt as 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. As of December 31, 2011, approximately 23.2% of our long-term debt (including the current portion and discounts on debentures but excluding premium on debentures) before accounting for swap transactions was denominated in foreign currencies, principally in U.S. dollars, Yen and Euro. 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 procurement of fuels.

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 than 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 were originally anticipated. In addition, we regularly review the profitability and growth potential of our existing and new businesses. 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 operation, financial condition and cash flows.

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We plan to pursue international expansion opportunities that may subject us to different or greater risk 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 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 risks inherent to such businesses, which 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 a competing system which enables regional districts to independently source electricity would erode our market position and hurt our business, growth prospects, revenues and profitability.

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 Knowledge Economy in accordance with the Electricity Business Act. The purpose of this system is to decentralize electricity supply and thereby reduce

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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, 2012, 14 districts were using this system and one district was preparing to launch it. The generation capacity installed or under construction of the electricity suppliers in these 15 districts amounted to approximately 1% of the aggregate generation capacity of our generation subsidiaries as of March 31, 2012. 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 16 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 market position in the generation and distribution of electricity in Korea, which is virtually monopolized by us at present, 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, 2011, approximately 69.8% 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. See Item 5B. Liquidity and Capital Resources Capital Requirements for further details. 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.

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 21 nuclear-fuel generation units. The 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 31.1% of electricity generated in Korea in 2011. 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 check-up

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and overhauls lasting 20 to 30 days, 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.

Recently, 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 facilities in general 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.

Opposition to the construction and operation of nuclear-fuel generation units 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.

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 associated 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 at third party-owned or -operated sites, and hazardous wastes may be disposed of or treated at third party-owned or -operated disposal sites. If those sites become contaminated, we could also be held responsible for the cost of investigation and remediation of such sites for any associate environmental damage, 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 will be required to supply 2.0% and 10.0% of the total energy generated from such subsidiary in the form of renewable energy by 2012 and 2022, respectively. 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

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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.

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.

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

We anticipate that 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. 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, the amount of such additional indebtedness may be substantial. 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.

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, 2011, 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).

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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. Recent difficulties affecting the European, U.S. and global financial sectors, adverse conditions and volatility in the worldwide credit and financial markets, fluctuations in oil and commodity prices and the general weakness of the European, U.S. 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 recent liquidity and credit concerns and volatility in the global financial markets, the value of the Won relative to the 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 the rate of deterioration of the global economy slowed in the second half of 2009, with some signs of stabilization and improvement in 2010 and 2011, substantial uncertainties have resurfaced in the form of fiscal and financial sector crisis in several European countries (including Italy, Spain, France, Greece and Portugal), 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 economy, and the overall prospects for the Korean and global economy in 2012 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 Korea s economy is highly dependent on the health and direction of the global economy, investors reactions to developments in one country can have adverse effects on the securities price of companies 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 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 Korea s 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, 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 oil prices), exchange rates (particularly against the U.S. dollar), interest rates and stock markets and inflows and outflows of foreign capital, either directly, into the stock markets, through derivatives or otherwise;

- increased reliance on exports to service foreign currency debts, which could cause friction with Korea s trading partners;

- 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 lay-offs, increasing unemployment and lower levels of income;

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

a decrease in tax revenues and a substantial increase in the Government s expenditures for unemployment compensation and other social programs that together could lead to an increased Government budget deficit;

political uncertainty or increasing strife among or within political parties in Korea, including as a result of the increasing polarization of the positions of the ruling conservative party and the progressive opposition, particularly in light of the general election for National Assembly members in April 2012 and the presidential election scheduled for December 2012;

a 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;

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 recent years, there have been heightened security concerns stemming from North Korea s nuclear weapons and long-range missile programs and uncertainty regarding North Korea s actions and possible responses from the international community. In April 2009, after launching a long-range rocket over the Pacific Ocean which led to protests from the international community, North Korea announced that it would permanently withdraw from the six-party talks that began in 2003 to discuss Pyongyang s path to denuclearization. On May 25, 2009, North Korea conducted its second nuclear testing by launching several short-range missiles. In response to such actions, the Republic decided to join the Proliferation Security Initiative, an international campaign aimed at stopping the trafficking of weapons of mass destruction, over Pyongyang s harsh rebuke and threat of war. After the United Nations Security Council passed a resolution on June 12, 2009, to condemn North Korea s second nuclear test and impose tougher sanctions such as a mandatory ban on arms exports, North Korea announced that it would produce nuclear weapons and take resolute military actions against the international community. In November 2010, North Korean forces fired artillery shells at Yeonpyeong Island off the west coast of Korea killing four South Koreans. Efforts at multilateral negotiations with North Korea have been made in response to North Korean provocations, but the prospects of such negotiations remain unclear.

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. On December 17, 2011, North Korean officials announced that Kim Jong-il, the North Korean ruler, died of a heart attack. Shortly after his death, his third son, Kim Jong-eun, who is reported to be in his twenties, was named head of the government and military. Kim Jong-eun s succession, including its implications for the politics and economy of North Korea, 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

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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 April 13, 2012, North Korea conducted a failed 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.

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 Republic, the Korea Tourism Organization and other private Korean companies in the Geumgang area amount to approximately Won 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. Currently, the Republic is in the process of considering various options, including legal and diplomatic measures, in response to the 2011 Declaration.

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.

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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 82-2-3456-4264. 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, 2011, 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 Knowledge Economy, 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 Knowledge Economy. The Ministry of Knowledge Economy, 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 Knowledge Economy, 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 Ministry of Knowledge Economy 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.

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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 substantially all of the electricity produced in Korea. As of December 31, 2011, we and our generation subsidiaries owned approximately 88.4% of the total electricity generating capacity in Korea (excluding plants generating electricity primarily for private or emergency use). In 2011, we sold to our customers approximately 455 billion kilowatt-hours of electricity. We purchase electricity principally from our generation subsidiaries and to a lesser extent from independent power producers. Of the 477 billion kilowatt-hours of electricity we purchased in 2011, 32.0% was generated by KHNP, our wholly-owned nuclear and hydroelectric power generation subsidiary, 56.9% was generated by our wholly-owned five non-nuclear generation subsidiaries and 11.1% 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 2011, we had sales of Won 43,532 billion and net loss of Won 3,370 billion (excluding non-controlling interests) compared to sales of Won 39,507 billion and net loss of Won 120 billion (excluding non-controlling interests) in 2010. Our sales increased primarily as a result of a 4.8% increase in kilowatt hours of electricity sold in 2011, which was attributable primarily to the general increase in demand for electricity among consumers in Korea as a result of the economic recovery in 2011 compared to 2010. The increase in the volume of electricity sold was due to a 8.1% 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, which more than offset a 0.9% decrease 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 5.5% per annum from 2007 to 2011, compared to the real gross domestic product, or GDP, which increased at a CAGR of 3.5% during the same period, according to The Bank of Korea. The GDP growth rate was 3.6% for 2011 as compared to 6.2% for 2010. Demand for electricity in Korea increased by 4.8% from 2010 to 2011.

Strategy

In June 2009, we established a vision for ourselves to become, by 2020, one of the top utility service providers in the world in terms of environmentally-friendly clean energy, with a focus on substantially increasing our revenue, maintaining a fair level of return on investment, further expanding our overseas businesses and upgrading our technologies, including in the area of nuclear plant design. In order to achieve this vision, we have formulated the following strategies:

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 capabilities to generate electricity with lower carbon emission* We are currently developing, or seek to develop, a standardized integrated gasification combined cycle generation unit, namely a generation unit that uses high-purity gas produced by pressurizing coal or other solid waste at high temperature for generation of electricity with relatively low carbon emission, with an installed capacity of 300 megawatts, a standardized carbon capture and storage facility with an installed capacity of 500 megawatts and a standardized nuclear power generation unit for export purposes.

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(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 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 as of August 1, 2011, 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:

		Commercial			Industrial					
Type of Usage*	**Residential**	**Low-voltage**	**High-voltage**	**Average**	**Low-voltage**	**High-voltage**	**Average**	**Educational**	**Agricultural**	**Street Lighting**
% increase	2.0	2.3	6.3	4.4	2.3	6.3	6.1	6.3	No change	6.3

* Tariff on overnight power usage was also increased by 8.0% on all types of usage.

Effective as of December 5, 2011, the Government further increased the electricity rates that we charge to the end-users by an average of 4.5% as further set forth in the following table:

		Commercial			Industrial					
Type of Usage	**Residential**	**Low-voltage**	**High-voltage**	**Average**	**Low-voltage**	**High-voltage**	**Average**	**Educational**	**Agricultural**	**Street Lighting**
% increase	No change	3.9	5.0	4.5	3.9	6.6	6.5	4.5	No change	6.5

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.

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Implementation of the Fuel Cost-based Tariff System

Further to the announcement by the Ministry of Knowledge Economy 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 will also have a third component of fuel cost-adjusted rate, which will be added to or subtracted from the sum of the base rate and the usage rate based on the movements of coal, LNG and oil prices. The fuel cost-related adjustment will be made on a monthly basis based on the three-month average fuel cost which is reflected as fuel-cost adjustment fees 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 Knowledge Economy has for the time being suspended applying the fuel cost-based adjustment, and such adjustment amount (which has been a positive amount since the adoption of the new tariff system due to the continued rise in coal, LNG and oil prices) is currently being recorded as accounts receivable pending the commencement of the application of the fuel cost-based adjustment. There is no assurance as to when the Government will commence applying the fuel cost-based adjustment and reflect the adjustment amount in the electricity tariff payable to us, or whether the new tariff system will undergo further 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.

Transfer of Pumped Storage Hydro-electric Units

Effective January 2011, the pumped-storage hydro-electricity business of each of our five non-nuclear generation subsidiaries, comprising of 16 units with total installed capacity of 4,700 megawatts, were transferred to our nuclear and hydro-electric subsidiary KHNP for greater operational efficiency.

Overseas Activities

Pursuant to our strategy to diversify and facilitate procurement of fuel sources and expand our overseas activities in general, we and our generation subsidiaries have recently been involved in several acquisition, investment and other operating activities overseas. Our recent overseas activities include:

- in September 2011, entering into a joint venture with Megha Engineering & Infrastructures Ltd. to improve the overall power distribution network in Madhya Pradesh, India through a feeder separation program, which includes improvements of transmission lines and installation of power meters in rural areas;

- in October 2011, a consortium consisting of our wholly-owned generation subsidiary, KOMIPO, and POSCO Engineering being selected by the City of Boulder as the winning bidder in an auction for the construction and operation of a solar power plant in Nevada, United States;

- in November 2011, participating in a joint venture with China Datang Group in the construction and operation of two additional wind-powered electricity generation facilities in Neimenggu and Chaoyang City in Liaoning, China with total generation capacity of approximately 93 megawatts;

- in December 2011, entered into an agreement to acquire through our wholly-owned subsidiary, KOMIPO, a 29% equity interest in Navanakorn Electric Co., a Thailand power company, to jointly develop a combined-cycle power plant project in Thailand;

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in January 2012, winning a bid to build, own and operate a 600-megawatts diesel engine power facility in Almanakher, Jordan;

in February 2012, entering into an agreement to acquire a 14% equity interest in Strathmore Minerals Corp. of Canada in relation to a uranium development project in Gas Hills, Wyoming, with an option to acquire up to a maximum of 40% equity interest in Gas Hills; and

in March 2012, entering into an agreement, through our wholly-owned generation subsidiary, KOWEPO, to acquire a 22.7% equity interest in Pioneer Gas Power of India to construct a 388-megawatt gas-powered power facility in Maharashtra, India.

For further details on these activities, see Overseas Activities.

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 Knowledge Economy 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 established 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.

Restructuring of the Electric Power Industry in Korea

On January 21, 1999, the Ministry of Knowledge Economy 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

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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 Knowledge Economy.

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.

Privatization of Non-nuclear Generation Subsidiaries

In April 2002, the Ministry of Knowledge Economy 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.

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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

In 2009, the Government commissioned Korea Development Institute to undertake a study addressing concerns regarding inefficiencies in the cost structure of electricity generation, including by potentially consolidating one or more of our generation subsidiaries or merging them with us. On August 25, 2010, based on this study and deliberations with various interested parties, the Ministry of Knowledge Economy 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 Knowledge Economy 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 each such subsidiary is required to enter into a management contract directly with the minister of the Ministry of Knowledge Economy, performance evaluation of such subsidiaries is conducted by the Public Enterprise Management Evaluation Commission, and the president and the statutory auditor of each such subsidiary are appointed by the President of Korea while the selection of outside directors is subject to approval by the minister of the Ministry of Strategy and Finance. Previously, the president of each such subsidiary entered into a management contract with our president, performance evaluation of such subsidiaries was conducted by our evaluation committee, and the president and the statutory auditor of each such subsidiary were appointed by, and the selection of outside directors was subject to approval by, our president.

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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 411 as of December 31, 2011. 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 Knowledge Economy, 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 Knowledge Economy, 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).

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. For example, prior to December 31, 2006, the marginal price operated on a two-tiered structure, namely, a base load marginal price applicable to electricity generated from nuclear fuels and coals, which tend to be less expensive per unit of electricity than electricity generated from liquefied natural gas, oil and hydroelectric power to which a non-base load marginal price applied. The base load marginal price and the non-base load marginal price were generally set at levels so that electricity generated from cheaper fuels could be utilized first while ensuring a relatively fair rate of return to all generation units. However, when the price of coal

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rose sharply beginning in the second half of 2006, the pre-existing base load marginal price was abolished and a market cap by the name of regulated market price was introduced in its stead for electricity generated from base load fuels, with the regulated market price being set at a level higher than the pre-existing base load marginal price in order to compensate the generation subsidiaries for the rapid rise in the price of coal. However, when the price of coal continued to rise sharply above the level originally assumed in setting the regulated market price, this had the effect of undercutting our profit margin as the purchaser of electricity from our generation subsidiaries, although the generation subsidiaries were able to maintain a better margin under the regulated market price regime than under the pre-existing base load marginal price regime. Accordingly, on May 1, 2008, the regulated market price regime was abolished, and the current system of system marginal price was introduced in order to set the marginal price in a more flexible way by using the concept of an adjusted coefficient tailored to each fuel type.

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

Variable cost + [System marginal price Variable cost] * 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, after taking into account, among others, 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 most expensive 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 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.

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The adjusted coefficient applies uniformly to all generation units that use the same type of fuel, and is generally higher for generation units that use fuel types that inherently entail higher construction and maintenance costs, such as nuclear plants. The adjusted 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, our generation subsidiaries 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. Other than the foregoing region-based variations, the capacity price generally applies uniformly 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.

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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, 2011 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	152,343	33.0	6,556	17.8	43.0
	KOSEP	58,002	12.6	4,311	11.7	74.3
	KOMIPO	51,322	11.1	4,996	13.6	97.4
	KOWEPO	52,870	11.4	5,188	14.1	98.1
	KOSPO	58,049	12.6	5,899	16.0	101.6
	EWP	51,088	11.0	4,699	12.8	92.0
	Others[(1)]	38,386	8.3	5,172	14.0	134.8
	Total	462,060	100.0	36,821	100.0	79.7
Energy Sources	Nuclear	147,667	31.9	5,789	15.7	39.2
	Bituminous coal	185,658	40.2	12,480	33.9	67.2
	Anthracite coal	7,772	1.7	767	2.1	98.6
	Oil	9,563	2.1	2,160	5.9	225.9
	LNG	2,477	0.5	463	1.2	187.0
	Combined-cycle	93,483	20.2	13,205	35.9	141.3
	Hydro	4,119	0.9	561	1.5	136.2
	Pumped-storage	3,212	0.7	567	1.5	176.4
	Others	8,109	1.8	829	2.3	102.2
	Total	462,060	100.0	36,821	100.0	79.7
Load	Base load	337,768	73.1	18,618	50.6	55.1
	Non-base load	124,292	26.9	18,203	49.4	146.5
	Total	462,060	100.0	36,821	100.0	79.7

Note:

(1) Others represent independent power producers that trade electricity through the cost-based pool system of power trading.

Power Purchased from Independent Power Producers

In 2011, we purchased an aggregate of 14,638 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 3,941 megawatts as of December 31, 2011.

Power Generation

As of December 31, 2011, we and our generation subsidiaries had a total of 503 generation units, including nuclear, thermal, hydroelectric and internal combustion units, representing total installed generating capacity of 67,005 megawatts. Our thermal units produce electricity using steam turbine generators fired by coal and oil. Internal combustion units are diesel-fired gas turbine and combined-cycle units. Combined-cycle units consist of either LNG-fired combined-cycle units or oil-fired combined-cycle units. 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, 2011 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[1] (Megawatts)	Average Capacity Factor[2] (Percent)
Nuclear	21	18,716	90.7
Thermal:			
Coal	51	24,205	92.7
Oil	19	4,478	23.7
LNG	4	888	29.6
Total thermal	74	29,571	80.4
Internal combustion	172	356	39.9
Combined-cycle	97	12,936	66.4
Hydro	67	5,329	13.6
Wind	31	67	34.7
Solar	37	24	15.4
Fuel cell	4	6	58.6
Total	503	67,005	76.5

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; 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 level of continuous demand, 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.

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

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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.

	2007	2008	2009	2010	2011	% of 2011 Gross Generation[1]
	(in gigawatt hours, except percentages)					
Electricity generated by generation subsidiaries:						
Nuclear	142,937	150,958	147,771	148,596	154,723	31.1
Thermal:						
Coal	155,684	174,156	193,803	198,287	199,516	40.2
Oil	15,703	7,981	11,970	10,874	9,501	1.9
LNG	2,028	1,518	762	2,288	2,233	0.4
Total thermal	173,415	183,655	206,535	211,449	211,205	42.5
Internal combustion	579	503	697	731	821	0.2
Combined-cycle	60,465	55,909	47,580	70,081	71,624	14.4
Hydro	2,779	3,836	4,091	4,393	4,815	1.0
Wind	21	53	82	91	117	0.0
Solar and fuel cells	5	15	24	44	60	0.0
Total generation	380,201	394,929	406,780	435,384	443,409	89.2
Electricity purchased from others:						
Thermal	20,660	25,699	25,274	37,197	50,468	10.2
Hydro	2,263	1,727	1,550	2,079	3,016	0.6
Total purchased	22,923	27,426	26,824	39,276	53,484	10.8
Gross generation	403,124	422,355	433,604	474,660	496,893	100.0
Auxiliary use[2]	16,613	17,374	18,258	19,564	19,986	4.0
Pumped-storage[3]	1,817	3,243	3,713	3,663	4,257	0.9
Total net generation[4]	384,694	401,726	411,631	451,433	472,650	95.1
Transmission and distribution losses[5]	15,345	16,106	16,770	18,034	17,430	

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) 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)

Our transmission and distribution loss in 2011, calculated as the ratio of total transmission and distribution losses to total net generation, was 3.7%.

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

	2007	2008	2009	2010	2011
			(Megawatts)		
Total capacity	68,268	72,491	73,470	76,078	76,649
Peak load	62,285	62,794	66,797	71,308	73,137
Average load	46,019	48,082	49,498	54,185	56,619

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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 21 nuclear generation units at four power plant complexes in Korea, located in Kori, Wolsong, Yonggwang and Ulchin, 51 hydroelectric generation units including 16 pumped storage hydro generation units as well as two solar generation units and one wind generation unit as of December 31, 2011.

The table below sets forth the number of units and installed capacity as of December 31, 2011 and the average capacity factor by types of generation units in 2011.

	Number of Units	Installed Capacity[1] (Megawatts)	Average Capacity Factor[2] (Percent)
Nuclear	21	18,716	90.7
Hydroelectric	51	5,303	11.5
Wind	1	0.8	7.9
Solar	2	3	13.2
Total	75	24,022	

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 Shin-Kori-1, with a 1,000 megawatt capacity, commenced commercial operation on February 28, 2011. We are currently building seven additional nuclear generation units, consisting of three units each with a 1,000 megawatt capacity and four units each with a 1,400 megawatt capacity at the Shin-Kori, Shin-Wolsong and Shin-Ulchin sites, respectively. We expect to complete these units between 2012 and 2018. In addition, we plan to build four additional nuclear units, each with a 1,400 megawatt capacity, at the Shin-Kori and Shin-Ulchin sites between 2018 and 2021.

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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, 2011.

Unit	Reactor Type[1] (Megawatts)	Reactor Design[2]	Turbine and Generation[3]	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
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
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					18,716

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 Alsthom (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 2011 with respect to each nuclear generation unit of KHNP.

Unit	Average Capacity Factor (Percent)	Average Fuel Cost Per kWh (Won)
Kori-1	87.9	4.9
Kori-2	98.8	5.0
Kori-3	90.7	4.6
Kori-4	92.9	4.7
Shin-Kori-1	100.0	6.0
Wolsong-1	49.3	12.8
Wolsong-2	99.6	5.9
Wolsong-3	97.5	6.7
Wolsong-4	94.3	6.9
Yonggwang-1	101.1	4.8
Yonggwang-2	92.0	4.3
Yonggwang-3	91.6	4.7
Yonggwang-4	91.2	4.7
Yonggwang-5	94.6	4.3
Yonggwang-6	93.2	4.6
Ulchin-1	99.7	4.3
Ulchin-2	80.0	4.6
Ulchin-3	90.4	4.5
Ulchin-4	69.4	4.3
Ulchin-5	92.4	4.4
Ulchin-6	92.9	4.5
Total nuclear	90.7	5.0

The average capacity factor of all of our nuclear units in aggregate has been maintained at 90.0% or more in each year since 2000.

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 37 days excluding Wolsong unit-1, or 51 days including Wolsong unit-1, in 2011.

KHNP s nuclear units experienced an average of 0.3 unplanned shutdowns per unit in 2011. 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. 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.

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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 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, 2011 and the average capacity factor in 2011.

Location of Unit	Number of Units	Classification	Year Built	Installed Capacity (Megawatts)	Average Capacity Factor (%)
Hwacheon	4	Dam waterway	1944	108.0	29.1
Chuncheon	2	Dam	1965	62.2	28.5
Euiam	2	Dam	1967	45.0	41.2
Cheongpyung	4	Dam	1943	139.6	36.5
Paldang	4	Dam	1973	120.0	42.0
Seomjingang	3	Basin deviation	1945	34.8	45.8
Boseonggang	2	Basin deviation	1937	4.5	56.4
Kwoesan	2	Dam	1957	2.6	46.8
Anheung	3	Dam waterway	1978	0.5	44.8
Kangreung	2	Basin deviation	1991	82.0	
Topyeong(1)	1	Dam	2011	0.05	16.3
Muju(1)	1	Dam	2003	0.4	15.4
Sancheong(1)	2	Dam	2001	1.0	33.5
Yangyang(1)	2	Dam	2005	1.4	17.8
Yecheon(1)	1	Dam	2011	0.9	24.5
Cheongpeoung(1)	2	Pumped Storage	1980	400	4.3
Samrangjin(1)	2	Pumped Storage	1985	600	7.9
Muju(1)	2	Pumped Storage	1995	600	9.8
Sancheong(1)	2	Pumped Storage	2001	700	10.2
Yangyang(1)	4	Pumped Storage	2006	1,000	8.4
Cheongsong(1)	2	Pumped Storage	2006	600	11.0
Yecheon(1)	2	Pumped Storage	2011	800	10.8
Total	51			5,303	11.5

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, 2011 and the average capacity factor in 2011, regarding each solar and wind power unit of KHNP.

Location of Unit	Classification	Year Built	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)

Yonggwang	Solar	2008	3	13.2
Kori	Wind	2008	1	7.9
Total			4	12.1

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

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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, 2011 and the average capacity factor and average fuel cost per kilowatt in 2011 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)
Bituminous:				
Samchunpo #1, 2, 3, 4, 5, 6	19.8	3,246	92.5	66.0
Yong Hung #1, 2, 3, 4	4.8	3,372	92.9	64.5
Anthracite:				
Yongdong #1, 2	34.4	325	88.3	104.5
Oil-fired:				
Yosu #1, 2	34.6	529	28.1	157.6
Total thermal	19.7	7,472	87.9	68.6
Combined cycle and internal Combustion:				
Bundang gas turbine #1,2,3,4,5,6,7,8; steam turbine #1, 2	17.5	924	47.3	173.4
Total	18.7	8,396	83.3	75.4

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Korea Midland Power Co., Ltd.

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2011 and the average capacity factor and average fuel cost per kilowatt in 2011 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)
Bituminous:				
Boryeong #1, 2, 3, 4, 5, 6, 7, 8	16.9	4,000	95.1	64.9
Anthracite:				
Seocheon #1, 2	28.4	400	86.2	120.1
Oil-fired:				
Jeju #2, 3	11.4	150	55.9	275.3
LNG-fired:				
Seoul #4, 5	42.0	388	31.6	226.2
Incheon #1, 2	39.3	500	26.5	200.7
Total thermal	21.4	5,438	82.5	83.5
Combined-cycle and internal combustion:				
Boryeong gas turbine #1, 2, 3, 4, 5, 6; steam turbine #1, 2, 3,	12.8	1,350	45.6	147.8
Incheon gas turbine #1, 2, 3, 4; steam turbine #1, 2	4.5	1,012	83.4	133.2
Jeju Gas Turbine #3	34.1	55	0.2	9,635.7
Jeju Internal Combustion Engine #1,2	4.5	80	70.5	238.1
Total	10.0	2,497	59.1	144.0
Wind-powered:				
Yangyang #1, 2	5.5	3	18.6	3.9
Mini-hydro:				
Boryeong	2.8	7.5	17.6	59.3
Photovoltaic power & Fuel Cell generation:				
Boryeong (Photo) site	3.7	0.6	13.3	345.3
Seocheon (Photo) site	3.9	1.2	14.6	410.2
Jeju (Photo) site	3.9	0.1	15.2	
Seoul(Photo) site	0.4	1.3	13.2	4.5
Boryeong (fuel Cell) site	3.3	0.3	79.0	272.0
Total Photovoltaic & Fuel Cell generation	2.3	3.8	21.2	293.3
Total	17.7	7,949	74.5	98.6

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Korea Western Power Co., Ltd.

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2011 and the average capacity factor and average fuel cost per kilowatt in 2011 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)
Bituminous:				
Taean #1, 2, 3, 4, 5, 6, 7, 8	11.4	4,000	96.2	51.7
Oil-fired:				
Pyeongtaek #1, 2, 3, 4	30.1	1,400	21.3	179.6
Total thermal	16.2	5,400	76.8	61.0
Combined cycle:				
Pyeongtaek	19.5	480	35.0	152.9
West Incheon	19.5	1,800	76.0	124.6
Gunsan	1.6	718.4	79.6	117.3
Total combined-cycle	15.1	2,998.4	70.3	124.9
Mini-hydro:				
Taean	4.3	2.2	21.5	
Solar:				
Taean	6.4	0.1	12.4	
Samryangjin	4.3	3.0	14.2	4.9
Gunsan	1.4	0.3	15.4	
Total solar	4.0	3.4	14.1	
Total	15.8	8,404	74.5	83.0

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Korea Southern Power Co., Ltd.

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2011 and the average capacity factor and average fuel cost per kilowatt in 2011 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)
Bituminous:				
Hadong #1, 2, 3, 4, 5, 6, 7, 8	11	4,000	100.6	50.4
Oil-fired:				
Youngnam #1, 2	40.5	400	15.8	207.2
Nam Jeju #3, 4	5.5	200	76.0	226.2
Total thermal	13.3	4,600	92.3	58.8
Combined cycle:				
Shin Incheon #9, 10, 11, 12	15.7	1,800	59.0	128.7
Busan #1, 2, 3, 4	7.5	1,800	78.6	119.7
Yeongwol #1	0.3	848	60.0	122.4
Hallim	15.5	105	5.0	281.9
Total combined cycle	10.1	4,553	65.7	123.6
Internal combustion:				
Nam Jeju	21.3	40	30.9	198.1
Wind power:				
Hankyung	5.9	21	25.5	0.6
Seongsan	2.3	20	28.6	0.5
Total wind power	4.1	41	27.0	0.5
Solar	1.9	4	13.2	0.1
Total	11.6	9,238	78.6	85.9

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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, 2011 and the average capacity factor and average fuel cost per kilowatt in 2011 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)
Bituminous:				
Dangjin #1, 2, 3, 4, 5, 6,7,8	8.0	4,000	94.1	63.5
Honam #1, 2	38.1	500	91.4	80.6
Anthracite:				
Donghae #1, 2	12.1	400	84.8	95.0
Oil-fired:				
Ulsan #1, 2, 3, 4, 5, 6	33.3	1,800	19.1	220.6
Total thermal	23.1	6,700	72.3	78.0
Combined cycle:				
Ulsan gas turbine #1, 2, 3, 4, 5, 6; steam turbine #1, 2, 3	18.1	1,200	67.7	140.7
Ilsan gas turbine #1, 2, 3, 4, 5, 6; steam turbine #1, 2	16.1	900	44.1	178.9
Total combined-cycle and internal combustion	17.1	2,100	55.9	153.2
Mini-hydro:				
Dangjin	2.0	5.0	69.1	83.5
Photovoltaic:				
Dangjin	1.0	1.0	14.0	50.3
Ulsan	0.1	0.5	11.1	50.9
Kwangyang	0.1	2.3	0.4	0
Dangjin Waste Treatment Facility	0.0	1.3	0.2	0
Donghae	5.0	1.0	10.5	453.5
Total Photovoltaic	1.1	6.1	12.7	183.2
Fuel cell:				
Ilsan #1	2.1	2.4	59.6	200.6
Ilsan # 2	0.1	2.8	77.3	180.6
Total Fuel Cell	1.1	5.2	75.7	188.5
Total	9.05	8,816.3	69.5	140.3

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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	4,000 MW (500 MW×8)	FGD[(1)]: 1998 to 2007 SCR[(2)]: 2005 to 2007 EP[(3)]: 1995 to 2007 LNCS[(4)]:1995 to 2007 EP[(3)] upgrade (#5, 2009) EP[(3)] upgrade (#6, 2010) EP[(3)] upgrade (#4, 2011)	Anti-pollution	KOWEPO
Pyeongtaek #1-4	1,400 MW (350 MW×4)	FGD[(1)]: 2005 SCR[(2)]: 2006 to 2007 EP[(3)]: 1992 EP[(3)] upgrade (#1, 2009) EP[(3)] upgrade (#2, 2010)	Anti-pollution	KOWEPO
Seoincheon CC	1,800 MW (gas turbines 150 MW ×8) (steam turbines 75 MW ×8)	LNCS[(4)]: 1992 Gas turbine upgrade (2003 to 2006)	Anti-pollution Efficiency improvement	KOWEPO
Honam #1	250 MW	2010	10 years	EWP
Honam #2	250 MW	2010	10 years	EWP
Gunsan CC	718.4 MW (gas turbines 233.3 MW ×2) (steam turbines 251.8 MW ×1)	LNCS[(4)]: 2010	Anti-pollution	KOWEPO
Boryeong #1-8	4,000 MW (500 MW×8)	FGD[(1)]: 1996 to 2009 SCR[(2)]: 2006 to 2009 LNCS[(4)]: 1993 to 2009 EP[(3)]: 1984 to 2009 2009 (#1,2)	Anti-pollution	KOMIPO

			10 years	
Incheon #1,2	500 MW (250 MW×2)	SCR[2]: 2002 to 2005 LNCS[3]: 2002 to 2005	Anti-pollution	KOMIPO
Seoul #4,5	387.5 MW (137.5 MW×1) (250 MW×1)	SCR[2] : 2001 to 2002	Anti-pollution	KOMIPO
Seocheon #1,2	400 MW (200 MW×2)	FGD[1]: 1998, SCR : 2006 LNCS[4]: 2004 to 2005 EP[3]: 1982 to 1983	Anti-pollution	KOMIPO
Incheon #1,2	500 MW (250 MW×2)	1996(#1) 2002(#2)	10 years	KOMIPO
Jeju T/P #2,3	150 MW (75 MW×2)	SCR[2]: 2010 EP[3]: 2000	Anti-pollution	KOMIPO
Jeju D/P #1,2	80 MW (40 MW×2)	SCR[2]: 2005 to 2009 EP[3]: 2005 to 2009 FGD[1]: 2005 to 2009	Anti-pollution	KOMIPO

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Power Plant	Capacity	Completed (Year)	Extension	Company
Yonghung #5,6	1,750 MW (870 MW × 2)	2014	30 years	KOSEP
Hadong #1-8	4,000 MW (500 MW × 8)	FGD[(1)] : 1998 to 2009 EP[(3)] : 1997 to 2009 LNCS[(3)] :1997 to 2009 SCR[(2)]: 2006 to 2009	Anti-pollution	KOSPO
Shin-Incheon CC	1,800 MW (gas turbines 150 MW × 8) (steam turbines 150 MW × 4)	LNCS[(4)] : 1996	Anti-pollution	KOSPO
Busan CC	1,800 MW (gas turbines 150 MW × 8) (steam turbines 150 MW × 4)	LNCS[(4)] : 2003 to 2004	Anti-pollution	KOSPO
Youngnam #1,2	400 MW (200 MW × 2)	FGD[(1)]: 1999 SCR[(2)]: 2002 EP[(3)]: 1988 to 1990 LNCS[(4)]: 2002-	Anti-pollution	KOSPO
Namjeju T/P #3,4	200 MW (100 MW × 2)	FGD[(1)]: 2006 to 2007 SCR[(2)]: 2006 to 2007 EP[(3)]: 2006 to 2007	Anti-pollution	KOSPO
Namjeju D/P #1-4	40 MW (10 MW × 4)	SCR[(2)]: 1999 to 2000 EP[(3)]: 1990 to 1991	Anti-pollution	KOSPO
Yeongwol CC	848MW (gas turbines 183 MW × 3) (steam turbines 299 MW × 1)	LNCS[(4)]: 2010	Anti-pollution	KOSPO

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_2) combustion system.

Transmission and Distribution

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

In addition to us, under the Community Energy System there are also 12 other entities in Korea that are licensed to supply electricity in limited geographical areas, but their aggregate market share has to-date been insignificant. 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 Knowledge Economy 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

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Energy System. As of March 31, 2012, 14 districts were using this system and one other district was preparing to launch it and there were 12 independent entities that were licensed to distribute electricity in all of such 15 districts, to which we also transmit and distribute electricity. The generation capacity installed or under construction of the electricity suppliers in these 15 districts amounted to approximately 1% of the aggregate generation capacity of our generation subsidiaries as of March 31, 2012. 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 16 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 market position in the generation and distribution of electricity in Korea, which has been virtually monopolized by us until recently, and may have a material adverse effect on our business, growth, revenues and profitability.

The table below sets forth as of December 31, 2010 and 2011 and March 31, 2012, 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	31	320	1,474
December 31, 2011	31	320	1,474
March 31, 2012[(1)]	31	320	1,474

Note:

(1) Reflects 16 districts with a permit to participate in the Community Energy System, which have subsequently announced that they are abandoning plans to adopt such system. The number of apartments and generating capacity represented by such districts are approximately 190 thousand units and 866 megawatts, respectively.

As of December 31, 2011, our transmission system consisted of 31,249 circuit kilometers of lines of 765 kilovolts and others including high voltage direct current lines, and we had 749 substations with an aggregate installed transformer capacity of 264,373 megavolt-amperes.

As of December 31, 2011, our distribution system consisted of 102,582 megavolt-amperes of transformer capacity and 8,463,756 units of support with a total line length of 435,549 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 3.7% in 2011. 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. 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.

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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% and 34.2% of our fuel requirements for electricity generation in 2010 and 2011, 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 2011, KHNP purchased 100%, or approximately 3,374 tons, of its uranium concentrate requirement under long-term supply contracts with suppliers in Australia, Canada, France, Germany, Japan, Kazakhstan 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 concentrate are provided by suppliers in Canada, China, 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% and 43.5% of our fuel requirements for electricity generation in 2010 and 2011, respectively, and anthracite coal accounted for 1.9% and 1.9% of our fuel requirements for electricity generation in 2010 and 2011, respectively.

In 2011, our generation subsidiaries purchased approximately 79.8 million tons of bituminous coal, of which approximately 45.9%, 33.5%, 7.9%, 6.8% and 5.9% were imported from Indonesia, Australia, the United States, Russia, and others, respectively. Approximately 75.9% of the bituminous coal requirements of our generation subsidiaries in 2011 were purchased under long-term contracts with the remaining 24.1% 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 and Won 116,073 in 2010 and 2011, respectively. Due to such 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 2011, our generation subsidiaries purchased approximately 1.7 million tons of anthracite coal. The average cost of anthracite coal per ton purchased under such contracts was Won 130,836 and Won 136,471 in 2010 and 2011, respectively.

Oil

Oil accounted for 2.5% and 2.2% of our fuel requirements for electricity generation in 2010 and 2011, respectively.

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In 2011, our generation subsidiaries purchased approximately 14.4 million barrels of fuel oil, of which 65.3% 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 and Won 128,395 in 2010 and 2011, respectively.

LNG

LNG accounted for 16.6% and 16.8% of our fuel requirements for electricity generation in 2010 and 2011, respectively. In 2011, we purchased approximately 10.7 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 are jointly and severally obligated to purchase a total of 10.5 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. Our LNG supply contract with Korea Gas Corporation has a term of 20 years and expires in December 2026.

The annual purchase price for LNG is determined by our negotiations with Korea Gas Corporation, subject to approval by the Ministry of Knowledge Economy. 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 778,980 and Won 888,745 in 2010 and 2011, respectively.

Hydroelectric

As of December 31, 2011, hydroelectric units represented approximately 8.0% of our total installed generating capacity.

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 5.5% per annum for the five years ended December 31, 2011. According to The Bank of Korea, the compounded growth rate for real gross domestic product, or GDP, was approximately 3.5% for the same period. The GDP growth rate was approximately 6.2% in 2010 and approximately 3.6% in 2011.

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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.

	2007	2008	2009	2010	2011
Growth in GDP (at 2006 constant prices)	5.1%	2.3%	0.3%	6.2%	3.6%
Growth in electricity consumption	5.7%	4.5%	2.4%	10.1%	4.8%

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.

	2007 (GWh)	YoY growth (%)	2008 (GWh)	YoY growth (%)	2009 (GWh)	YoY growth (%)	2010 (GWh)	YoY growth (%)	2011 (GWh)	YoY growth (%)	% of Total 2011
Residential	75,148	3.3	77,269	2.8	78,548	1.7	82,890	5.5	82,130	(0.9)	18.0
Commercial	82,208	5.7	86,827	5.6	89,619	3.2	97,410	8.7	99,504	2.1	21.8
Educational	5,304	10.7	5,783	9.0	6,465	11.8	7,453	15.3	7,568	1.5	1.7
Industrial	194,936	6.5	203,475	4.4	207,216	1.8	232,672	12.3	251,491	8.1	55.3
Agricultural	8,215	7.6	8,869	8.0	9,671	9.0	10,654	10.2	11,232	5.4	2.5
Street lighting	2,794	4.0	2,847	1.9	2,954	3.8	3,081	4.3	3,145	2.1	0.7
Total	368,605	5.7	385,070	4.5	394,475	2.4	434,160	10.1	455,070	4.8	100.0

The industrial sector represents the largest segment of electricity consumption in Korea. Demand from the industrial sector increased by 8.1% to 251,491 gigawatt hours in 2011 from 2010, largely due to the continued export-led growth of the Korean economy in 2011.

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 increased by 2.1% to 99,504 gigawatt hours in 2011 from 2010.

In 2011, 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 decreased by 0.9% to 82,130 gigawatt hours in 2011 from 2010 due to the relatively less warm summer in 2011 compared to 2010 resulting in reduced use of air conditioning in 2011, which more than offset increased electricity demand from greater electric heater usage during the winter of 2011 due to the relatively colder winter compared to 2010.

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Demand Management

Our ability to provide an adequate supply of electricity is principally measured by the facility capacity reserve margin and the supply capability 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 capability 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.

	2007	2008	2009	2010	2011
Facility reserve margin	7.9%	12.0%	9.7%	6.7%	4.1%
Supply reserve margin	7.2%	9.1%	7.9%	6.2%	5.1%

Both the facility reserve margin and the supply reserve margin decreased from 2010 to 2011, mainly due to economic recovery and unanticipated weather conditions, including relatively colder winter in 2011 compared to 2010 resulting in greater use of heaters in 2011 at peak hours.

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. The principal measure we take is to apply, for large-scale customers, time-of-use rate schedules, which are structured so that higher tariffs are charged at the time of peak demand. Our other demand management programs include applying a progressive rate structure for the residential use of electricity. We seek to reduce not only energy consumption but also greenhouse gas emission by deploying various high efficiency devices such as energy efficient lightings. Furthermore, we replace lightings for low-income households for free as part of government s energy welfare policy.

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 Knowledge Economy. The Ministry of Knowledge Economy then reviews these proposals and, upon consultation with the Electricity Rates Expert Committee of the Ministry of Knowledge Economy 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 Knowledge Economy s final decision.

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.

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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 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, and for the period since 2006, our actual rates of return have been lower than the fair rates of return largely due to rising fuel costs and higher facility investment costs. 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 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 night 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 night 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 night power usage tariff.

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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 excluding June from the summer season when peak rates are in effect and increasing the rates for the months of November, December, January and February to correspond more closely to peak demand trends.

Our current tariff schedule, which became effective as of December 5, 2011, is summarized below by the type of usage:

Industrial. The basic charge varies from Won 4,900 per kilowatt to Won 7,930 per kilowatt depending on the type of contract, the voltage used and the rate option. The energy usage charge varies from Won 45 per kilowatt hour to Won 167.9 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 5,610 per kilowatt to Won 7,430 per kilowatt depending on the type of contract, the voltage used and the rate option. The energy usage charge varies from Won 46.2 per kilowatt hour to Won 172.9 per kilowatt hour depending on the type of contract, the voltage used, the season, the time of day and the rate option.

Residential. Residential tariff includes a basic charge ranging from Won 390 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 57.3 to Won 670.6 per kilowatt hour for electricity usage depending on the amount of usage and voltage.

Educational. The basic charge varies from Won 5,390 per kilowatt to Won 6,540 per kilowatt depending on the voltage used and the rate option. The energy usage charge varies from Won 40.2 per kilowatt hour to Won 147 per kilowatt hour depending on the voltage used, the season and the rate option.

Agricultural. The basic charge varies from Won 340 per kilowatt to Won 1,070 per kilowatt depending on the type of usage. The energy usage charge varies from Won 20.6 per kilowatt-hour to Won 36.4 per kilowatt hour depending on the type of usage.

Street-lighting. The basic charge is Won 5,420 per kilowatt and the energy usage charge is Won 74 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 32.3 per watt applies, with the minimum charge per month of Won 1,050.

Further to the announcement by the Ministry of Knowledge Economy 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 will also have a third component of fuel cost-adjusted rate, which will be added to or subtracted from the sum of the base rate and the usage rate based on the movements of coal, LNG and oil prices. The fuel cost-related adjustment will be made on a monthly basis based on the three-month average fuel cost which is reflected as fuel-cost adjustment fees 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 Knowledge Economy has for the time being suspended applying the fuel cost-based adjustment, and such adjustment amount (which has been a positive amount since the adoption of the new tariff system due to the

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continued rise in coal, LNG and oil prices) is currently being recorded as accounts receivable pending the commencement of the application of the fuel cost-based adjustment. There is no assurance as to when the Government will commence applying the fuel cost-based adjustment and reflect the adjustment amount in the electricity tariff payable to us, or whether the new tariff system will undergo further 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 Implementation of the Fuel Cost-based Tariff System.

In 2001, as part of implementing the Restructuring Plan, the Ministry of Knowledge Economy established the Electric Power Industry Basis Fund to enable the Government to take over certain public services previously performed by us. In 2011, 3.7% of the tariff we collected from our customers was transferred to this fund prior to recognizing our sales revenue.

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 December 2010, the Government announced the fifth Basic Plan relating to the future supply and demand of electricity. The fifth Basic Plan, which is effective for the period from 2010 to 2024, focuses on, among other things, (i) ensuring that electricity generation conforms to the National Energy Basic Plan relating to the overall energy management policy for Korea, (ii) expanding the base-load generation capacity to promote economical supply of electricity, (iii) preparing contingency planning to cover for, among others, delayed construction of generation facilities, and otherwise ensuring stable long-term balance between electricity supply and demand, (iv) tightening supply management from 2012 to 2014 in response to the short-term decrease in facility reserve margins, (v) fostering environmentally friendly electricity sources in line with the planned nationwide reduction in greenhouse gas emission by giving priority in the construction of nuclear generation facilities and taking other green energy initiatives, (vi) appropriately adjusting the generation capacity expansion and (vii) improving transparency in planning and engaging a greater number of experts in the process of planning future basic plans.

We cannot assure that the fifth 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 and 2011, the amounts of capital expenditures (including capitalized interest) for the construction of generation, transmission and distribution facilities. The figures in the table are derived from Additions to property, plant and equipment under the item cash flows from investing activities in our consolidated statements of cash flows.

2010	2011
(In billions of Won)	
(Won)10,184	(Won) 10,610

In accordance with the fifth Basic Plan, our generation subsidiaries currently intend to add new installed capacity of 39,523 megawatts during the period from 2012 to 2024 by newly constructing 13 nuclear units,

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17 coal-fired units, 14 LNG-combined units. According to the fifth Basic Plan, the total capacity of all generating facilities at the end of 2024 is expected to be 112,593 megawatts, with nuclear power plants accounting for 31.9% of the total capacity. Coal-fired plants, LNG combined plants, oil-fired plants and hydroelectric and other plants are expected to account for 27.9%, 20.9%, 3.6% and 15.7%, 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 fifth Basic Plan in each year from 2012 to 2015.

Year	Number of Units	Type of Units	Total Installed Capacity (Megawatts)
2012	2	LNG-combined	1,283
	2	Nuclear power	2,000
2013	3	LNG-combined	1,650
	2	Nuclear power	2,400
2014	9	LNG-combined	6,100
	1	Nuclear	1,400
	3	Coal-fired	2,240
2015	9	Coal-fired	6,050

From 2016 and 2024, our generation subsidiaries currently plan to complete eight nuclear units with an aggregate installed capacity of 11,400 megawatts, five coal-fired units with an aggregate installed capacity of 5,000 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.

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 2012 to 2015, 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 fifth 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.

	2012	2013	2014	2015	Total
	(in billions of Korean won)				
Generation:					
Nuclear	4,892	5,432	5,526	6,272	22,122
Thermal	3,336	8,531	6,567	3,713	22,147
Sub-total	8,228	13,963	12,093	9,985	44,269
Transmission and Distribution:					
Transmission	2,627	2,353	2,244	1,965	9,189
Distribution	2,195	2,182	2,139	2,080	8,596
Sub-total	4,822	4,535	4,383	4,045	17,785
Others[(1)]	1,872	2,328	2,508	2,363	9,071

Total	14,922	20,826	18,984	16,393	71,125

Note:

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

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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 3,583 billion, the full amount of which was available as of December 31, 2011. We and KHNP also maintain global medium-term note programs in the aggregate amount of US$8 billion, of which approximately US$4.6 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 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 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, 2011.

	KOSEP	KOMIPO	KOWEPO	KOSPO	EWP
Flue Gas Desulphurization System	12	12	12	12	13
Selective Non-Catalytic Reduction System					3
Selective Catalytic Reduction System	9	16	12	15	13
Electrostatic Precipitation System	14	14	12	14	18
Low NO_2 Combustion System	18	16	26	30	30
Total	53	58	62	71	77

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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 CO2 emissions is expected to increase in 2012 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_2 (kg/MWh)
2009	169	308	8	489
2010	158	283	8	467
2011	145	278	8	452

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 2025. 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 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.

Renewable Energy

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.

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The following table sets forth the generating capacity and generation volume in 2011 of our generation facilities that are powered by renewable energy sources.

	Generating Capacity (megawatts)	Generation Volume (gigawatt-hours)
Hydraulic Power	625.5	1,519.9
Wind Power	81.5	154.7
Solar Energy	25.0	25.0
Fuel Cells	5.8	40.3
By-product gas	116.0	85.0
Subtotal	853.8	1,824.9
As percentage of total[(1)]	1%	0.41%

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, the Government has adopted the Renewable Portfolio Standard (RPS) policy, under which each generation subsidiary will be required to supply 2.0% and 10.0% of the total energy generated from such subsidiary in the form of renewable energy by 2012 and 2022, respectively, with fines being levied on any unit failing to do so in the prescribed timeline. We currently estimate that, under the current RPS policy, our generation subsidiaries will incur approximately Won 45 trillion in additional capital expenditure over the next 10 years. 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.

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, of which 63 megawatts capacity has been completed to-date. 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.

The breakdown of capital expenditures for Phase I and Phase II under the RPA by type of expenditure is as follows:

	Phase I (2006 2008)	Phase II (2009 2011)
	(in billions of Won)	
Facilities investment	(Won) 388.2	(Won) 830.4
Research and development	128.0	86.8
Promotion and other	3.9	3.5
Total	(Won) 520.1	(Won) 920.7

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 and KHNP also maintain global medium-term note programs in the aggregate amount of US$8 billion, of which approximately US$4.6 billion remains currently available for future drawdown. See Item 5B. Liquidity and Capital Resources Capital Resources.

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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 generating 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 the 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 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.

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 other than the Shin-Kori unit 1. KHNP is currently developing advanced maintenance rule implementation programs for Shin-Kori unit 1 and nuclear power plants to be constructed in the future.

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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 Operational Safety Review 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 March 2011, Shin-Wolsong 1 hosted the WANO Pre-Startup Peer Review and Ulchin 5 and 6 conducted the WANO Peer Review in September 2011. The recommendations and findings from this event were shared with KHNP s other nuclear plants to implement improvements at such plants.

The average level of radiation dose per unit amounted to a relatively low level of 0.53 man-Sv in 2011, which was substantially lower than the global average in 2010 of 0.79 man-Sv/year as reported in the WANO performance indicator report.

Recently, 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 established a 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 perform 46 comprehensive safety improvement measures. 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.

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 the 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 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 became effective on January 1, 2009 and designated KRMC to manage the disposal of spent fuels and low and intermediate level radioactive waste. Pursuant to the RWMA, the Government 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.

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.

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Since the submission of our annual report on Form 20-F in June 2011, 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, will reach the end of its intended lifetime 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 and has since normally operated at 100% capacity.

While it does not carry a cash reserve for its decommissioning liability, KHNP retains financial responsibility for decommissioning 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 Knowledge Economy every two years.

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
Ilijan, Philippines	March 1999 to June 2022	1,200-megawatt combined-cycle power plant project (BOT)[1]
Naga, Philippines	Since February 2006	242.5-megawatt power plant (O&M/M&A)[2]
Cebu, Philippines	June 2011 to May 2036	200-megawatt CFBC[3] coal-fired power plant (BOO)[4]
Shanxi, China	April 2007 to April 2056	5,489-megawatt coal-fired power plants (BOO)[4] and coal mine projects
Gansu, China	September 2005 to April 2029	99-megawatt wind power plants (BOO)[4]
Inner Mongolia, China	May 2007 to December 2035	990-megawatt wind power plants (BOO)[4]

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Country	Project Period	Project Description
Liaoning, China	April 2010 to April 2031	226-megawatt wind power plant (BOO)[4]
Thailand	2011 to 2037	Purchase of minority equity interest in Navanakorn Electric Co. (BOO)[4]
Indonesia	Since July 2010	Purchase of equity interest of PT Bayan Resources Tbk
Indonesia	Since July 2009	Purchase of equity interest of PT Adaro Energy Tbk
Bhutan	April 2011 to June 2012	Bhutan Semtohka substation upgradation with 220/66kV50/63MVA transformer
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
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
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
Jordan	May 2009 to December 2035	373-megawatt combined-cycle power plant (BOO)[4]
Jordan	March 2012 to June 2038	Construction and operation of a diesel engine power plant in Almanakher, Jordan
Saudi Arabia	July 2009 to March 2033	1,204-megawatt oil-fired power plant (BOO)[4]
UAE	March 2011 to March 2039	1,600-megawatt combined-cycle gas power plant project (BOO)[4]
UAE	December 2009 to May 2020	Construction, operation and support for four 1,400-megawatt nuclear power generation units
Niger	Since December 2009	Share subscription of ANCE, a uranium development company
Australia	Since January 2008	Moolarben thermal coal mine development

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Country	Project Period	Project Description
Australia	Since November 2007	Share subscription of Cockatoo Coal Limited, a coal development company
Australia	Since July 2010	Bylong thermal coal mine development
Canada	December 2007 to August 2012	Uranium exploration project in the Cree East
Canada	January 2008 to May 2013	Uranium exploration project in the Waterbury Lake
Canada	Since June 2009	Share subscription of Denison Mines, a uranium development company
United States	2013 to 2065	Construction and operation of a solar power plant in Nevada (BOO)[4]
United States	Since February 2012	Acquisition of minority interest in Strathmore Minerals Corp. in relation to a uranium development project in Wyoming
Mexico	January 2011 to May 2038	433-megawatt combined-cycle power plant project (BOO)[4]
France	June 2009 to 2015	Construction and operation of a uranium enrichment plant
Kazakhstan	February 2011 to 2013	Modernization of 17 substations in Actub, Kazakhstan
Kazakhstan	Since March 2011	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 description of the material overseas activities by us and our subsidiaries by key geographic region is provided below.

Asia

China

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 unit in Gansu province with total capacity of 49.3 megawatts and three units in Inner Mongolia with total capacity of

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139.4 megawatts. Since then, one unit with capacity of 49.5 megawatts has been added in Gansu and thirteen units with total capacity with 851.4 megawatts have been added in Inner Mongolia. In Liaoning province, we have developed five units under an understanding with the government of Chaoyang City. In November 17, 2011, one unit with total capacity of 45 megawatts was added to Inner Mongolia and one unit with total capacity of 48 megawatts was added to Liaoning. The joint ventures were capitalized with RMB 271 million for the Gansu projects, RMB 3,252 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 60:40 equity interests in each of the aforementioned joint ventures and we participate in the projects through our wholly-owned subsidiary, KEPCO Neimnggu International Limited. Of the 25 wind power generation units constructed in the aforementioned areas in China, 18 units with a total capacity of 826 megawatts are currently in operation. These projects are currently generating additional revenue from the clean development mechanism (CDM) business.

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 in April 2007. As of December 31, 2011, the total installed capacity was 5,489 megawatts and our equity ownership in the partnership was 34%, representing 1,867 megawatts in installed capacity.

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$710 million, for which project finance on a limited recourse basis was provided), and (ii) acquisition of a 40.0% equity interest in SPC Power Corporation, an independent power producer operating a 242.5-megawatt Naga power complex in Cebu, the Philippines, in February 2006 for which rehabilitation, operation, maintenance and management was completed in March 25, 2012 followed by six months of operation and maintenance 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 December 24, 2011, our contract to operate and maintain a 650-megawatt oil-fired power plant project in Malaya expired. We are currently in the process of transferring this project to National Power Corporation, a state-owned company in the Philippines. We expect the transfer process to take up to two years.

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$46 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 50 million tons of coal in 2011. 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 20 million tons of coal in 2011. 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.

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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. The consortium 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 involves the construction of 200kV transmission lines with a total length of 325km, and is expected to be completed by the end of 2012.

Bhutan

In April 2011, a consortium led by us entered into an agreement with the Bhutan Electricity Authority for the upgrade of the Semtohka substation and construction of a power transformer for an estimated project cost of US$2.6 million. Due for completion by the end of June 2012, this project is expected to create 63 megavolt-amperes of transformer capacity.

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. Construction for the project began in September 2011 and is expected to be completed in 2013.

In March 2012, our wholly-owned generation subsidiary, KOWEPO, purchased a 22.7 % equity interest in Pioneer Gas Power for a purchase price of approximately US$20 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.

Middle East

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 2036. 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$114 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.

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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 600 megawatts. This project involves two years of construction beginning in April 2012 followed by 25 years of operation upon target completion of the power plant in 2014. Phase I of the project consists of partial completion of construction by May 2013, after which we will begin partial operations of the power plant. The total project cost is currently estimated to be US$800 million, of which approximately 25% will be financed through equity investments by the consortium members and the remaining 75% through debt. We expect to invest US$120 million and hold a 60% equity interest in the consortium. We plan to establish a subsidiary for the purpose of participating in the consortium.

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. The project s target completion date is 2013 and the project will involve operation of the plant for 20 years with an estimated project cost of US$2.5 billion. We are expected to hold a 40.0% equity interest in the joint venture which will oversee the project. On July 11, 2009, we entered into a power purchase agreement with Saudi Electricity Company to construct and operate a heavy oil power plant at Rabigh in Saudi Arabia.

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 Braka, 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 an operation company to be 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.

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 until March 2039. 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%), subject to further change. The total amount of our equity investment in the project is expected to be approximately Won 60.4 billion, and we are participating in this project through a special purpose vehicle.

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North America

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.

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 U$8 million. As a result of this acquisition, we hold approximately 14% of the equity interests of Strathmore. Under this agreement, we have 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 U$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.

Canada

On December 14, 2007, a consortium consisting of four Korean companies, namely us, Korea Resources Corporation, Hanwha Corporation and SK Energy 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

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interest. Subsequent to the exercise of the Back-In Option, the consortium and Fission Energy Corp. is required to make estimated cash contributions for the project on the basis of their respective equity interest.

On June 15, 2009, we, together with KHNP, entered into a definitive agreement with Denison Mines Corporation (Denison) under which we currently hold a 15.1% 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 159 metric tons of uranium in 2011 and expect such amounts to increase in the near future.

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 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.

Australia

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 4.7% 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 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 2011 Moolarben produced 5 million tons of coal, of which we imported 2.5 million tons in 2011. Our four generation subsidiaries have a coal off-take agreement for a total of 2.5 million tons of coal per annum.

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 7.5 million tons of bituminous coal per year from this mine during the period from 2016 to 2045. We and Cockatoo are currently undergoing a feasibility study for this project to explore and develop coal that is of export quality.

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Africa

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 and the case is currently pending in court.

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.

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.

Europe

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 Kansai Electric Power in Japan and Suez Energy International in Belgium have also acquired 2.5% and 5.0% 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.

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

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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.

As of December 31, 2011, we supplied electricity to 232 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.

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. 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. Other than KHNP, neither we nor our generation subsidiaries separately insure against terrorist attacks.

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

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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. KHNP maintains a nuclear liability insurance for personal injury and third-party property damage for a coverage of up to Won 50 billion per accident per plant complex, for a total coverage of Won 250 billion. 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$461 million, at the rate of 1 SDR = US$1.5357 as posted on the Internet homepage of the International Monetary Fund on March 12, 2012, 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

We currently transmit and distribute substantially all of the electricity in Korea. In addition to us, under the Community Energy System there are also 12 other entities in Korea that are licensed to supply electricity in limited geographical areas, but their aggregate market share has to-date been insignificant. 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 Knowledge Economy 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, 2012, 14 districts were using this system and one other district was preparing to launch it and there were 12 independent entities that are licensed to distribute electricity in all of such 15 districts, to which we also transmit and distribute electricity. The generation capacity installed or under construction of the electricity suppliers in these 15 districts amounted to approximately 1% of the aggregate generation capacity of our generation subsidiaries as of March 31, 2012. 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 16 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 market position in the generation and distribution of electricity in Korea, which has been virtually monopolized by us until recently, and may have a material adverse effect on our business, growth, revenues and profitability.

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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;

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, 2011, the legal reserve was Won 1,604 billion, the reserve for business expansion was Won 15,949 billion, and the reserve for investment of social overhead capital was Won 5,277 billion.

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We are under the supervision of the Ministry of Knowledge Economy, 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, 2012, we and 12 other electricity suppliers (we nationally and the 12 other suppliers for a total of 15 districts) have obtained a license for the distribution of electricity under the Community Energy System as authorized by the Korea Electricity Commission and approved by the Minister of Knowledge Economy 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.

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	Net asset value / book value as of December 31, 2011	Ownership percentage as of December 31, 2011	Ownership percentage to be sold
		(in billions of Won)		
KEPCO Plant Service & Engineering Co., Ltd.	Overhauling and repairing power plants	494[1]	75.0%	15.0%
KEPCO Engineering & Construction Co., Inc	Designing and engineering power plants	380[1]	74.9%	16.9%
LG Uplus Corp.	Electronics, telecommunications and Internet access services	284[2]	7.5%	7.5%
Korea Electric Power Industrial Development Co., Ltd.	Electricity metering	21[3]	29.0%	29.0%

Notes:

(1) Represents net asset value of a consolidated subsidiary.
(2) Represents book value recorded by us as an available-for-sale financial asset as of December 31, 2011.
(3) Represents book value recorded by us as an investment in associate as of December 31, 2011.

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 an additional 5.0% of KPS shares through a block sale and plan to sell an additional 15.0% of KPS s equity interest by the end of 2012 subject to prevailing market conditions. We expect to maintain control of KPS subsequent to the planned sale. As such, KPS is expected to remain as our consolidated subsidiary.

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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 and currently own 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 plan to sell an additional 20.0% equity interest in KEPCO E&C by the end of 2012, subject to prevailing market conditions, and in furtherance of such plan, on November 29, 2011, we sold an additional 3.08% of our shares in KEPCO E&C to third party investors for gross proceeds of approximately Won 101 billion. Following such sale, we currently hold 74.9% equity interest in KEPCO E&C. We expect to maintain control of KEPCO E&C subsequent to the planned sale. As such, KEPCO E&C is expected to remain as our consolidated company.

LG Uplus Corp.

We currently own a 7.46% 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, 2011, we had 66 subsidiaries, 30 associates and 22 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 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

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Note 18 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, 2011.

	Ownership (Percent)	Principal Activities
Associates:		
Daegu Green Power Co., Ltd.	41.0	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.[1].	15.0	Wind power generating
Hyundai Green Power Co. Ltd.	29.0	Generating electricity
AMEC Partners Korea[2]	19.0	Resources development
Hyundai Energy Co., Ltd.	29.0	Power generation
Ecollite Co. Ltd.	33.5	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
Gyeongju Wind Power Co., Ltd.	30.0	Power generation
KNH Solar Co., Ltd.	27.0	Power generation
SPC Power Corporation	40.0	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.[3].	14.6	Oil and gas exploration in Nigeria
KNOC Nigerian West Oil Co., Ltd.[3]	14.6	Oil and gas exploration in Nigeria
Dolphin Property Limited[3]	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[4]	100.0	Management of power market
Joint ventures:		
Canada Korea Uranium Limited Partnership[5].	12.5	Resources development
KEPCO-Uhde Inc.[6]	66.0	Power generation
Eco Biomass Energy Sdn. Bhd.	40.0	Power generation
Datang Chaoyang Renewable Power Co., Ltd.	40.0	Power generation
Shuweihat Asia Power Investment B.V.	49.0	Holding company
Shuweihat Asia Operation & Maintenance Company[6]	55.0	Maintenance of utility plant
Waterbury Lake Uranium LP	40.0	Resources development
ASM-BG Investicii AD	50.0	Power generation
RES Technology AD	50.0	Power generation
KV Holdings, Inc.	40.0	Power generation
Kings Plaza JV, LLC[6]	75.0	Power generation
KEPCO SPC Power Corporation[6]	76.0	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.	43.4	R&D
Busan Shinho Solar power Co., Ltd.	20.0	Power generation
STX Electric Power Co., Ltd.	49.0	Power generation

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Notes:

(1) Although we hold less than 20% of the equity shares of Gangwon Wind Power Co., Ltd., we may exercise significant influence over the company due to our ability to appoint directors to the board of directors and our indirect control over the management of its financial and operating policies.
(2) Although we hold less than 20% of the equity shares of AMEC Partners Korea, we may exercise significant influence over the company due to our ability to appoint a director to the board of directors.
(3) Although we hold less than 20% of the equity shares in this company, we may exercise significant influence over the company due to our ability to appoint one out of four members of the steering committee. In addition, we engage in significant financial transactions with the company which further results in our indirect influence on the company.
(4) We hold 100% of the equity shares of Korea Power Exchange and we exercise some control over the company due to our ability to nominate directors to the board of directors. However, Korea Power Exchange is not classified as our subsidiary because the Korean Government has the ability to appoint directors to the board of directors.
(5) Although we hold less than 20% of the equity shares of Canada Korea Uranium Limited Partnership, we posses joint control of the company due to our ability to appoint directors to the board of directors and our indirect control over the management of its financial and operating policies.
(6) We hold over 50% of the equity shares of the company. However, pursuant to the terms of the joint venture agreement, all material decisions require the consent of each of the parties to the joint venture agreement, each of whom has equal voting rights in the board of directors. For these reasons, the company is classified as a joint venture.

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, 2011, the net book value of our property was Won 112,385 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).

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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 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 2012 and beyond. In part to address these concerns, the Government from time to time increases the electricity tariff rates (most recently in August 2010 and August and December 2011). 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 Knowledge Economy 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. However, due to inflationary and other policy considerations, the Ministry of Knowledge Economy has for the time being suspended applying the fuel cost-based adjustment, and such adjustment amount (which has been a positive amount since the adoption of the new tariff system due to the continued rise in coal, LNG and oil prices) is currently being recorded as accounts receivable pending the commencement of the application of the fuel cost-based adjustment. See Electricity Rates.

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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.

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 5.5% per annum for the five years ended December 31, 2011. According to The Bank of Korea, the compounded growth rate for real gross domestic product, or GDP, was approximately 3.5% during the same period. The GDP increased, on a year-on-year basis, by 6.2% in 2010 and by 3.6% in 2011.

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).

	2007	2008	2009	2010	2011
Growth in GDP (at 2006 constant prices)	5.1%	2.3%	0.3%	6.2%	3.6%
Growth in electricity consumption	5.7%	4.5%	2.4%	10.1%	4.8%

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 (including the agricultural 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 2011. Demand from the industrial sector increased by 8.1% to 251,491 gigawatt hours in 2011 from 2010, largely due to the continued export-led growth of the Korean economy backed by greater utilization of industrial plants.

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 increased by 2.1% to 99,504 gigawatt hours in 2011 from 2010, 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 decreased by 0.9% to 82,130 gigawatt hours in 2011 from 2010. In 2011, 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 and other electrical appliances. Residential demand for electricity decreased in 2011, largely due to the relatively less warm summer in 2011 compared

to 2010 resulting in reduced use of air conditioning in 2011, which more than offset increased electricity demand from greater electric heater usage during the winter of 2011 due to the relatively colder winter compared to 2010.

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

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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 2010 and 2011. While as of March 31, 2012, there were 12 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 transmission and distribution capacity accounted for approximately 1% of our capacity. 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 16 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 to our end-users, our generation subsidiaries accounted for 91.5% and 88.9% in 2010 and 2011, 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.

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 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, and for the period since 2006, our actual rates of return have been lower than the fair rate of return largely to a general increase in fuel costs and higher facility investment costs. 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 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 night 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.

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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 night 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 night power usage tariff.

Further to the announcement by the Ministry of Knowledge Economy 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 will also have a third component of fuel cost-adjusted rate, which will be added to or subtracted from the sum of the base rate and the usage rate based on the movements of coal, LNG and oil prices. The fuel cost-related adjustment will be made on a monthly basis based on the three-month average fuel cost which is reflected as fuel-cost adjustment fees 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 Knowledge Economy has for the time being suspended applying the fuel cost-based adjustment, and such adjustment amount (which has been a positive amount since the adoption of the new tariff system due to the continued rise in coal, LNG and oil prices) is currently being recorded as accounts receivable pending the commencement of the application of the fuel cost-based adjustment. There is no assurance as to when the Government will commence applying the fuel cost-based adjustment and reflect the adjustment amount in the electricity tariff payable to us, or whether the new tariff system will undergo further 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 Sales and Customers Electricity Rates and Item 4B. Recent Developments Implementation of the Fuel Cost-based Tariff System.

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 45.1% and 48.2% of our sales and 49.3% and 48.7% of our cost of sales in 2010 and 2011, 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

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

Uranium accounted for 34.1% and 34.2% of our fuel requirements in 2010 and 2011, respectively. Coal accounted for 45.5% and 45.4% of our fuel requirements in 2010 and 2011, respectively. LNG accounted for 16.6% and 16.8% of our fuel requirements in 2010 and 2011, respectively. Oil accounted for 2.5% and 2.2% of our fuel requirements in 2010 and 2011, 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 2011, approximately 75.9% of the bituminous coal requirements of our generation subsidiaries were purchased under long-term contracts and 24.1% purchased on the spot market. The average free on board Newcastle coal price index was US$120.5 per ton in 2011 and decreased to US$104.0 per ton as of April 17, 2012. If the bituminous coal price rises again 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. Furthermore, there have been recent increases in crude oil prices that may lead to an increase in the price of commodity oil that we use, thereby resulting in higher 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 check-up and overhauls lasting 20 to 30 days. 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 coal-fired 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 or does not increase it to a level to sufficiently offset the impact of rising fuel prices, the price increases will significantly narrow our profit margins or even cause us to suffer net losses and our business, financial condition, results of operations and cash flows would seriously 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 was Won 1,134.2 on April 13, 2012. While Won has recently been appreciating against U.S. dollar and other foreign currencies, there were times in the past when it underwent steady depreciation, which resulted in a significant increase in the cost of fuel materials and equipment purchased from overseas as well as the cost of servicing our

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foreign currency debt. As of December 31, 2011, approximately 23.2% of our long-term debt (including the current portion and discounts on debentures but excluding premium on debentures) before accounting for swap transactions was denominated in foreign currencies, principally in U.S. dollar, Yen and Euro. 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

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

Historically, we prepared our financial statements in accordance with Korean GAAP. As of January 1, 2011 (the date of transition), we have adopted IFRS as issued by IASB, and prepared our first consolidated financial statements in accordance with IFRS 1 First-time of adoption of IFRS.

Starting on January 1, 2011, we have prepared our consolidated financial information in accordance with IFRS. A description of the principal differences between our previous accounting standards and IFRS and the impacts of transition to IFRS is as follows (also see paragraph 4 below):

(1) IFRS 1 *First-time of adoption of IFRS* Optional exemptions
IFRS 1 provides for a number of optional exemptions from the general principle of full retrospective applications. Our optional exemptions for first-time adoption of IFRS are as follows:

(a) Business combination
We have elected not to apply IFRS 3, *Business Combinations* retrospectively to past business combinations that occurred before January 1 2010, the date of transition to IFRS.

(b) Fair value or revaluation as deemed cost
Land, property, plant and equipment have been revalued at the date of transition to IFRS and that revaluation is used as the asset s deemed cost.

Effect of revaluation in certain land, property, plant and equipment as of January 1, 2010 are as follows

(KRW in millions):

Korean GAAP	Revaluation increase	IFRS
(Won) 74,033,431	(Won) 21,839,510	(Won) 95,872,941

(c) Cumulative translation differences
Cumulative translation differences for all foreign operations were deemed to be zero at the date of transition to IFRS.

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(d) Leases

We have elected to apply the transitional provisions in International Financial Reporting Interpretations Committee (IFRIC) 4, *Determining Whether an Arrangement Contains a Lease* (IFRIC 4), thereby determining whether we have any arrangements that exist at the date of transition to IFRS that contain a lease on the basis of facts and circumstances existing at January 1, 2010. No such arrangements were identified.

(e) Investments in subsidiaries, associates, and joint ventures

For certain investments in foreign subsidiaries, associates, or joint ventures, who have previously adopted IFRS, we recognized the carrying values on the respective entity s books, as of date of transition, as deemed cost.

(f) Decommissioning liabilities included in the cost of property, plant and equipment

In accordance with IFRIC 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities*, specified changes in a decommissioning, restoration or similar liability are added to or deducted from the cost of the asset to which it relates, and the adjusted depreciable amount of the asset is then depreciated prospectively over its useful life.

(2) Exceptions to retrospective application of other accounting standards.

(a) Derecognition of financial assets

We applied derecognition criteria listed in IAS 39 *Financial Instruments: Recognition and derecognition* for transfer of financial assets for transfers after the transition date. For any derecognized financial assets in accordance with past accounting standards before the date of transition, we did not retrospectively recognize such assets in accordance with IFRS, even if it does not satisfy the derecognition criteria under IFRS.

(b) Exception for estimates

Unless there is objective evidence that estimates were in error, we applied estimates which are estimated before the date of transition to be consistent with estimates made for the same date under Korean GAAP, after adjustments to reflect any difference in accounting policies.

(3) Explanation of transition to IFRS

Korean GAAP	IFRS
Scope of consolidation (*1)	
The definition of control is similar to those in IFRS. However, some of the scope of consolidation is restricted by the Act on External Audit of Stock Companies as below.	Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. All entities controlled by us are consolidated regardless of quantitative significance. As a result, at transition date to IFRS, our change in scope of consolidation as compared with those of Korean GAAP.

An entity that another entity owns more than 30% of shares as the largest shareholder is included in consolidation.

A subsidiary with less than 10 billion Won in its total assets as of the previous fiscal year end is excluded from consolidation.

An unincorporated entity such as a partnership is excluded from consolidation

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Korean GAAP	IFRS
Property, plant and equipment	
Under Korean GAAP, we use the cost model in the measurement after initial recognition.	We revalued our property and equipment as at January 1, 2010 and used their fair values as deemed cost in the opening IFRS statement of financial position.
The depreciation method is required to be applied consistently at each period and cannot be changed unless there are justified reasons. For a newly acquired asset, the same depreciation methods applied to the existing, similar assets are applied consistently.	For the measurement after initial recognition, IAS 16, Property, Plant and Equipment allows for an entity to choose either the cost model or the revaluation model by the class of property and equipment and we have chosen the cost model.
	The residual value, the useful life and the depreciation method of property and equipment are required to be reviewed at least at each financial year-end and, if expectations differ from previous estimates, the changes should be accounted for as a change in an accounting estimate in accordance with IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors.
	We changed our depreciation method of equipment from a declining balance method to a straight-line method in connection with the adoption of IFRS.
Revenue recognition	
Under Korean GAAP, we read meters and bill customers on a cycle basis. We did not accrue revenue for power sold to customers between the meter-reading date and end of the reporting period but recorded the revenue in the subsequent period. Such practice was consistent with the Accounting Regulations for Public Enterprise Associated Government Agency, which has been approved by the Korean Ministry of Strategy and Finance (formerly the Korean Ministry of Finance and Economy) and considered by the utility industry in Korea as Korean GAAP.	Under IFRS, we estimate and recognize unbilled revenue related to the sale of power between the meter-reading dates and the end of the reporting period.
Retirement benefit obligation & long-term employee benefits obligation	
Allowances for retirement benefits accrued equal to the amounts to be paid at the end of reporting period, assuming that the all entitled employees with a service year more than a year would retire at once. Retirement benefit expenses incur at the point when the payment obligation is fixed. We recognized allowances for long-term employee	The retirement benefit amount is appropriated as a defined benefit obligation by actuarial assessment using the projected unit credit method. Also, we recognize our long-term employee benefits obligation by actuarial assessment using the projected unit credit method.

benefit at the point when the payment obligation is fixed.

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Korean GAAP	IFRS
Income tax	
Under Korean GAAP, deferred tax assets and liabilities were classified as either current or non-current based on the classification of their underlying assets and liabilities assuming that all differences from one entity are recovered or settled together. If there are no corresponding assets or liabilities, deferred tax assets and liabilities were classified based on the periods the temporary differences were expected to reverse.	Under IFRS, deferred tax assets and liabilities are all classified as non-current on the statement of financial position.
Under Korean GAAP the temporary differences associated with investments in subsidiaries, branches and associates and interest in joint ventures were recognized as deferred tax assets and liabilities.	Under IFRS, the temporary differences associated with investments in subsidiaries, branches and associates and interest in joint ventures is recognized as deferred assets and liabilities reflecting the manner in which Company expects to recover or settle the carrying amount of its assets and liabilities.
Financial assets measurement and impairment	
Our available-for-sale securities, loans & receivables and other financial assets are measured at fair value. Under Korean GAAP, expected loss was estimated and set as allowance for doubtful accounts based on our evaluation of loans and receivables collectability.	Under IFRS, we review whether or not impairment exists for individually significant loans and receivables. For other loans and receivables, we group loans and receivables which have similar credit risks, performs collective impairment test, and estimates the incurred loss as allowance for doubtful loans and receivables.
Construction contracts	
Under Korean GAAP, there was no concept of recognizing the gross amount due from or due to customers as an asset or liability.	Under IFRS, the due from or due to customers amount which is the net amount of cost incurred plus recognized profits, less the sum of the recognized losses and progress billing. If the costs incurred plus recognized profit (or losses) exceeds progress billings a due from customer amount is recognized as an asset, and if the progress billing exceeds the cost incurred plus recognized profit (or losses) a due to customer amount is recognized as a liability.
Other reclassifications	
i. Memberships and guarantee deposits Under Korean GAAP memberships and guarantee deposits were classified as other non-current assets.	Under IFRS facility-use memberships are recognized as intangible assets with an indefinite useful life and guarantee deposits that satisfy the definition of financial assets are classified as loans and receivables at amortized costs.
ii. Investment property and intangible assets Under Korean GAAP, properties acquired for earn rental income and/or for capital appreciation (including property under construction for such purposes) were classified as property, plant and equipment.	Under IFRS, such properties are reclassified separately as investment properties and for property under construction with intangible asset type items are classified separately within

intangible assets.

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(*1) As of January 1, 2010, the date of transition to IFRS, our change in scope of consolidation is as follows:

Type	Description	Company
Newly Added	Under the former Act on External Audit of Stock companies Article 1.3 Section 2.1 in the Republic of Korea, companies those whose total assets are less than 10 billion Korean won were not subject to consideration, However, under IFRS all entities are subject to consolidation.	KEPCO Canada Uranium Investment Limited Partnership
		KEPCO Middle East Holding Company
		Qatrana Electric Power Company
		Sylardus Holdings B.V.
		Akkuyu Finance B.V.
		Akkuyu Fuel B.V.
		Akkuyu Operation B.V.
		Korea Electric Power Nigeria Ltd.
		KOWEPO International Corporation
		KOSPO Jordan LLC
		EWP Cebu Corporation
		KOREA Waterbury Uranium Limited Partnership
		Akkuyu Electricity Production Company
Excluded	Under the former Act on External Audit of Stock companies Article 1.3 Section 2.1 in the Republic of Korea, entities where we own more than 30% of shares and is the largest shareholder with the largest voting rights were included in the scope. Under IFRS no such exceptions exist.	KEPCO SPC Power Corporation.
		(formerly KEPCO Salcon Power Corporation)