

HUANENG POWER INTERNATIONAL INC  
Form 6-K  
April 27, 2012

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16 of  
The Securities Exchange Act of 1934

For the month of April, 2012

(Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.)

Form 20-F  Form 40-F \_\_\_\_\_

(Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.)

Yes \_\_\_\_\_ No

(If "Yes" is marked, indicate below the file number assigned to registrant in connection with Rule 12g3-2(b):

82-\_\_\_\_\_. )

N/A

Huaneng Power International, Inc.  
Huaneng Building,  
4 Fuxingmennei Street,  
Xicheng District,  
Beijing, 100031 PRC

This Form 6-K consists of:

A copy of 2011 annual report filed with the Stock Exchange of Hong Kong Limited by Huaneng Power International, Inc. (the "Registrant").

---

Contents

2	Company Profile
6	Major Corporate Events in 2011
10	Financial Highlights
13	Letter to Shareholders
20	Management's Discussion and Analysis
42	Corporate Governance Report
55	Social Responsibility Report
63	Investor Relations
67	Report of the Board of Directors
89	Report of the Supervisory Committee
93	Profiles of Directors, Supervisors and Senior Management
101	Corporate Information
104	Glossary

Financial statements prepared in  
accordance with International  
Financial Reporting Standards

105	Independent Auditor's Report
107	Consolidated Statement of Comprehensive Income
109	Balance Sheets
111	Consolidated Statement of Changes in Equity
113	Statement of Changes in Equity
115	Consolidated Statement of Cash Flows
117	Notes to the Financial Statements

Financial statements prepared in  
accordance with PRC  
Accounting Standards

221	Report of the Auditor
223	Balance Sheets
225	Income Statements
226	Cash Flow Statements
228	Consolidated Statement of Changes in Equity
229	Statement of Changes in Equity
230	Notes to the Financial Statements
361	Supplemental Information to the Financial Statements

## Company Profile

Huaneng Power International, Inc. (“the Company”, “Huaneng Power” or “Huaneng International”) and its subsidiaries are mainly engaged in developing, constructing, operating and managing large-scale power plants throughout China. As at 20 March 2012, the Company is one of China’s largest listed power producers with equity-based generation capacity of 55,350 MW and controlling generation capacity of 60,375 MW, and its domestic power plants are located in 19 provinces, municipalities and autonomous regions. The Company also has a wholly-owned power company in Singapore.

The Company was incorporated on 30 June 1994. It completed its initial global public offering of 1,250,000,000 overseas listed foreign shares (“foreign shares”) in October 1994, which were listed on the New York Stock Exchange (NYSE: HNP) in the United States by issuing 31,250,000 American Depository Shares (“ADS”). In January 1998, the foreign shares of the Company were listed on the Stock Exchange of Hong Kong Limited (the “Hong Kong Stock Exchange”) by way of introduction (Stock Code: 902). Subsequently, in March 1998, the Company successfully completed a global placement of 250,000,000 foreign shares along with a private placement of 400,000,000 domestic shares. In November 2001, the Company successfully completed the issue of 350,000,000 A Shares in the PRC, of which 250,000,000 shares were domestic public shares. In December 2010, the Company completed the non-public issuance of 1,500,000,000 ordinary shares in RMB (“A Shares”) and 500,000,000 overseas listed ordinary shares (“H Shares”). Currently, the total share capital of the Company amounts to approximately 14.06 billion shares.

The core business of the Company is to develop, construct, and operate large-scale power plants by making use of modern technology and equipment and financial resources available domestically and internationally. As a power generation enterprise, the Company has been insisting on innovations in technologies, structure, management since its incorporation; and on aspects regarding the advancement in power technologies, power plant facilities and mode of management, etc.. The Company has been the pioneer and created various milestones within the domestic industry. The Company was the first to introduce a 600 MW supercritical coal-fired generating unit into China while its Huaneng Dalian Power Plant was the first one to be awarded the honor of “First Class Coal-fired Power Plant” in China. The generating unit 1 at Huaneng Yuhuan Power Plant is the first operating single 1,000 MW ultra-supercritical coal-fired generating unit in China, Huaneng Yuhuan Power Plant was the first domestically built 1,000 MW ultra-supercritical coal-fired power plant in China that was put into commercial operation, Huaneng Jinling Power Plant has constructed the first digitalized 1,000 MW domestic ultra-supercritical coal-fired generating unit, and the generating unit 1 at Huaneng Haimen Power Plant was the first 1,000 MW generating unit in the world using sea water desulfurization facilities. The Company was the first power company in China to get listed in New York, Hong Kong and Shanghai. The overall manpower efficiency of the Company has been remaining at the forefront in China’s power industry. The Company has fastened its pace to transform modes of development and improve quality of the expansion plans. The Company constantly optimizes the power structure and regional distribution, give priority to thermal power development, and constructs efficient, environmentally friendly units and large-scale thermal power base in developed areas. We also strive to promote development of efficient wind power projects and investment in hydropower and nuclear power projects. Meanwhile, the Company actively promoted the industry synergy, increased the investment in coal, port and sea transportation and upgraded the capability in the self-supply of coal, port storage, trans-shipment and the sea transportation. The combined synergy in power, coal, port and transportation is basically formulated.

Throughout the years, with efforts in seeking expansion and operating the business in a prudent manner, the Company has expanded gradually, with steady profit growth and increasing competitive strengths. The success of the Company is attributable to the following competitive advantages: firstly, advanced equipment, highly efficient generating units and stable operation of power plants; secondly, high-quality staff and experienced management; thirdly, a disciplined corporate governance structure and rationalized decision-making mechanisms; fourthly, geographical strategic advantages of the locations of the power plants which present promising prospects in the power market; and fifthly, good credit standing and reputation domestically and internationally and rich experience in the capital markets.

The objectives of the Company are: as a power company, devoted to providing sufficient, reliable and eco-friendly energy to the community; as a listed company, devoted to creating long-term, stable and increasing returns for shareholders; and as a first class power corporation, devoted to becoming a leading power enterprise in China and an advanced enterprise internationally.

Huaneng International Power Development Corporation (“HIPDC”), the Company’s parent company and controlling shareholder, was incorporated as a Sino-foreign joint stock company in 1985. The Company was incorporated by way of joint promotion by HIPDC and local government investment companies in the regions where the power plants are located.

## Major Corporate Events in 2011

### January

- \* The Company announced the acquisition of the entire shareholding in the Liaoning Fushun Suzihe Hydropower Development Company Limited with an aggregate consideration of RMB50 million.
- \* Generating unit 5 of Hunan Yueyang Power Plant, the Phase I Project of Hebei Kangbao Wind Power Plant and the first stage of the Phase II Project of Jiangsu Qidong Wind Power Plant have respectively completed the trial run.
- \* The Company completed the issue of the first tranche of the short-term notes for 2011 and the total issuing amount was RMB5 billion.
- \* The Company announced that its total power generation within China for 2010 rose 26.25% from a year ago.

### February

- \* The Huaneng Liaoning Changtu Taiping Wind Power Project had been approved.

### March

- \* The Company announced the operating results for the year ended 2010 in accordance with International Financial Reporting Standards. The Company recorded a net profit attributable to equity holders of RMB3.348 billion, representing a decrease of 32.08% from a year earlier.

### April

- \* The Company announced the release of the conditions of restricted shares held by China Huaneng Group and HIPDC.
- \* The Company announced that for the first quarter in 2011, the Company's total power generation within China recorded a growth of 28.77% from the same period of the previous year.
- \* The Company announced that net profit attributable to equity holders for the first quarter of 2011 was RMB226 million under the PRC Accounting Standards, representing a decrease of 76.25% from the same period of last year.

### May

- \* The Company announced the results of the election of the Seventh session of the Board of Directors, the Supervisory Committee and other committees of the Board.
- \* The Company ranked 57th on the "Top 100 Chinese Listed Companies for 2010" list compiled by China Business Top 100.

### June

- \* The Company announced the adjustments of tariffs of its power plants that the estimated on-grid tariff for the Company's generation units in 2011 would increase by RMB0.93 cent/kWh.
- \* The Huaneng Jinling Combined Cycle Cogeneration Project had been approved.
- \* The Company announced the transfer of the entire shareholding in Huaneng Jilin Biological Power Generation Limited Company for a consideration of RMB106 million.

### July

\* The Company announced that for the first half 2011, the Company's total power generation within China rose 28.25% over the same period in 2010.

- \* On the list of “Chinese Fortune 500 companies” compiled by the American magazine “Fortune” in 2011, the Company ranked 29th and was the only listed firm making it to the top 30 in domestic power industry.
- \* At the CPEM Annual Conference jointly organized by China Electricity Council and State Grid Corporation of China, the Dalian power plant was awarded the first prize of “Chinese Power Enterprise Standardization Management Award”, while the Taicang power plant won the third prize of the same award.

#### August

- \* The Company announced its interim results in 2011 with RMB1.131 billion of net profit attributable to equity holders under the International Financial Reporting Standards, representing a decrease of 41.48% from the same period of last year.

#### September

- \* The Company completed the issue of the second tranche of the Company’s short-term notes for 2011. The total issuing amount was RMB5 billion.

#### October

- \* The Company announced that its power generation within China in the first three quarters of 2011 increased by 23.85% from a year earlier.
- \* The Company announced that for the first three quarters in 2011, net profit attributable to equity holders of the Company was RMB1.41 billion under the PRC accounting standards, representing a decrease of 55.17% over the same period in 2010.
- \* The Company announced that it had agreed to make a capital contribution of RMB264 million to Huaneng (Tianjin) Coal Gasification Power Generation Co., Ltd. (“Coal Gasification Co.”) in cash. Upon completion of the capital increase, the Company will hold 35.97% of the total equity interests in Coal Gasification Co.

#### November

- \* The Company completed the issuance of the first tranche of non-public issuance of debt financing instruments of 2011. The issuance amount for the debt financing instruments was RMB5 billion.
- \* The Company won the Golden Bauhinia Awards as the most popular listed company among investors in Hong Kong and PRC. The award was jointly organized by Tao Kung Pao, the Hong Kong Chinese Enterprises Association, Chinese Securities Association of Hong Kong, The Hong Kong Institute of Chartered Secretaries, the Listed Companies Association of Beijing and Shanghai Association of Stock System Enterprises.

#### December

- \* The Company announced adjustments on the on-grid electricity tariffs, and the weighted average on-grid electricity tariffs for capacities of the Company’s generating units with tariff adjustments for 2012 would increase by RMB28.8/MWh.
- \* The Huaneng Chongqing Liang Jiang Gas-fired Combined Cooling-Heating-Power Project was approved.





A leading power enterprise in China  
An advanced enterprise internationally

devoted to providing sufficient, reliable and eco-friendly energy; devoted to creating long-term, stable and increasing returns

the Company will increase its efforts in promoting corporate culture development and personnel management, strive for upgrading the Company's industry standing and its influence to the world, and put itself amongst the world's first-class listed power company by leveraging on its comprehensive and integral capabilities.

## Financial Highlights

(Amounts expressed in thousands of RMB, except per share data)

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Note 1)

	Year ended 31 December				
	2007	2008	2009	2010	2011
Operating revenue	49,892,049	67,835,114	76,862,896	104,318,120	133,420,769
Profit/(Loss) before income tax (expense)/benefit	7,319,301	(4,791,556 )	5,703,976	4,164,090	2,050,367
Income tax (expense)/benefit	(838,270 )	239,723	(593,787 )	(842,675 )	(868,927 )
Profit/(Loss) after income tax (expense)/benefit	6,481,031	(4,551,833 )	5,110,189	3,321,415	1,181,440
Attributable to:					
– Equity holders of the Company	6,161,127	(3,937,688 )	4,929,544	3,347,985	1,180,512
– Minority interests	319,904	(614,145 )	180,645	(26,570 )	928
Basic earnings/(loss) per share (RMB/share)	0.51	(0.33 )	0.41	0.28	0.08
Diluted earnings/(loss) per share (RMB/share)	0.51	(0.33 )	0.41	0.28	0.08

## CONSOLIDATED BALANCE SHEETS (Note 2)

	As at 31 December				
	2007	2008	2009	2010	2011
Total assets	124,296,129	165,917,758	197,887,179	227,938,213	257,415,874
Total liabilities	(72,216,487 )	(123,357,805 )	(147,239,059 )	(165,512,741 )	(197,858,121 )
Net assets	52,079,642	42,559,953	50,648,120	62,425,472	59,557,753
Equity holders of the Company	46,928,580	36,829,320	42,124,183	53,789,133	50,882,929
Minority interests	5,151,062	5,730,633	8,523,937	8,636,339	8,674,824

## Notes:

1. The results for the years ended 31 December 2007, 2008, 2009 are derived from the historical financial statements of the Company. The results for the years ended 31 December 2010 and 2011 are set out on pages 107 to 108. All such information is extracted from the financial statements prepared under International Financial Reporting Standards (“IFRS”).

2. The consolidated balance sheets as at 31 December 2007, 2008, 2009 are derived from the historical financial statements of the Company. The consolidated balance sheets as at 31 December 2010 and 2011 are set out on pages 109 to 110. All such information is extracted from the financial statements prepared under IFRS.

House

Consumption Rate

5.03%

Performance Values

of Sulphur Dioxide

0.57 g/kWh

Consumption for

Power Supply

for Coal-fired

Generating Units

312.10 g/kWh

Performance Values

of Nitrogen Oxides

1.55 g/kWh

Strictly complied with the country's environmental regulations, actively fulfilled its environmental responsibilities, promoted technological innovations, enhanced resources utilization efficiency and actively established superior energy saving and environmental friendly coal-fired power plants. In 2011, the Company achieved all of its energy saving and environmental protection objectives, and maintained its primary technical and economic indicators at the forefront both at domestic and international levels.

Letter to Shareholders

Dear Shareholders,

The development objectives of Huaneng Power International are: as a power company, devoted to providing sufficient, reliable and eco-friendly energy to the community; as a listed company, devoted to creating long-term, stable and increasing returns for shareholders; and as a first-class power company, devoted to becoming a leading power enterprise in China and an advanced enterprise internationally.

In 2011, we faced an unfavorable situation with continuous rise in fuel prices and increase in funding costs. The management and all the staff of the Company have made every effort to grasp every opportunity, tackled every difficulty with indomitable perseverance and accomplished results with strenuous effort. The Company made steady progress on the development and construction of its projects over the year, and maintained a stable and safe production environment. The Company remained leading positions in terms of main energy consumption index while it took an active role in exploring new financing channels and strived to minimize finance costs. Meanwhile, the operation of overseas assets have generated significant benefits. As the Company's wholly-owned company, Singapore Tuas Power Co. Ltd., recorded a growth of 85.45% year-on-year in net profit attributable to equity holders for the year, bringing considerable contribution to the total profit of the Company. Nevertheless, due to the increase in fuel prices and Renminbi lending rate, the Company recorded a fall of 64.74% year-on-year in net profit attributable to equity holders for 2011.

The Board of Directors of the Company has resolved to propose the following profit distribution plan for 2011: a cash dividend of RMB0.05 (inclusive of tax) for each share to all shareholders of the Company. In the future, the Company will continue to follow a proactive, balanced and stable dividend policy, keep increasing its profitability and achieve continuous growth of return on equity.

In 2011, the Company further secured its market position and was widely recognized by the market. Given its outstanding performance, the Company was awarded the “Most Popular Listed Company Among Investors in China” granted by the 2011 Golden Bauhinia Awards; the Company continued to remain on the list of “Chinese Fortune 500 Companies” compiled by the American magazine “Fortune” and was ranked 29th; besides, the Company was ranked 57th on the “Top 100 Chinese Listed Companies for 2010” list, and was on the list of “Platts Top 250 Global Energy Listed Companies Award” three years in a row and ranked 127th, and ranked 4th in the category of global independent power producers and energy traders.

During the course of the “12th Five-Year Plan” and future development, the Company will endeavor to build up a first-class listed power company with global competitive edge:

- o with an aim to seek for value growth in its power generation operations, focus on enhancing the quality and efficiency of its development and further strengthen and refine its major power generation operations; continue to optimize its investment decisions and strategies, increase the proportion of high efficiency and large capacity generating units, consolidate and enlarge the Company’s market share in the economically developed regions, and upgrade the value creating ability of the Company’s major power generation operations in general;
- o with an aim to pursue excellence, promote lean production management, tighten cost control, optimize utilization rate of power generating equipment, improve operating efficiency, reach the world’s leading standards of operation and management, and provide unwavering support for the sustainable development and expansion of the Company;
- o take an active role in adjusting and optimizing the structure of the power generating assets. While consolidating the Company’s advantages over its coal and power operation, to promote large scale natural gas power generation and effective wind power generation in an active pace, increase efforts in the development the hydropower and other clean energy, and diversify Company’s structure of power generating assets; and
- o strengthen operational risk control, enhance synergy effect and integration of industry chain; build up and enhance the risk control ability towards international operations, upgrade the capability for investment and financial management, further refine corporate governance for listed companies, improve information disclosure and investor relation management, and attain the world’s leading standards of risk management and corporate governance.

In addition, the Company will increase its efforts in promoting corporate culture development and personnel management, strive for upgrading the Company’s industry standing and its influence to the world, and put itself amongst the world’s first-class listed power company by leveraging on its comprehensive and integral capabilities.

Being a responsible enterprise, we insist on supporting the continued enhancement of our corporate competitive edges through a responsible approach; insist to duly perform our economic responsibilities to provide our shareholders with long-term, stable and growing returns; continue to perform our safety responsibilities with people-oriented and safety development to become the safest enterprise; continue to perform our environmental responsibilities by paying heed to people’s livelihood and clean development to ensure utilization of resources in an efficient and energy saving manner, and turn the Company into a “green corporation”; continue to perform our social responsibilities by creating mutual

benefits and win-win scenarios that are conducive to the harmonious development of the Company and its stakeholders, so that the Company may serve as an excellent corporate citizen.

Finally, we would like to extend our sincere gratitude to all our shareholders for their continuous attention and support to the Company's development.

CAO Peixi  
Chairman

Beijing, PRC  
20 March 2012



Increase Economic Benefits  
Maintain Leading Market Position

Actively dealt with the changes in power, coal and capital markets, made focused efforts to generate profit, and implemented innovative initiatives.

Achieved effective market expansions and explorations while actively pursuing policy supports, realized stable fuels supply and further streamlined fuel supply structure. It has completed construction projects as scheduled and made marked progress in utilization of clean energies.

Conserving Resources  
Protecting the Environment

Attaches importance to social responsibilities and makes active efforts to build a harmonious society.

The Company capitalized on the leading role in the culture of “three-color” companies, insisted on sustainable development, serving the State, benefitting the community, actively assuming social responsibilities, creating a good internal and external environment, jointly promoting social development with the relevant interested parties and sharing corporate development achievements.

MANAGEMENT’S  
DISCUSSION AND ANALYSIS

Since its incorporation, the Company has continued to expand its operating scale, thus increasing its operating revenue. The Company has also been the industry leader in the level of competitiveness, effectiveness of resources utilization and environmental protection. Currently, the Company is one of the largest listed power producers in China.

OPERATING AND FINANCIAL REVIEWS AND PROSPECTS  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
(Prepared under International Financial Reporting Standards ("IFRS"))

Overview

The principal activities of the Company are investment, construction, operation and management of power plants. The Company provides stable and reliable electricity supply to customers through grid operators where the operating plants are located. The Company is committed to scientific development, increasing economic efficiency, enhancing returns for shareholders, conserving resources and protecting the environment. The Company also attaches importance to social responsibilities and makes active efforts to build a harmonious society.

Since its incorporation, the Company has continued to expand its operating scale, thus increasing its operating revenue. The Company has also been the industry leader in the level of competitiveness, effectiveness of resources utilization and environmental protection. Currently, the Company is one of the largest listed power producers in China. Its power generation operations are widely located, covering the Northeast China Grid, the Northern China Grid, the Northwest China Grid, the Eastern China Grid, the Central China Grid, the Southern China Grid, and the overseas market in Singapore.

Looking back in 2011, with strong support of all shareholders and concerted efforts of the employees, as well as commitment to increasing economic benefits based on scientific and improved development, the Company has actively dealt with the changes in power, coal and capital markets, made focused efforts to generate profit, and implemented innovative initiatives to maintain leading market position. The Company's safely production environment is generally stable and the main technical and economic indicators are maintained as a leader in the industry. The Company achieved effective market expansions and explorations while actively pursuing policy supports, realized stable fuels supply and further streamlined fuel supply structure. It has completed construction projects as scheduled and made marked progress in utilization of clean energies. In the meantime, the Company continued to diligently fulfill its social responsibilities to provide sufficient, reliable and clean electric power and achieved new progress on energy saving, project construction, generating units renovation and environmental protection.

A. Operating Results

1. 2011 operating results

The Company completed acquisitions of Diandong Energy, Diandong Yuwang, Luoyuanwan Harbor, Luoyuanwan Pier, Ludao Pier, Suzihe Hydropower and Enshi Hydropower in 2011. These seven companies are consolidated into the consolidated financial statements for the year ended 31 December 2011 of the Company.

Total Revenue  
RMB133.421 billion  
increase 27.90%



Total Power Generation  
313.6 billion kWh  
increase 22%

Total Assets  
RMB257.416 billion  
increase 12.93%

The power generated of the Company's domestic power plants for the year ended 31 December 2011 was listed below (in billion kWh):

Domestic Power Plant	Power generation of 2011	Power generation of 2010	Change	
<b>Liaoning Province</b>				
Dalian	6.805	7.912	-13.99	%
Dandong	3.204	3.864	-17.08	%
Yingkou	8.678	9.850	-11.90	%
Yingkou Co-generation	3.137	3.669	-14.50	%
Wafangdian Wind Power	0.066	—	—	
<b>Inner Mongolia</b>				
Huade Wind Power	0.136	0.130	4.62	%
<b>Hebei Province</b>				
Shang'an	14.473	14.098	2.66	%
Kangbao Wind Power	0.0003	—	—	
<b>Gansu Province</b>				
Pingliang	12.214	8.945	36.55	%
<b>Beijing</b>				
Beijing Co-generation	4.887	4.704	3.89	%
Beijing Co-generation (Combined Cycle)	0.004	—	—	
<b>Tianjin</b>				
Yangliuqing Co-generation	6.956	6.439	8.03	%
<b>Shanxi Province</b>				
Yushe	4.180	4.889	-14.50	%
<b>Shandong Province</b>				
Dezhou	14.518	16.143	-10.07	%
Jining	4.852	5.271	-7.95	%
Xindian	3.313	3.657	-9.41	%
Weihai	11.128	4.212	164.20	%
Rizhao Phase II	8.173	8.152	0.26	%

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Zhanhua Co-generation1	1.587	0.206	670.39	%
Henan Province				
Qinbei	15.146	13.961	8.49	%

Domestic Power Plant	Power generation of 2011	Power generation of 2010	Change	
<b>Jiangsu Province</b>				
Nantong	9.086	8.643	5.13	%
Nanjing	3.981	3.759	5.91	%
Taicang	11.373	11.624	-2.16	%
Huaiyin	7.370	8.048	-8.42	%
Jinling (Combined-cycle)	3.740	2.434	53.66	%
Jinling (Coal-fired)	11.884	6.458	84.02	%
Qidong Wind Power	0.286	0.214	33.64	%
<b>Shanghai</b>				
Shidongkou First	7.681	7.566	1.52	%
Shidongkou Second	7.412	6.510	13.86	%
Shanghai Combined-cycle	1.266	1.650	-23.27	%
Shidongkou Power	6.862	5.002	37.19	%
<b>Chongqing</b>				
Luohuang	15.560	12.535	24.13	%
<b>Zhejiang Province</b>				
Changxing2	—	1.077	—	
Yuhuan	26.768	23.440	14.20	%
<b>Hubei Province</b>				
Enshi Hydropower3	0.0001	—	—	
<b>Hunan Province</b>				
Yueyang	10.679	5.786	84.57	%
<b>Jiangxi Province</b>				
Jinggangshan	9.485	8.252	14.94	%
<b>Fujian Province</b>				
Fuzhou	16.905	8.802	92.06	%
<b>Guangdong Province</b>				
Shantou Coal-fired	7.085	7.036	0.70	%
Haimen	15.213	12.012	26.65	%
<b>Yunnan Province</b>				
Diandong Energy4	11.648	10.962	6.26	%
Yuwang Energy4	5.813	6.185	-6.02	%
<b>Total</b>	<b>313.554</b>	<b>256.950</b>	<b>22.03</b>	<b>%</b>

1. Shandong Zhanhua Co-generation acquired by the Company was consolidated into the Company's consolidated accounts since December 2010. The figures for 2010 represented the power generation in December 2010.

2. Changxing Power Plant in Zhejiang Province had ceased operation.
3. Hubei Enshi Hydropower was consolidated into the Company's consolidated accounts since 30 December 2011.
4. The figures representing the power generation of Yunnan Diandong Energy and Yuwang Energy in 2010 were for information only. These figures had not been included in the calculation of the total figures for the Company's power generation in 2010.

In 2011, the power generated by Singapore operations accounted for 27.12% of the total power generated in Singapore, increased by 1.91 percentage points from 2010.

In respect of the tariff, the average tariff of domestic power plants for the year ended 31 December 2011 was RMB430.10 per MWh, an increase of RMB8.44 per MWh from the year ended 31 December 2010.

In respect of fuel supply and cost controls, the increase of fuel price and power generation contributed to an increased fuel cost of the Company. Compared to last year, the unit fuel cost of power sold of the Company's domestic power plants increased by 9.24% to RMB270.37 per MWh.

Combining the forgoing factors, the operating revenue of the Company and its subsidiaries for the year ended 31 December 2011 increased by 27.90% from last year. The Company and its subsidiaries recorded a net profit attributable to equity holders of the Company of RMB1.181 billion, decreased by 64.74% compared to the net profit attributable to equity holders of the Company of RMB3.348 billion for the year ended 31 December 2010.

For the year ended 31 December 2011, the profit attributable to equity holders of the Company from domestic operations was RMB-0.101 billion, decreased by RMB2.758 billion compared to last year. The decrease was primarily due to the increase in fuel price in China and the increase of RMB borrowing interest rates. The increase of fuel price was mainly because of the increase of coal demand in the market and the increase of coal price. The increase of RMB borrowing interest rates was resultant from consecutive raise of benchmark lending interest rates by the People's Bank of China (PBOC) during 2010 and 2011.

For the year ended 31 December 2011, the profit attributable to equity holders of the Company from Singapore operations was RMB1.282 billion, increased by 85.45% compared to last year. This is mainly because the constrained supply of natural gas in Singapore contributed to higher demand for electricity and therefore temporary higher electricity price, result in higher profit derived compare to last year.

## 2. Comparative Analysis of Operating Results

### 2.1 Operating revenue and tax and levies on operation

Operating revenue mainly consists of revenue from power sold. For the year ended 31 December 2011, the consolidated operating revenue of the Company and its subsidiaries amounted to RMB133.421 billion, representing a 27.90% increase from RMB104.318 billion for the year ended 31 December 2010. The increase in operating revenue of domestic operations was primarily attributable to increased power generation and expanded operations. The operation of new generating units contributed



RMB14.598 billion to the increase.

The operating revenue of the Singapore operations increased by RMB6.195 billion for the year ended 31 December 2011 from last year. This is mainly because the constrained supply of natural gas in Singapore contributed to higher demand for electricity and therefore temporary higher electricity price.

Average tariff rate (VAT inclusive)  
(RMB/MWh)

Power Plant	2011	2010	Change	
Dalian	382.84	375.44	1.97	%
Fuzhou	425.38	413.22	2.94	%
Nantong	425.97	409.06	4.14	%
Shang'an	408.20	378.59	7.82	%
Shantou Coal-fired	522.91	521.34	0.30	%
Dandong	383.08	376.61	1.72	%
Shidongkou II	422.25	416.36	1.41	%
Nanjing	442.54	414.19	6.84	%
Dezhou	443.20	417.68	6.11	%
Weihai	435.52	456.31	-4.56	%
Jining	422.91	401.53	5.32	%
Shidongkou I	441.11	435.52	1.28	%
Taicang I	424.09	415.37	2.10	%
Changxing	N/A	519.39	N/A	
Huaiyin II	438.72	443.17	-1.01	%
Yushe	362.65	334.11	8.54	%
Yingkou	394.82	387.78	1.82	%
Jinggangshan	447.05	413.30	8.17	%
Luohuang	410.86	382.70	7.36	%
Yueyang	465.74	435.71	6.89	%
Qinbei	412.75	379.68	8.71	%
Pingliang	306.36	275.91	11.04	%
Yuhuan	462.49	459.86	0.57	%
Taicang II	429.44	414.13	3.70	%
Xindian II	426.77	405.67	5.20	%
Haimen	498.77	496.33	0.49	%
Rizhao Phase II	420.06	397.60	5.65	%

Average tariff rate (VAT inclusive)  
(RMB/MWh)

Power Plant	2011	2010	Change	
Yingkou Co-generation	391.92	386.29	1.46	%
Beijing Co-generation	481.35	474.21	1.50	%
Yangliuqing Co-generation	414.23	407.08	1.76	%
Shidongkou Generation	457.20	445.70	2.58	%
Zhanhua Co-generation	419.76	397.40	5.63	%
Diandong Energy	345.43	N/A	N/A	
Diandong Yuwang	345.31	N/A	N/A	
Shanghai CCGT	665.00	662.00	0.45	%
Nanjing Jinling Power	459.37	453.38	1.32	%
Tuas Power	1,146.88	927.89	23.60	%
Qidong Wind Power	519.08	487.70	6.43	%
Huade Wind Power	528.45	510.00	3.62	%
Wafangdian Wind Power	610.00	N/A	N/A	
Enshi Hydropower	437.03	N/A	N/A	

Tax and levies on operations mainly consist of taxes associated with value-added tax surcharges. According to relevant administrative regulations, these surcharges include City Construction Tax and Education Surcharges calculated at prescribed percentages on the amounts of the value-added tax paid. These surcharges also applied to direct foreign investment entities that have been approved by the government since December 2010, certain power plants of the Company are subject to these taxes since then. For the year ended 31 December 2011, the taxes and levies on operations amounted to RMB484 million.

## 2.2 Operating expenses

For the year ended 31 December 2011, the total operating expenses of the Company and its subsidiaries was RMB124.189 billion, representing a 29.98% increase from RMB95.541 billion for the year ended 31 December 2010. The increase of operating expenses of domestic operations was primarily attributable to the increase in fuel prices, expanded operations and the increase of power generation. The operation of new generating units contributed RMB13.986 billion to the increase in operating expenses.

The operating expenses of the Singapore operations increased by RMB5.433 billion. This is mainly because of the rise of the purchase price for natural gas and oil in Singapore due to global oil price increase, increase of fuel costs caused by the increase of power generation, and increase of power purchase costs as a result of the increase of retail electricity sold.

### 2.2.1

#### Fuel costs

Fuel costs represent the majority of the operating expense for the Company and its subsidiaries. For the year ended 31 December 2011, fuel costs of the Company and its subsidiaries increased by 33.37% to RMB90.546 billion from RMB67.892 billion for the year ended 31 December 2010. The increase of fuel costs of domestic power plants was primarily attributable to the increase of fuel price and the increase of

power generation. The operation of new generating units accounted for RMB11.179 billion of the increase in fuel costs.

For the year ended 31 December 2011, the average price (excluding tax) of natural fuel coal was RMB548.72 per ton, representing a 6.09% increase from RMB517.20 per ton for the year ended 31 December 2010. Due to the increase in coal price, the fuel cost per unit of power sold by the Company's domestic power plant increased by 9.24% to RMB270.37 per MWh.

Fuel costs of Singapore operations increased by RMB2.186 billion for the year ended 31 December 2011 from last year, which is mainly attributable to the rise of the purchase price for natural gas and oil in Singapore due to global oil price increase, as well as the increase of power generation.

#### 2.2.2

##### Maintenance

For the year ended 31 December 2011, the maintenance expenses of the Company and its subsidiaries amounted to RMB2.529 billion, representing a 9.85% increase from RMB2.302 billion for the year ended 31 December 2010. The operation of new generating units accounted for RMB234 million of the increase. The maintenance expenses of the Singapore operations increased by RMB40 million.

#### 2.2.3

##### Depreciation

For the year ended 31 December 2011, depreciation expenses of the Company and its subsidiaries increased by 13.59% to RMB11.867 billion from RMB10.447 billion for the year ended 31 December 2010. The increase was primarily attributable to the Company's expansion.

#### 2.2.4

##### Labor

Labor costs consist of salaries to employees and contributions payable to relevant state authorities for employees' housing fund, medical insurance, pension and unemployment insurance, as well as training costs, etc. For the year ended 31 December 2011, the labor costs of the Company and its subsidiaries amounted to RMB4.622 billion, representing a 13.63% increase from RMB4.067 billion for the year ended 31 December 2010. This is mainly attributable to expanded operations and operation of new generation units of the Company. The operation of new generating units contributed RMB296 million of the increase. The labor costs of Singapore operations increased by RMB39 million.

#### 2.2.5

##### Other operating expenses (including purchase of electricity and service fees paid to HIPDC)

Other operating expenses include environmental protection expenses, land fee, insurance premiums, office expenses, amortization, and Tuas Power's purchase cost of electricity, etc. For the year ended 31 December 2011, other operating expenses (including purchase cost of electricity) of the

Company and its subsidiaries was RMB14.626 billion, representing a 35.00% increase from RMB10.833 billion for the year ended 31 December 2010. The operation of new generating units contributed RMB588 million to the increase of other operating expenses.

Other operating expenses of the Singapore operations increased by RMB3.124 billion, in which purchase cost of electricity increased by RMB3.056 billion, which was mainly caused by the increase of power purchase quantity and unit price.

### 2.3 Financial expenses

Financial expenses consist of interest expense, bank charges and net exchange differences.

2.3.1 Interest expenses

For the year ended 31 December 2011, the interest expenses of the Company and its subsidiaries were RMB7.736 billion, representing a 46.45% increase from RMB5.283 billion for the year ended 31 December 2010. The increase of interest expenses of domestic operations was primarily attributable to the increase of RMB borrowing interest rates, expensing instead of capitalizing interest upon commercial operation of new generating units, and expanded operations of the Company. The operation of new generation units accounted for RMB1.390 billion of the increase. The interest expenses of the Singapore operations increased by RMB54 million.

2.3.2 Net exchange differences and bank charges

For the year ended 31 December 2011, the exchange gains less bank charges of the Company and its subsidiaries amounted to RMB76 million, decreased by RMB12 million compared to RMB88 million for the year ended 31 December 2010. For the year ended 31 December 2011, the exchange gain of the Company and its subsidiaries was RMB147 million, representing an increase of RMB13 million from RMB134 million for the year ended 31 December 2010. Net exchange differences and bank charges of the Singapore operations increased by RMB23 million.

2.4 Share of profit of associates/jointly controlled entities

For the year ended 31 December 2011, the share of profit of associates/jointly controlled entities was RMB704 million, a RMB135 million increase from RMB569 million for the year ended 31 December 2010. The increase was primarily due to the overall increase of the profit of associates and jointly controlled entities for the year ended 31 December 2011, which includes profit of RMB76 million from investment in Time Shipping.

2.5 Income tax expenses

For the year ended 31 December 2011, the Company and its subsidiaries recorded an income tax expense of RMB869 million, representing an increase by 3.12% from RMB843 million for the year ended 31 December 2010. The income tax expense of domestic operations decreased by RMB109 million which was primarily due to the decrease of profit before income tax expense. The income tax expense of the Singapore operations increased by RMB136 million which was mainly attributable to the increase of profit before income tax expense.

2.6 Net profit, profit attributable to the equity holders of the Company and non-controlling interests

For the year ended 31 December 2011, the Company and its subsidiaries achieved a net profit of RMB1.181 billion, representing a decrease of RMB2.140 billion from RMB3.321 billion for the year ended 31 December 2010. For the year ended 31 December 2011, the profit attributable to equity holders of the Company was RMB1.181 billion, representing a decrease of RMB2.167 billion from RMB3.348 billion for the year ended 31 December 2010. The profit attributable to equity holders of the Company from domestic operations decreased by RMB2.758 billion mainly because of increase of fuel price and increase of RMB borrowing interest rate. The profit attributable to equity holders of the Company from the Singapore operations increased by RMB591

million to RMB1.282 billion. This is mainly because the constrained supply of natural gas in Singapore contributed to higher demand for electricity and therefore temporary higher electricity price, result in higher profit compare to last year. The profit attributable to non-controlling interest of the Company was RMB1 million for the year ended 31 December 2011 compared to loss of RMB27 million for the year ended 31 December 2010. This is mainly attributable to the fact that the companies in



which the Company has low shareholding have performed better than those in which the Company has high shareholding.

## 2.7 Comparison of financial positions

The assets and liabilities of the Company and its subsidiaries experienced significant change compared to that at beginning of the year, due to acquisition of power plants and continued investment in construction projects.

### 2.7.1 Comparison of asset items

As at 31 December 2011, total assets of the Company and its subsidiaries were RMB257.416 billion, representing a 12.93% increase from RMB227.938 billion as at 31 December 2010. Non-current assets increased by 12.53% to RMB220.999 billion, primarily due to investment in construction projects and acquisitions. Current assets increased by 15.40% to RMB36.417 billion, primarily due to the increase of accounts receivable and inventories.

As at 31 December 2011, total assets of the Singapore operations were RMB30.794 billion. Non-current assets increased by 6.61% to RMB24.257 billion, primarily attributable to investment in construction projects. Current assets increased by 24.63% to RMB6.537 billion, mainly because of increase in cash and cash equivalents, as a result of increase of profit.

### 2.7.2 Comparison of liability items

As at 31 December 2011, total liabilities of the Company and its subsidiaries were RMB197.858 billion, representing a 19.54% increase from RMB165.513 billion as at 31 December 2010, primarily attributable to the increased borrowings for construction projects. Non-current liabilities of the Company and its subsidiaries mainly consist of bank loans and bonds. The increase of current liabilities was largely attributable to the increase of short-term bonds.

As at 31 December 2011, interest-bearing debts of the Company and its subsidiaries totalled RMB167.077 billion. The interest-bearing debts consist of long-term loans (including those maturing within 1 year), long-term bonds (including those maturing within 1 year), short-term borrowings, and short-term bonds. The interest-bearing debts denominated in foreign currencies were RMB5.608 billion.

As at 31 December 2011, total liabilities of the Singapore operations were RMB19.213 billion. Non-current liabilities were RMB16.162 billion decreased by RMB863 million from that as at the beginning of this year, which is mainly due to repayment of long-term borrowings. Current liabilities were RMB3.051 billion, increased by RMB1.406 billion from that as at the beginning of this year, which is principally because of

increase in accounts payable.

2.7.3

Comparison of equity items

Excluding the impact of profit and profit appropriations, the equity of the Company and its subsidiaries decreased at the end of the year compared to the beginning of the year, resulting from the post-tax impact of decreased fair value of available-for-sale investments held by the Company amounting to RMB234 million, the decrease of RMB409 million resulting from the post-tax impact of cash flow hedge of the domestic and Singapore operations, and the decrease of RMB664 million in currency translation differences as well as the increase of RMB38 million in non-controlling interests.

## 2.7.4 Major financial position ratios

	2011	2010
Current ratio	0.38	0.38
Quick ratio	0.30	0.32
Ratio of liability and shareholders' equity	3.89	3.08
Multiples of interest earned	1.14	1.55

## Formula of the financial ratios:

Current ratio	=	balance of current assets as at the year end balance of current liabilities as at the year end
Quick ratio	=	(balance of current assets as at the year end – net inventories as at the year end) balance of current liabilities as at the year end
Ratio of liabilities and shareholders' equity	=	balance of liabilities as at the year end balance of shareholders' equity (excluding non-controlling interests) as at year end
Multiples of interest earned	=	(profit before income tax expense + interest expense) interest expenditure (inclusive of capitalized interest)

The current ratio and quick ratio remained at relatively low level at 31 December 2011 and 2010, and decreased slightly at year end of 2011 from year end of 2010. The increase in the ratio of liabilities and shareholders' equity at the year end of 2011 from the year end of 2010 was primarily due to the increase of borrowings for construction projects. The multiples of interest earned decreased, primarily attributable to the decrease of net profit for the year ended 31 December 2011.

## B. Liquidity and Cash Resources

## 1. Liquidity

	For the year ended 31 December		Change %
	2011 RMB billion	2010 RMB billion	
Net cash provided by operating activities	20.949	18.067	15.95
Net cash used in investing activities	-21.665	-26.981	-19.70
Net cash provided by financing activities	0.070	13.063	-99.46

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Currency exchange (loss)/gain	-0.227	0.050	-554.00
Net (decrease)/increase in cash and cash equivalents	-0.873	4.199	-120.79
Cash and cash equivalents as at the beginning of the year	9.426	5.227	80.33
Cash and cash equivalents as at the end of the year	8.553	9.426	-9.26

For the year ended 31 December 2011, net cash provided by operating activities of the Company was RMB20.949 billion, of which RMB2.405 billion was from the operating activities in Singapore. The decrease in cash used in investing activities was mainly attributed to the decrease of expenditure on construction projects and acquisitions. The decrease in cash provided by financing activities was mainly attributable to issuance of shares last year and repayment of a number of borrowings matured during 2011. The Company expects to continue its focus on construction projects with large investment amount in 2012.

As at 31 December 2011, the cash and cash equivalents of the Company and its subsidiaries denominated in RMB, Singapore dollar, U.S. dollar and Japanese Yen were RMB4.973 billion, RMB2.936 billion, RMB0.644 billion, RMB0.2 million respectively.

As at 31 December 2011, net current liabilities of the Company and its subsidiaries were approximately RMB60.180 billion. Based on the Company's proven financing record, readily available banking facilities and sound credibility, the Company believes it is able to duly repay outstanding debts, obtain long-term financing and secure funding necessary for its operations. The Company has also capitalized on its good credit record to make short-term borrowings at relatively lower interest rates, thus reducing its interest expenses.

## 2. Capital expenditure and cash resources

### 2.1

#### Capital expenditures on acquisitions

On 31 December 2009, the Company entered into an Equity Interest Transfer Contract with Shandong Electric Power Corporation ("Shandong Power") and Shandong Luneng Development Group Company Limited ("Luneng Development"), in accordance with which the Company agreed to acquire 100% equity interest in the registered capital of Diandong Energy, 100% equity interest in the registered capital of Diandong Yuwang, 100% equity interest in the registered capital of Zhanhua Co-generation, 100% equity interest in the registered capital of Jilin Biological Power Generation, 60.25% equity interest in the registered capital of Luoyuanwan Harbour, 58.3% equity interest in the registered capital of Luoyuanwan Pier, 73.46% equity interest in the registered capital of Ludao Pier, 100% equity interest in the registered capital of Luneng Jiaonan Port, 53% equity interest in the registered capital of Luneng Sea Transportation, and development rights with respect to the preliminary stage projects (including Rizhao Lanshan 4×660 MW coal-fired project and Luoyuanwan 2×660 MW coal-fired project), all of which are owned by Shandong Power, and 39.75% equity interest in the registered capital of Luoyuanwan Harbour owned by Luneng Development. The aggregate consideration for the above mentioned purchase of equity interests is RMB8.625 billion. As at 31 December 2011, the Company has paid the consideration in full.

Following completion of acquisitions of Zhanhua Co-generation, Luneng Jiaonan Port, Luneng Sea Transportation and Jilin Biological Power Generation at the end of 2010, the Company completed acquisitions of the other five entities during the first half of 2011.

On 30 September 2011, the Company entered into an agreement regarding transfer of equity interests of Enshi Maweigou Hydropower Development Co., Ltd. (“Enshi Hydropower”), according to which the Company acquired 100% of the equity interests in Enshi Hydropower with consideration of RMB227 million. Enshi Hydropower has been consolidated into the consolidated financial statements of the Company for the year ended 31 December 2011.

## 2.2 Capital expenditure on construction and renovation projects

The capital expenditures for the year ended 31 December 2011 were RMB16.789 billion, mainly for construction and renovation projects, including RMB1.109 billion for Haimen power project, RMB0.276 billion for Jingtangshan expansion project, RMB0.220 billion for Weihai expansion project, RMB1.101 billion for Qinbei expansion project, RMB0.490 billion for Yueyang expansion project, RMB0.354 billion for Pingliang expansion project, RMB0.330 billion for Jinling Coal-fired project, RMB0.604 billion for Shidongkou Generation project, RMB1.195 billion for Beijing Co-generation expansion project, RMB0.247 billion for Qidong Wind Power project, RMB0.300 billion for Xiangqi Hydropower, RMB1.662 billion for Zuoquan Power project, RMB0.774 billion for Jiuquan Wind Power project, RMB0.503 billion for Diandong Energy project, RMB0.320 billion for Diandong Yuwang Project, and RMB0.217 billion for Qingdao Harbor project. The expenditures on construction projects in Singapore were RMB2.683 billion. The expenditures on other construction projects and renovation were RMB1.516 billion and RMB2.888 billion, respectively.

The above capital expenditures are sourced mainly from internal capital, cash flows provided by operating activities, and debt financing.

The Company expects to have significant capital expenditures in the next few years. During the course, the Company will make active efforts to improve project planning process on commercially viable basis. The Company will also actively develop newly planned projects to pave the way for its long-term growth. The Company expects to finance the above capital expenditures through internal funding, cash flows provided by operating activities, and debt financing.

The cash requirements, usage plans and cash resources of the Company for next two years are as following:

(unit: RMB billion)

	Capital expenditure arrangement		Contractual arrangement		Cash Financing resources methods	Internal cash resources & bank loans, etc	Financing costs and note on use
	2012	2013	2012	2013			
Thermal power projects	12.614	9.715	12.614	9.715	Debts financing	Internal cash resources & bank loans, etc	Within the floating range of benchmark lending interest rates of PBOC
Hydropower projects	0.649	—	0.649	—	Debts financing	Internal cash resources & bank loans, etc	Within the floating range of benchmark lending interest rates of PBOC
Wind power projects	1.899	2.87	1.899	2.87	Debts financing	Internal cash resources & bank loans, etc	Within the floating range of benchmark lending interest rates of PBOC
Port projects	1.387	0.45	1.387	0.45	Debts financing	Internal cash resources & bank loans, etc	Within the floating range of benchmark lending interest rates of PBOC
Coal mining projects	0.779	1.00	0.779	1.00	Debts financing	Internal cash resources & bank loans, etc	Within the floating range of benchmark lending interest rates of PBOC
Technical renovation projects	3.475	4.5	3.475	4.5	Debts financing	Internal cash resources & bank loans, etc	Within the floating range of benchmark lending interest rates of PBOC

### 2.3 Cash resources and anticipated financing costs



The Company expects to finance its capital expenditure and acquisition primarily from internal capital, cash flow from operating activities and debt financing.

Good operating results and sound credit status provide the Company with strong financing capabilities. As at 31 December 2011, the Company and its subsidiaries had an undrawn banking facilities over RMB90 billion, granted by Bank of China, Construction Bank of China and China Development Bank.

The Company has completed the issuance of short-term bonds in two installments on 13 January 2011 and 19 September 2011, each at principal amount of RMB5 billion and nominal annual interest rate of 3.95% and 6.04%, respectively. Both of the bonds were denominated in RMB, issued at par value, and would mature in 365 days and 366 days, respectively.

As at 31 December 2011, short-term loans of the Company and its subsidiaries totalled RMB43.979 billion (2010: RMB44.047 billion). Loans from banks were charged at interest rates ranging from 4.00% to 8.52% per annum (2010: 1.80% to 5.31%). Short-term bonds of the Company and its subsidiaries totalled RMB10.262 billion (2010: RMB5.070 billion).

As at 31 December 2011, long-term loans of the Company and its subsidiaries totalled approximately RMB93.985 billion (2010: approximately RMB78.967 billion), consisting of loans denominated in RMB of approximately RMB73.734 billion (2010: approximately RMB56.187 billion), in US dollars of approximately US\$0.779 billion (2010: approximately US\$0.943 billion), and in Euro of approximately Euro 86 million (2010: approximately Euro 95 million). Included in the above U.S. dollar denominated borrowings were approximately US\$743 million (2010: US\$812 million) floating-rate borrowings. Singapore dollar denominated borrowings were all floating-rate borrowings. For the year ended 31 December 2011, long-term bank borrowings of the Company and its subsidiaries bore interest rates from 0.51% to 8.65% (2010: 0.51% to 6.97%) per annum.

As at 31 December 2011, the borrowings for the Singapore operations were all long-term loans approximately in aggregate of RMB14.647 billion (2010: approximately RMB15.687 billion), including borrowings denominated in Singapore dollar in the amount of S\$3.008 billion (2010: approximately S\$3.064 billion) with interest rates from 1.94% to 4.25% per annum (2010: 2.15% to 4.25%), and borrowings denominated in U.S. dollar in the amount of US\$1 million (2010: Nil) with interest rate of 2.74% per annum (2010: Nil).

The Company has completed the issuance of unsecured long-term debenture on 7 November 2011, at principal amount of RMB5 billion and an annual interest rate of 5.74%. The debenture was denominated in RMB, issued at par value, and would mature in five years.

The Company and its subsidiaries will closely monitor any change in the exchange rate and interest rate markets and cautiously assess the currency rate and interest rate risks.

Combining the current development of the power generation industry and the growth of the Company, the Company will make continuous efforts to not only meet cash requirements of daily operations, constructions and acquisitions, but also establish an optimal capital structure to minimize the cost of capital and manage financial risks through effective financial management activities, thus maintaining sustainable and stable returns to the shareholders.

#### 2.4 Other financing requirements

The objective of the Company is to bring long-term, steadily growing returns to shareholders. In line with this objective, the Company follows a proactive, stable and balanced dividend policy. In accordance with the profit appropriation plan of the board of directors of the Company (subject to the approval of the shareholders' meeting), the Company expects to pay a cash dividend of approximately RMB703 million relating to the year 2011.



## 2.5 Maturity profile of loans

	(RMB billions)				
Maturity Profile	2012	2013	2014	2015	2016
Principal proposed to be repaid	69.4	10.7	21.2	4.4	10.4
Interest proposed to be repaid	7.1	4.8	4.0	3.2	2.8
<b>Total</b>	<b>76.5</b>	<b>15.5</b>	<b>25.2</b>	<b>7.6</b>	<b>13.2</b>

Note: (1) This table is prepared according to the amounts in the contracts which have been entered into;

(2) The amount of the principal to be repaid in 2012 is relatively large because this includes expected repayment of short-term loans and short-term bonds.

## C. Trend Information

According to the National Power Industry Statistics Express for 2011 issued by China Electricity Council, as at 31 December 2011, nationwide installed capacity reached 1.056 billion KW, representing an increase of 9.2% over 2010; total power consumption throughout China reached 4.69 trillion KWh, representing an increase of 11.7% from last year. In the first half and summer peak period of 2011, power shortage occurred in Zhejiang, Jiangsu, Fujian, Hubei, Henan, Chongqing, Gansu and Guangdong, and power shortage nationwide amounted up to 30 million KW. In 2011, the Company experienced smooth development of power generation construction projects and increased its operating controlled and equity-based generation capacity by 4,761.5MW and 3,149.4MW, respectively, from newly installed generation facilities, including 3,120MW from coal-fired power generation units, 923MW from gas-fired power generation units, 698.5MW from wind power generation units, and 20MW from hydropower generation units. Given the change of generation capacities of some affiliates of the Company and the change of generation capacity from technical renovation of existing generation units and closure of small generation units by the Company, the Company has had controlled generation capacity of 60,375MW and equity-based generation capacity of 55,350MW as at 20 March 2012. The Company is now one of China's largest listed power producers with power plants located in 19 provinces, municipalities and autonomous regions. The Company also has a wholly-owned operating power plant in Singapore.

## 1) Development trend in power generation market

China is expected to maintain steady economic growth in 2012 to meet the 7.5% GDP growth target set down at the central economic work conference and the government work report, which suggests slightly decreased growth of the economy and power consumption. According to the forecast of China Electricity Council, China's power consumption is expected to increase by 8.8% to more than 5,000 billion KWH in 2012, with higher

consumption during the second half of 2012. In respect of power supply, the newly installed generation capacity is expected to reach 85 million KW, including 20 million KW from hydropower and 50 million KW from coal-fired power. Total power generation capacity will be 1.14 billion KW by the end of 2012, with 4,750 hours of power equipment utilization and 5,300-5,400 hours of coal-fired generation equipment utilization throughout the year.

According to information available, China may experience shortage of water supply before the flooding season, and regionally and periodically deficient coal supply in 2012. It is therefore estimated that regional, periodical and seasonal shortage of power supply will occur during 2012, with shortage might be as much as 30 million KW.

After the rise of power tariff in 2011, all power producers have commonly realized to increase power generation as an effective measure to promote profitability, which surely will contribute to more intensified competition in the power market.

2) Trend of fuel supply

In 2011, China produced raw coal of 3.52 billion tons, representing an increase of 8.7% over 2010. According to the forecast of China Electricity Council, coal demand is expected to have an average annual growth rate of 5.2% during the 12th “Five-Year” period. In 2012, the demand and supply of coal will be generally balanced and stable, providing no driving force for price increase. In the coastal regions of eastern China, good transportation conditions ensure readily sufficient coal supply from domestic and overseas suppliers, which could lead to slight decrease of coal price. In central China, limited railway transportation capacity complicated the difficulty of coal supply and resulted in higher coal price. In western China where coal mines are mainly located, the merger of small-scale coal mines and concentration of coal resources might lead to increase of the historically low price of coal.

3) Trend of capital market

In 2012, the People’s Bank of China (PBOC) will continually implement steady monetary policies and make predicative fine-tuning to monetary policies from time to time. In respect of the credit market, liquidity is still tight with higher financing costs. In respect of monetary policies, the PBOC recently lowered RMB deposit reserve requirement ratio by 0.5 percentage point. This fine-tuning to monetary policies is helpful to ease liquidity and maintain consistent growth of economy. The consumer price index (CPI) in China is expected to follow a downward trend since 2012, which decrease together with reverse of negative interest rate situation will provide more flexibility for the PBOC in executing monetary policies.

D. Performance of Significant Investments and their Prospects

The Company acquired 25% equity interest in Shenzhen Energy Group Co., Ltd. at the consideration of RMB2.39 billion on 22 April 2003. In 2011, Shenzhen Energy Group divided into a remainder company Shenzhen Energy Group and a newly established company Shenzhen Energy Management Corporation, the Company held 25% equity interest in both of these companies. The Company acquired 200 million shares from Shenzhen Energy, a subsidiary of Shenzhen Energy Group, in December 2007. Shenzhen Energy allot shares with its capital surplus in 2011. As at 31 December 2011, the Company held 240 million shares of Shenzhen Energy. These investments brought a profit of RMB323 million for the Company for the year ended 31 December 2011 under IFRS. This investment is expected to provide steady returns to the Company.

The Company held directly 60% equity interest in Sichuan Hydropower as at 31 December 2006. In January 2007, Huaneng Group increased its capital investment in Sichuan Hydropower by RMB615 million, thus reducing the Company’s equity interest in Sichuan Hydropower to 49% and making Huaneng Group the

controlling shareholder of Sichuan Hydropower. This investment brought a profit of RMB299 million for the year ended 31 December 2011 under IFRS. This investment is expected to provide steady returns to the Company.

E. Employee Benefits

As at 31 December 2011, the Company and its subsidiaries had 35,903 domestic and overseas employees in total. The Company and its subsidiaries provided employees with competitive remuneration and linked such remuneration to operating results as working incentives for the employees. Currently, the Company and its subsidiaries do not have any non-cash remuneration packages.

Based on the development plans of the Company and its subsidiaries and the requirements of individual positions, together with consideration of specific characteristics of individual employees, the Company and its subsidiaries tailored various training programs for their employees on management skills, technical skills and marketing skills. These programs enhanced both the knowledge and operational skills of the employees.

F. Guarantees and Pledges on Loans and Restricted Assets

As at 31 December 2011, the Company provided guarantee for Tuas Power's long-term bank borrowings of approximately RMB14.610 billion.

As at 31 December 2011, a short-term loan of RMB500 million is guaranteed by a subsidiary of the Company.

As at 31 December 2011, the details of secured loans of the Company and its subsidiaries are as follows:

1. The Company pledged certain accounts receivable for certain short-term loans borrowed in 2011. As at 31 December 2011, the balance of the secured loans was RMB2.490 billion, and the pledged account receivables were amounted to approximately RMB2.771 billion.
2. As at 31 December 2011, secured short-term loans of RMB60 million represented the discounted notes receivable with recourse.
3. As at 31 December 2011, a loan of RMB28 million of a subsidiary of the Company pledged against the shares of a listed company held by a former shareholder of the subsidiary.
4. As at 31 December 2011, long-term loans of a subsidiary of the Company of RMB235 million were secured by property, plant and equipment with net book value amounting to RMB332 million and tariff collection right of the subsidiary. These loans are also guaranteed by former shareholders of the subsidiary.
5. As at 31 December 2011, a long-term loan of RMB78 million was secured by territorial waters use right with net book value of RMB86.37 million.
6. As at 31 December 2011, a long-term loan of RMB169 million secured by certain property, plant and equipment of the Company and its subsidiary.
7. As at 31 December 2011, a long-term loan of RMB13.094 billion was secured by electricity tariff collection right.
8. As at 31 December 2011, a long-term loan of a subsidiary of the Company of RMB4.70 million was secured by current and future assets of the subsidiary.
9. As at 31 December 2011, other long-term loans amounted to RMB800 million were secured by right of income derived from certain generation units of the Company.



10. As at 31 December 2011, notes receivable of the Company and its subsidiaries of approximately RMB15 million was secured to a bank as collateral against notes payable of RMB11 million.

As at 31 December 2011, restricted bank deposit amounted to RMB117 million.

## G. Contingent Liability

As at 31 December 2011, Luoyuanwan Harbour, a subsidiary of the Company was involved in a pending lawsuit. Luoyuanwan Harbour entered into an assets transfer agreement with a consideration of RMB96 million in prior year, pursuant to which Luoyuanwan Harbour has paid RMB76.20 million. Due to disputes on the fulfilment of the agreement by the counterparty, the remaining consideration was not paid by 31 December 2011. The counterparty filed a lawsuit in October 2011 claiming the default by Luoyuanwan Harbour and a compensation approximated to RMB37.33 million. Luoyuanwan Harbour filed a counterclaim in December 2011 claiming a compensation of RMB57.82 million for the default of counterparty, which was accepted by the court. There had been no further progress on this pending lawsuit as at the date of these financial statements being approved for publication. As at 31 December 2011, the remaining consideration of RMB19.80 million was accrued according to the original contract, the Company considered no additional liability be required as at 31 December 2011. Meanwhile, the compensation claimed on the counterparty was not recognized in these financial statements as there is no final decision made by the court.

## H. Accounting Standards with Significant Impact on the Financial Statements of the Company

For the significant changes in accounting standards for the year ended 31 December 2011, see Note 2 to the Financial Information extracted from Financial Statements prepared in accordance with IFRS.

## I. Impairment Sensitivity Analysis

### 1. Goodwill impairment

Separately recognized goodwill is tested for impairment by the Company and its subsidiaries at the end of each year. In 2011, based on the impairment tests, except for the goodwill arising from acquisition of Zhanhua Co-generation, no goodwill was impaired. Due to the continuous lower profitability of Zhanhua Co-generation, full impairment of related goodwill was provided based on the result of impairment test.

For goodwill allocated to CGUs in the PRC, changes of assumptions in tariff and fuel price could have affected the results of goodwill impairment assessment. As at 31 December 2011, if tariff had decreased by 1% or 5% from estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against goodwill by approximately RMB550 million and RMB1,452 million, respectively. If fuel price had increased by 1% or 5% from the estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against goodwill by approximately RMB406 million and RMB1,452 million, respectively.

### 2. Property, plant and equipment impairment

The Company and its subsidiaries test whether property, plant and equipment suffered any impairment whenever any impairment indicator exists.

Changes of assumptions in tariff and fuel price will affect the result of property, plant and equipment impairment assessment. As at 31 December 2011, if tariff had decreased by 1% or 5% from estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against property, plant and equipment by approximately RMB355 million and RMB5,994 million, respectively. If fuel price had increased by 1% or 5% from the estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against property, plant and equipment by approximately RMB139 million and RMB3,145 million, respectively.

J. Potential Risks

1) Risks relating to power market

Growth of economy and power demand in China began to slow down from the second half of 2011. Demand for electricity remained soft earlier this year as economic growth is expected to contract. Based on the 7.5% GDP growth target in 2012, China Electricity Council forecasts that power consumption nationwide will grow at by 8.8% in 2012, representing a decrease of two percentage points from 2011. The Company has conducted desulphurization renovation for a large number of generating units according to national energy saving and emission reduction policies, while the policy regarding tariff for electricity generated by generating units installed with desulphurization facilities has yet to be formally promulgated nationwide. If the tariff for electricity generated by generating units installed with desulphurization facilities fails to be effective as scheduled, it may cause risk to the operating result of the Company.

The Company will further its efforts to control and alert market risks, place more emphasis on research-based decision-making efforts regarding the conditions and policies of power market, take initiatives to develop market, design flexible marketing strategies to respond effectively to market demand, implement the standards and policies issued by the government to regulate domestic power market, and leverage on its strengths on energy saving and environment protection to increase equipment utilization rate and mitigate operational risks.

2) Risks relating to coal supply market

The shortage of coal supply appears to easing with the issue of an announcement (No. 30 in 2011) in November 2011 by National Development and Reform Commission to stabilize coal price along with full utilization of coal production capacities in coal producing provinces. However, uncertainties and risks can be identified from market performance during January and February of 2012, including: (1) key contract price of coal increased by 5%; (2) coal market is further controlled by coal producers after consolidation and combination of coal production capacities; and (3) the power plants of the Company located in central China and Yunnan may experience coal supply shortage because of railway transportation capacity bottleneck and the policies of certain coal producing provinces to restrict outbound coal delivery. The Company will strive to ensure stable coal supplies from major sources, increase imports of coal from overseas markets, make efficient use of economic coal, and make efforts to secure coal supply from group members. The Company will also leverage its strengths on centralized fuels procurement to make effective allocation of coal supplies and prompt adjustment of pricing strategies, and strive to control fuels costs by thorough and improved fuel management.

3)

Risks relating to environment protection requirements

The PRC government imposed higher standards on the emission of air pollutant by coal-fired power generators. In accordance with the newly promulgated emission standards, during the 12th Five Year, the Company will increase its investment in desulphurization, install denitrification facilities on all coal-fired generating units, and reconstruct smoke and gas anti-dust devices, in order to meet the new emission standards requirement. The new emission standards make it more difficult for the Company to control its capital expenditure and decrease its production costs. To strictly comply with the government's policies and regulations on energy saving and environment protection, the Company will apply advanced technologies and enhanced management standards; develop advanced, highly capable and effective coal-fired generating units; improve renovation on existing generating units; and phase out outdated capabilities; so as to effectively enhance the efficiency in energy saving and environment protection and realize the clean development target.

4) Risks relating to capital market

Liquidity remains tight with higher borrowing costs in the capital market today. The interest bearing debts of the Company are mostly denominated in RMB, and the change in RMB interest rates will have direct effect on the Company's borrowing costs. The Company will make appropriate funding arrangement in line with market conditions, explore new funding opportunities, and make efforts to control financing while satisfying funding needs. The debts denominated in currencies other than RMB were less than 15% of the total interest bearing debts of the Company, most of which are charged with floating interest rates. The Company has provided interest rate hedging for nearly half of the floating-interest-rate debts and fluctuation of interest rates for the foreign loans will not have material adverse impact on the Company.

The Company has outstanding debts denominated in U.S. dollar and Euro, which are exposed to exchange gain or loss arising from exchange rate fluctuation. The debts denominated in foreign currencies accounted for less than 5% of the total interest bearing debts of the Company, most of which are denominated in U.S. dollar. Considering the slow but steady appreciation of RMB against U.S. dollar, the Company expects not to have material adverse impact from exchange rate fluctuation in foreseeable future.

## Corporate Governance Report

The Company has been consistently stressing the importance of corporate governance through promoting innovation on the Company's system management and strengthening the establishment of the Company's system. It strives to enhance the transparency of the Company's corporate governance standards and to maintain high quality corporate governance on an ongoing basis. The Company insists on adopting the principle of "maximizing the benefits of the Company and all shareholders" as the starting point and treats all shareholders fairly in order to strive for the generation of long-term, stable and growing returns for shareholders.

The Company has complied with the provisions of the Code on Corporate Governance Practices in Appendix 14 to the Listing Rules in this accounting year.

### (a) CODE ON CORPORATE GOVERNANCE PRACTICES

Recently, the Company adopted the following measures in order to strengthen corporate governance and enhance the Company's operation quality:

#### (1) Enhancing and improving corporate governance

Apart from complying with the provisions of the applicable laws, as a public company listed in three markets both domestically and internationally, the Company is subject to the regulations of the securities regulatory authorities of the three listing places and the supervision of investors at large. Accordingly, our fundamental principles are adopting a corporate governance structure that balances and coordinates the decision-making powers, supervisory powers and operating powers, acting with honesty and integrity, complying with the law and operating in accordance with the law.

Over the past years, the Board of the Company has formulated and implemented the Rules of Procedures for General Meetings, Rules of Procedures for the Board Meetings; the Rules of Procedures for the Supervisory Committee Meetings; the Detailed Rules on the Work of the General Manager; the Terms of Reference of the Strategy Committee under the Board of Directors; the Terms of Reference of the Audit Committee under the Board of Directors; the Terms of Reference of the Nomination Committee under the Board of Directors; the Terms of Reference of the Remuneration and Appraisal Committee under the Board of Directors; and the System on Work of Independent Directors, the System on Work of Independent Directors on the Annual Report and the Working Guidelines on Annual Report for the Audit Committee. The Board has proposed certain amendments to the Articles of Association according to the applicable laws and the needs of the Company.

#### (2) Enhancing and improving the information disclosure system

The Company has been stressing the importance of public information disclosure. The Company has established the Information Disclosure Committee comprised of managers of various departments and headed by the Vice President and the Chief Accountant is responsible for examining the Company's regular reports. The Company has implemented the system of holding regular information disclosure meetings every Monday, chaired by the Vice President and the Chief Accountant who will report on the Company's important matters of the week, thereby warranting the Company's performance of the relevant information disclosure obligations. The Company has successively formulated and implemented the relevant information disclosure system, and has made timely amendments thereto according to regulatory requirements. The current systems which have been implemented include the Measures on Information Disclosure Management, the Measures on Investor Relations Management, the Detailed Rules on the Work of the Information Disclosure Committee, the Management Measures of Insider Information, and the Rules on the Management of the Shares Held by the Directors, Supervisors and Senior

Management of Huaneng Power International, Inc. and other regulations. For purposes of ensuring the regulated operation of the Company and to enhance the authenticity, accuracy, completeness and timeliness of information disclosure, the Company promulgated and implemented the Annual Report Information Disclosure Significant Errors Accountability Regulations in April 2011 to



further enhance the quality and transparency of information disclosure in the annual report.

Relevant departments of the Company compiled answers (and subsequent updates) to questions regarding the hot topics of market concerns, the Company's production, operation and operating results in a timely manner, which shall become the basis of external communication of the Company after being approved by the Company's management and the authorized representatives of the Information Disclosure Committee. Also, the Company engages professional personnel to conduct specialized training for the staff of the Company responsible for information disclosure on an irregular basis in order to continuously enhance their level of professionalism.

(3) Regulating financial management system, strengthening internal control

The credibility of a listed company, to a large extent, relates to the quality of the preparation of financial statements and a regulated operation of financial activities. In order to regulate its financial management, the Company has completed a large amount of specific and detailed work, including:

1. In order to strictly implement the accounting rules, accounting standards and accounting systems, to strengthen accounting and accounts supervision, and to truthfully and fairly reflect the financial position, operating results and cash flow, the Company has formulated the Measures on Accounting, the Provisions on Construction Accounting, the Provisions on Fixed Assets Management, Lists of Fixed Assets and the Provisions on Cost Management. The Company's Board, Supervisory Committee and the Audit Committee have examined the Company's financial reports on a regular basis and the Company has fulfilled the requirements of making the Chairman, the President and the Chief Accountant responsible for the authenticity and completeness of the financial reports.
2. In order to safeguard the independence of the listed company, the Company realized the separation of personnel in organizational structure and specifically established the relevant institution responsible for the entrusted business so that the Company may realize the complete separation of the listed company and the controlling shareholder in terms of personnel, assets and finances according to the laws and regulations of the State and the requirements of regulatory rules.
3. In 2003, the Company initiated an all-rounded plan to enhance the internal control, in order to establish a sound internal control system for the Company, to achieve an efficient operating effect for ensuring the reliability of financial reports, and to effectively enhance the capability of risk prevention. For the past nine years, the Company had established an internal control strategic plan and highlighted the targets for internal control. Through the implementation of internal control work in full force, the continuing improvement in the Company's development power, competitive edge and risk resistance power, the Company has visualized the strategic targets, established a system for internal control and reinforced the work required for internal control systems for the Company, branches and the power plants. Based on internal control regulations of China and related countries, the Company had established an internal control

procedure that was consistent with the management feature of the Company, designed and promulgated the Internal Control Handbook which was identified as having the highest authority to govern the Company's internal management issues. The Company had kept on various routine self-assessments on internal control, thereby discovering control deficiencies and implementing rectification followed by an all-rounded propaganda and training on the philosophy and knowledge for internal control.

Based on a comprehensive assessment, the management believes that the Company's internal control system is sound and the execution of which is effective.

The Company was among the first batch of the US listed PRC enterprises which had satisfied the requirement on internal control in the financial reports under section 404 of the Sarbanes-Oxley Act. In 2011, as a company listed simultaneously both inside and outside the PRC, the Company successfully passed the internal control audit of both the standards of the Fundamental Regulatory

Guidelines on Enterprise Internal Control and Section 404 of the Sarbanes-Oxley Act. So far, the external auditors had issued the auditor's report on the Company's internal control for six successive years with unqualified opinion, the Company has been implementing the internal control work standardization for establishing a long-term internal control system.

4. In regard to fund management, the Company has successively formulated a number of management measures including the Measures on Financial Management, the Measures on the Management of Funds Receipts and Expenses, Measures on the appraisal of management of funds receipts and expenses, the Measures on the Management of Bills of Exchange, the Measures on Management of Fund Raising, Measures on the Management of Derivative Financial Product Transactions, Measures on the Management of External Guarantee and Measure on the Management of Regulating Fund Transfers with Related Parties. The Company's Articles of Association also set out provisions relating to loans, guarantees and investment. In the annual reports of the Company over the previous years, the Company has engaged registered accountants to conduct an examination on the use of funds by the controlling shareholders and other related parties and issue individual statements according to the requirements of the China Securities Regulatory Commission ("CSRC") and the Shanghai Stock Exchange, and there has not been any violation of rules relating to the use of funds. Moreover, the Company also conducted quarterly checking and clearing with related parties in relation to the operational fund transfers in order to ensure the safety of funds. At the same time, the Company has reported the fund use position each quarter to the Beijing Securities Regulatory Bureau of CSRC and urged itself to comply with the relevant provisions at any time.

The above systems and measures have formed a sound management framework for our production and operation. The timely formulation and strict implementation of the above regulations ensures the ongoing standardization of operations of the Company and gradual enhancement of corporate management quality. In 2011, the Company won the Most Popular Listed Company Among PRC and Hong Kong Investors Award of the China Securities Golden Bauhinia Award. The company secretary had also been praised by the Shanghai Stock Exchange as the best secretary to the board of directors for the year. The various awards built a good overall image for the Company in domestic and overseas capital markets.

#### (b) SECURITIES TRANSACTIONS BY DIRECTORS

As the Company is listed in three jurisdictions, the Company has strictly complied with the relevant binding clauses on securities transactions by directors imposed by the regulatory authorities of the US, Hong Kong and China and we insist on the principle of complying with the strictest clause, which is, implementing the strictest clause among three places. We have adopted a set of standards not less exacting than the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules as the model

code for securities dealings by directors of the Company, namely, Management Rules regarding the Company's Securities Information and Trading. The Company has also formulated and implemented the Management Rules in respect of the Shares of the Company Held by the Directors, Supervisors and Senior Management of Huaneng Power International, Inc. The model codes for the trading of securities by the Company's directors include: trading the Company's shares strictly in accordance with the stipulations under the Company Law and relevant regulations, prohibiting those who are in possession of securities transaction insider information using insider information in securities trading; and setting out detailed rules for those who are in possession of insider information. Following a specific enquiry on all the directors and senior management of the Company, all the directors and senior management currently do not hold any shares in the Company and there is no material contract in which the directors and senior management directly or indirectly have material interests.

(c) BOARD OF DIRECTORS

The Company's Board of Directors comprised 15 members. In the sixth session of the Board of Directors, Mr. Cao Peixi was the Chairman, and Mr. Huang Long was the Vice Chairman of the Board; the Executive Directors of the Company were Mr. Cao Peixi (Chairman), Mr. Liu Guoyue (President) and Mr. Fan Xiaxia (Vice President); the Non-executive Directors were: Mr. Huang Long, Mr. Wu Dawei, Mr. Huang Jian, Mr. Shan Qunying, Mr. Xu Zujian, Ms. Huang Mingyuan and Mr. Liu Shuyuan. The Company had five Independent Non-executive Directors comprising one-third of the members of the Company's Board of Directors, namely, Mr. Liu Jipeng, Mr. Yu Ning, Mr. Shao Shiwei, Mr. Zheng Jianchao and Mr. Wu Liansheng.

On 17 May 2011, there was a change of session to the Board of Directors of the Company. On establishment of the Seventh Session of the Board of Directors, Mr. Cao Peixi was appointed as the Chairman, Mr. Huang Long was appointed as the Vice Chairman. The Executive Directors of the Company are Mr. Cao Peixi (Chairman) and Mr. Liu Guoyue (President), Mr. Fan Xiaxia (Vice President). The Non-Executive Directors are Mr. Huang Long, Mr. Li Shiqi, Mr. Huang Jian, Mr. Shan Qunying, Mr. Liu Shuyuan, Mr. Xu Zujian and Ms. Huang Mingyuan. The 5 Independent Non-Executive Directors of the Company, representing one third of the members of the Company's Board of Directors, are: Mr. Shao Shiwei, Mr. Wu Liansheng, Mr. Li Zhensheng, Mr. Qi Yudong and Mr. Zhang Shouwen. On 13 December 2011, owing to work requirement, Mr. Liu Shuyuan tendered his resignation report to the Board. On 21 February 2012, the Company's general meeting elected Mr. Guo Hongbo as a director and Mr. Liu Shuyuan's officially resigned from the post.

The Board of Directors of the Company has held eight meetings during this reporting period including regular meetings and ad hoc meetings. For details, please see related announcements.

Details of the attendance of directors attending the board meetings are as follows:

Name	Number of meetings to be attended	Number of meetings attended in person	Number of meetings attended by proxy	Attendance rate (%)
<b>Executive Directors</b>				
Cao Peixi	8	6	2	75%
				(Attendance by proxy rate: 25%)
Liu Guoyue	8	7	1	87.5%
				(Attendance by proxy rate: 12.5%)
Fan Xiaxia	8	7	1	87.5%
				(Attendance by proxy rate: 12.5%)
<b>Non-executive Directors</b>				
Huang Long	8	8	0	100%
Li Shiqi	5	4	1	80%
				(Attendance by proxy rate: 20%)
Huang Jian	8	8	0	100%
Shan Qunying	8	7	1	87.5%
				(Attendance by proxy rate: 12.5%)
Guo Hongbo	0	0	0	(Appointed on 21 February 2012)
Xu Zujian	8	7	1	87.5%
				(Attendance by proxy rate: 12.5%)
Huang Mingyuan	8	8	0	100%

Independent Non-executive Directors

Shao Shiwei	8	8	0	100%
Wu Liansheng	8	8	0	100%
Li Zhensheng	5	5	0	100%
Oi Yudong	5	5	0	100%
Zhang Shouwen	5	4	1	80%

(Attendance  
by  
proxy rate:  
20%)

Details of the attendance of resigning directors attending the board meetings are as follows:

Name	Number of meetings to be attended	Number of meetings attended in person	Number of meetings attended by proxy	Attendance rate (%)
Wu Dawei	3	3	0	100%
Liu Shuyuan	8	8	0	100%
Liu Jipeng	3	3	0	100%
Yu Ning	3	3	0	100%
Zheng Jianchao	3	2	1	66.7%
				(Attendance by proxy rate: 33.3%)

As stated in Corporate Governance Report of 2010, the Company's Articles of Association set out in detail the duties and operational procedures of the Board (please refer to the Company's Articles of Association for details). The Board of the Company holds regular meetings to hear the report on the Company's operating results and makes timely decision. Material decisions on operation shall be discussed and approved by the Board. Ad hoc meetings may be held if necessary. Board meetings include regular meetings and ad hoc meetings. Regular meetings of the Board include: annual meeting, first quarterly meeting, half-yearly meeting and third quarterly meetings.

All arrangements for regular meetings have been notified to all directors at least 14 days in advance and the Company has ensured that each director thoroughly understood the agenda of the meeting and fully expressed his/her opinions, while all Independent Non-executive Directors expressed their independent directors' opinions on their respective duties. Minutes have been taken for all the meetings and filed at the Office of the Board of Directors of the Company.

Moreover, the Independent non-executive Directors of the Company have submitted their annual confirmation letters of 2011 in relation to their independence according to the requirements of the Listing Rules.

Apart from regular and ad hoc meetings, the Board obtained adequate information through the Chairman Office in a timely manner in order to monitor the objectives and strategies of the management, the Company's financial position and operating results and clauses of material agreements.

During the period when the Board was not in session, the Chairman, together with the Vice Chairman, discharged part of the duties of the Board of Directors, including (1) to examine and approve the establishment or cancellation of proposals to develop construction projects; (2) to examine and approve the approved proposals of the President in relation to the appointment, removal and transfer of managers of various departments of the Company and managers of external branches; (3) to examine and approve plans on the use of significant funds; (4) to examine and approve proposals on the establishment or cancellation of branch or branch organs; (5) to examine and approve other major issues.

The management of the Company shall be in charge of the production and operational management of the Company according to the Articles of Association. It shall implement annual operation plans and investment proposals and formulate the Company's management rules.



The Chairman of the Company shall sign the management authorization letter with the President of the Company, and confirm the respective authorities and duties of the Board and senior management. The Company's senior management reports on the actual implementation of various authorizations each year.

(d) CHAIRMAN AND PRESIDENT

The Company shall have a Chairman and a President who shall perform their duties respectively according to the Articles of Association. During the reporting period, Mr. Cao Peixi acts as Chairman of the Board and Mr. Liu Guoyue acts as President of the Company.

The division of duties of the Board and the senior management is the same as what has been disclosed in the Corporate Governance Report of 2010.

(e) NON-EXECUTIVE DIRECTORS

According to the provisions of the Articles of Association, the term of office of members of the Board of the Company shall not exceed three years (including three years) and the members are eligible for re-election. However, the term of office of Independent Non-executive Directors shall not exceed six years (including six years) according to the relevant provisions of the China Securities Regulatory Commission.

The respective terms of office of the Non-executive Directors are as follows:

Names of Non-executive Directors	Term of office
Huang Long	17 May 2011-May 2014
Li Shiqi	17 May 2011-May 2014
Huang Jian	17 May 2011-May 2014
Shan Qunying	17 May 2011-May 2014
Guo Hongbo	21 February 2012-May 2014
Xu Zujian	17 May 2011-May 2014
Huang Mingyuan	17 May 2011-May 2014

(f) DIRECTORS' REMUNERATION

According to the relevant laws of the PRC and the relevant provisions of the Articles of Association, the Board of the Company has established the Remuneration and Appraisal Committee. The committee is mainly responsible for studying the appraisal standards of the directors and senior management personnel of the Company, conducting appraisals and making proposals; responsible for studying and examining the remuneration policies and proposals of the directors and senior management personnel of the Company and to be accountable to the Board. As the executive directors of the Company are also the senior management of the Company, their performance appraisals were reflected in the appraisal of the senior management by the Board of Directors. During the reporting period, Mr. Liu Guoyue, Mr. Fan Xiaxia received salary from the Company as executive directors. Their salaries were recorded in the annual total remuneration and determined in accordance with the Company's internal pay scale. The total remuneration, after examined by the Remuneration and Appraisal Committee, was then submitted to the Board of Directors. The Executive Directors have entered into the director service contracts in compliance with the requirements of the Stock Exchange using the template set out by the Stock Exchange.

Members of the Sixth Session of the Remuneration and Appraisal Committee comprised seven directors. Members of the Remuneration and Appraisal Committee were Mr. Liu Jipeng, Mr. Liu Guoyue, Mr. Xu Zujian, Mr. Liu Shuyuan, Mr. Shao Shiwei, Mr. Zheng Jianchao and Mr. Wu Liansheng, of whom Mr. Liu Jipeng, Mr. Shao Shiwei, Mr. Zheng Jianchao and Mr. Wu Liansheng were Independent Non-executive Directors. Mr. Liu

Jipeng acted as Chief Member of the Remuneration and Appraisal Committee. Members of the Seventh Session of the Remuneration and Appraisal Committed comprised seven directors. Members of the Remuneration and Appraisal Committee are Mr. Qi Yudong, Mr. Liu Guoyue, Mr. Guo Hongbo (Mr. Liu was elected as a member on 20 March 2012. Mr. Liu Shuyuan was a member prior to 21

February 2012), Mr. Xu Zujian, Mr. Shao Shiwei, Mr. Wu Liansheng, Mr. Li Zhensheng, Mr. Qi Yudong, Mr. Shao Shiwei, Mr. Wu Liansheng and Mr. Li Zhensheng are Independent Non-executive Directors. Mr. Qi Yudong acted as Chief Member of the Remuneration and Appraisal Committee.

The operation of the Remuneration and Appraisal Committee under the Board of Directors did properly follow the Detailed Rules on the Work of the Remuneration and Appraisal Committee. The first meeting for 2011 was convened on 28 March 2011, at which the Report of Total Wage Expenses was reviewed and the Company's arrangement for the total wage in 2011. In the new financial year, the Remuneration and Appraisal Committee will carry out its work in a timely manner pursuant to the above rules on work according to the actual situation.

During this financial year, the attendance of meetings of the Remuneration and Appraisal Committee of the Company's Board was as follows:

Name of meeting	Date of meeting	Members who attended the meeting in person	Members who attended the meeting by proxy
First meeting of the Remuneration and Appraisal Committee of the Sixth Session of the Board of Directors in 2011	28 March 2011	Liu Jipeng, Liu Guoyue, Xu Zujian, Liu Shuyuan, Shao Shiwei, Wu Liansheng	Zheng Jianchao

(g) NOMINATION OF DIRECTORS

According to the relevant laws of the PRC and the relevant provisions of the Articles of Association, the Board of the Company has established the Nomination Committee. The Committee is mainly responsible for studying the selection standards and procedures for candidates for directors and senior management personnel of the Company according to the directors' qualifications under the Companies Law and Securities Law and the needs of the operational management of the Company, and making proposals thereon to the Board; searching for qualified candidates for directors and suitable persons for senior management personnel on a wide basis; and examining the candidates for directors and suitable persons for senior management personnel and making proposals thereon. Currently, the nomination of the candidates of directors of the Company is made by the major shareholders. The nominations, after examination of the relevant qualification by the Nomination Committee, will be submitted to the Board of Directors. The President of the Company was appointed by the Board and the candidates for the Vice President and management were nominated by the President. Such nominations, after examination of the relevant qualification by the Nomination Committee, will be submitted to the Board of Directors.

Members of the Nomination Committee of the Sixth Session of the Board were Mr. Shao Shiwei, Mr. Fan Xiaxia, Mr. Shan Qunying, Ms. Huang Mingyuan, Mr. Liu Jipeng, Mr. Yu Ning and Mr. Wu Liansheng, of whom Mr. Shao Shiwei, Mr. Liu Jipeng, Mr. Yu Ning and Mr. Wu Liansheng were Independent Non-executive Directors. Mr. Shao Shiwei acted as the Chief Member of the Nomination Committee. Members of the Seventh Session of the Nomination Committee are Mr. Shao Shiwei, Mr. Fan Xiaxia, Mr. Shan Qunying, Ms. Huang Mingyuan, Mr. Wu Liansheng, Mr. Qi Yudong, Mr. Zhang Shouwen. Mr. Shao Shiwei, Mr. Wu Liansheng, Mr. Qi Yudong and Mr. Zhang Shouwen are Independent Non-executive Directors. Mr. Shao Shiwei acted as Chief Member of the Nomination Committee.



Name of meeting	Date of meeting	Members who attended the meeting in person	Members who attended the meeting by proxy
First meeting of the Nomination Committee of the Sixth Session of the Board of Directors in 2011	28 March 2011	Shao Shiwei, Fan Xiaxia, Shan Ounying, Huang Mingyuan, Liu Jipeng, Yu Ning, Wu Liansheng	
First meeting of the Nomination Committee of the Seventh Session of the Board of Directors in 2011	8 August 2011	Shao Shiwei, Fan Xiaxia, Huang Mingyuan, Wu Liansheng, Oi Yudong, Zhang Shouwen	Shan Qunying
Second meeting of the Nomination Committee of the Seventh Session of the Board of Directors in 2011	22 December 2011	Shao Shiwei, Fan Xiaxia, Shan Qunying, Huang Mingyuan, Wu Liansheng, Oi Yudong, Zhang Shouwen	

## (h) REMUNERATION OF AUDITORS

PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian CPAs Limited Company were appointed as the international and domestic auditors of the Company for 2011, respectively. For the twelve months ended 31 December 2011, the total auditors' remuneration amounted to RMB33.94 million (including remuneration paid to other auditors in addition to that of the principal auditors).

## (i) AUDIT COMMITTEE

According to the requirements of the regulatory authorities of the jurisdictions where the Company is listed and the relevant provisions of the Articles of Association, the Board of Directors of the Company has established the Audit Committee which is mainly responsible for assisting the Board of Directors in supervising:

- (1) the authenticity of the financial statements of the Company,
- (2) the compliance by the Company with laws and regulatory requirements,

- (3) the qualification and independence of the independent auditors of the Company,
- (4) the performance of the independent auditors and the internal audit department of the Company; and
- (5) the control and management of the related-party transactions of the Company.

Members of the Audit Committee of the Board of Directors shall comprise five independent non-executive directors. Members of the Audit Committee of the Sixth Session of the Board of Directors were Mr. Wu Liansheng, Mr. Liu Jipeng, Mr. Yu Ning, Mr. Shao Shiwei and Mr. Zheng Jianchao respectively. Mr. Wu Liansheng acted as the Chief Member. Members of the Audit Committee of the Seventh Session of the Board of Directors are Mr. Wu Liansheng, Mr. Shao Shiwei, Mr. Li Zhensheng, Mr. Qi Yudong and Mr. Zhang Shouwen, respectively. Mr. Wu Liansheng acts as the Chief Member.

During the reporting period, the Audit Committee has held six meetings. As per Audit Committee's duties, the Audit Committee interviewed with the Company's legal advisor, external auditors, management and the relevant departments separately and exchanged ideas and communicated with them. With the understandings on the applicable laws and regulations of those jurisdictions in which the shares of the Company are listed, anti-fraud position in the Company, recruitment of staff, implementation and execution of internal control mechanism and audit work carried out by external auditors, the Audit Committee has rendered their views and opinion and made certain proposals. The meetings discussed and examined the audit working report of the Audit Department in 2010, the working plan and budget for auditing in 2011, the 2010 financial statements, the 2011 budget report, the 2010 profit distribution proposal, the proposal on appointment of external auditors, the financial reports for the first quarter for 2011, the interim and the third quarter of 2011 respectively. The Audit Committee submitted to the Board of Directors a work report for the past year and examination reports done in the meetings.

During this financial year, the attendance of meetings of members of the Audit Committee was as follows:

Name of meeting	Date of meeting	Members who attended the meeting in person	Members who attended the meeting by proxy
First meeting of the Sixth Session the Audit Committee in 2011	22 February 2011	Wu Liansheng, Liu Jipeng, Yu Ning, Shao Shiwei	Zheng Jianchao
Second meeting of the Sixth Session of the Audit Committee in 2011	28 March 2011	Wu Liansheng, Liu Jipeng, Yu Ning, Shao Shiwei	Zheng Jianchao
Third meeting of the Sixth Session of the Audit Committee in 2011	18 April 2011	Wu Liansheng, Liu Jipeng, Yu Ning, Zheng Jianchao, Shao Shiwei	—
First meeting of the Seventh Session of the Audit Committee in 2011	8 August 2011	Wu Liansheng, Shao Shiwei, Li Zhensheng, Qi Yudong, Zhang Shouwen	



Second meeting of the Seventh Session of the Audit Committee in 2011	24 October 2011	Wu Liansheng, Shao Shiwei, Li Zhensheng, Oi Yudong, Zhang Shouwen	–
Third meeting of the Seventh Session of the Audit Committee in 2011	6 December 2011	Wu Liansheng, Shao Shiwei, Li Zhensheng, Oi Yudong, Zhang Shouwen	–

(j) RESPONSIBILITY ASSUMED BY THE DIRECTORS IN RELATION TO THE FINANCIAL STATEMENTS

The Directors of the Company confirm that they shall assume the relevant responsibility in relation to the preparation of the financial statements of the Company, ensure that the preparation of the financial statements of the Company complies with the relevant regulations and applicable accounting standards and also warrant that the financial statements of the Company will be published in a timely manner.

The reporting responsibility statements made by the auditors of the Company in relation to the financial statements of the Company are set out in auditor's reports on page 105 to page 106 and page 221 to page 222.

(k) SENIOR MANAGEMENT'S INTEREST IN SHARES

None of the senior management of the Company holds any shares of the Company.

(l) STRATEGY COMMITTEE

According to the requirements of regulatory authorities where the Company is listed and the requirements of the Company's Articles of Association, the Board of Directors of the Company set up the Strategy Committee. The main responsibilities of the Strategy Committee are:

- (1) to study and make suggestions on the Company's long-term development strategies and plans;
- (2) to study and make suggestions on material investment and financing proposals which require the approval of the Board of Directors;
- (3) to study and make suggestions on material production and operational projects which require the approval of the Board of Directors;
- (4) to study and make suggestions on other material matters that will impact the Company's development;
- (5) to monitor the implementation of the above matters;
- (6) other matters required by the Board of Directors.

Members of the Strategy Committee of the Sixth Session of the Board of Directors comprised seven directors, namely Mr. Huang Long, Mr. Wu Dawei, Mr. Huang Jian, Mr. Liu Guoyue, Mr. Fan Xiaxia, Mr. Shao Shiwei and Mr. Zheng Jianchao, of whom Mr. Shao Shiwei and Mr. Zheng Jianchao were Independent Non-executive Directors. Mr. Huang Long acted as the Chief Member of the Strategy Committee. Members of the Strategy Committee of the Seventh Session of the Board of Directors comprised seven directors, namely Mr. Huang Long, Mr. Li Shiqi, Mr. Huang Jian, Mr. Liu Guoyue, Mr. Fan Xiaxia, Mr. Shao Shiwei, Mr. Li Zhensheng, of whom Mr. Shao Shiwei and Mr. Li Zhensheng are Independent Non-executive Directors. Mr. Huang Long acted as the Chief Member of the Strategy Committee.

On 27 June 2011, the Strategy Committee considered and approved the Report on Classification, Prevention and Control Measures on Risk of Huaneng Power International, Inc. in 2011 which was approved after the

examination by the Audit Committee of the Board of the Company on 8 August 2011.

On 2 November 2011, the Strategy Committee considered and approved the Risk Analysis Report of Huaneng Power International, Inc. for the first half of 2011.

The risk management work operates effectively, thus continuously strengthening and improving the internal control and risk management mechanism of the Company.

## Social Responsibility Report

The Board of Directors of the Company together with all the directors thereof guarantees that this Report does not contain any false statements, misleading representations or material omissions and jointly and severally accept responsibility as to the truthfulness, accuracy and completeness of the content of this Report.

This Report systematically summarizes the work of Huaneng Power International, Inc. (hereinafter referred to as the “Company”) in 2011 in fulfilling its social responsibility, which includes economic responsibility, environmental responsibility, safety responsibility, staff responsibility, and so on, with a view to giving a true presentation of the Company’s concrete achievement in its promotion of comprehensive, healthy and continuous development in 2011.

This Report has been prepared in accordance with the Guidelines on Preparation of “Corporate Report on Performance of Social Responsibilities” issued by the Shanghai Stock Exchange, and with reference to the G3 Sustainable Development Reporting Guidelines issued by Global Reporting Initiative (GRI) and in conjunction with the actual performance by the Company. This Report is the Company’s social responsibility report published to the general public and the data and contents contained herein are on the basis of the Company’s domestic business.

### I. CORPORATE OVERVIEW AND CORPORATE GOVERNANCE

#### 1. Corporate Overview

Established on 30 June 1994, the Company is principally engaged in the development, construction and operation of large power plants across the PRC with modern technology and equipment as well as domestic and overseas capital. In October 1994, the Company completed its global initial public offering of 1,250,000,000 overseas listed foreign invested shares (“foreign shares”) and listing of 31,250,000 American Depositary Shares (“ADS”) on the New York Stock Exchange in the United States (ticker symbol: HNP). The Company’s foreign shares were listed on The Stock Exchange of Hong Kong Limited (the “Hong Kong Stock Exchange”) by way of introduction (stock code: 902) in January 1998 and subsequently in March successfully completed its global placement of 250,000,000 foreign shares and its private placement of 400,000,000 domestic shares. The Company successfully issued 350,000,000 A shares on the Shanghai Stock Exchange in November 2001, of which 250,000,000 shares are public shares. In December 2010, the Company completed the non-public issuance of 1,500,000,000 ordinary shares denominated in RMB (A Shares) and 500,000,000 overseas listed foreign shares (H Shares). At present, the Company has a total of approximately 14.06 billion shares in issue.

As at 31 December 2011, the Company’s domestic controlling generation capacity and equity-based generation capacity amounted to 55,808.5 MW and 51,017.4 MW respectively. With wide coverage of power plants in 19 provinces, municipalities and autonomous regions in the PRC, the Company is currently one of the country’s largest listed power producers. In addition, the Company has a wholly-owned power company in Singapore.

Since its establishment, the Company, as a power generation enterprise, has been committed to technology, system and management innovations. It has achieved various No.1s among the PRC industry players and completed various milestone projects in areas such as power technology advancement, power plant construction and management approach, which significantly facilitated the great-leap forward development of the power business and technological advancement of the power station equipment manufacturing industry in the PRC, and also significantly contributed to the improvement of technical and management standards of the PRC power generation enterprises. At the same time, the Company increased the investment in coal, port and sea transportation and upgraded the capability in the self-supply of coal, the power in port storage, trans-shipment and the sea transportation. The combined synergy in power, coal, port and transportation is basically formulated.

2. Corporate Governance

As a public company listed in three places within and outside the PRC, the Company at the same time has been subject to regulation by the securities regulatory authorities in the three places where the Company's shares are listed and the supervision by the Company's shareholders. The Company consistently stressing the importance of corporate governance and has enhanced its corporate governance structure, which comprises the general meetings, the Board of Directors, the Supervisory Committee and senior management leading by the President. It has established an operating mechanism with clear segregation between decision authority, supervisory authority and operation authority to enable each of them to perform their respective responsibilities, implement checks and balances and coordinate with one another, so that the decision-making power of the Board of Directors over important matters and the supervision power of the Supervisory Committee can be effectively exercised to ensure the operation team can effectively deal with operation matters. Through years of researches and implementation, the Company has gradually formulated a regulated and enhanced structure for corporate governance, and established a systematic mechanism that is sound and effective, and suits the own needs of development by the Company.

The Company has been consistently treating all shareholders fairly, and striving for the generation of long-term, stable and growing returns for shareholders. The Company won the "Most Popular Listed Company Among Hong Kong and Mainland Investors Award" of the 2011 China Securities Golden Bauhinia Awards by way of its good governance, scientific system construction, standardized operations and distinctive practice.

The Company stresses on the importance of information disclosure. The Company has established the Information Disclosure Committee which comprises the Vice President, the Chief Accountant and managers of all departments, and is responsible for examining the Company's regular reports. The Company has implemented the system of holding weekly information disclosure meetings chaired by the Vice President and the Chief Accountant who will report on the Company's important matters of the week, thereby ensuring the organization that the Company's performance of the relevant information disclosure obligations. In 2011, the Company made 16 overseas press releases and published 145 announcements within and outside the PRC to reinforce effective communications with the investors.

## II. ECONOMIC RESPONSIBILITY OF THE COMPANY

The Company further strengthened control over comprehensive budgetary management, delivered monthly budgets ahead of schedule, conducted monthly assessments in a timely manner, strengthened closed-loop management of budgets, and emphasized guiding function of budgets to operations. In face of the changing operating situation, the Company timely set up a team responsible for investigation, research and supervision

under the leadership of the management to supervise operation and tackle important and difficult issues, which has proved to be quite effective.

The marketing campaign of the Company has been successful. It strengthened tracking and supervision on power output, highlighted the guidance, collaboration and motivation on efficient dispatch of power, over-fulfilled its annual power output target, and further optimized power consumption structure. The Company has actively sought policies support and its overall adjustment of power tariff was better than that of the national average, thus effectively improved its operating situation.

The Company has secured the supply of fuel, actively broadened new sources of coal and coal supply channels, strengthened mixed burning of economical coal, timely increased the import of coal, and successfully controlled its coal purchase prices, further refined the system and mechanism of fuel management. The development of the Fully Digitalized Dynamic Management Platform for Fuel Supply Process and active engagement in the Forging of Fuel Management Benchmarking Power Plant further reinforced closed-loop management throughout the fuel process.

The Company has endeavored to ensure secure sources of funds for every aspect of normal operation amid tightening credit, strengthened its management over capital inflows and outflows, perfected its overall planning on and allocation of funds, thus further enhanced its financial management and control.

### III. SAFETY RESPONSIBILITY OF THE COMPANY

The Company has adhered to its objective of “Zero Casualty of Human Being and Zero Tolerance for Violation of Regulations”, persistently stressed on the importance of being accountable, uncompromised and meticulous, rigorously engaged in the development of Four Major Projects related to intrinsically safe management system, full-scale safety education and training, on-site operating risk control, and contractors safety management. The Company also devoted itself to the 100 Days Campaign of Specific Rectification of Violation of Regulations, conscientiously organized and rolled out the potential risk identification and rectification measures, further strengthened the production safety basis, further enhanced the reliability and utilization rates of generators and further enhanced the production safety and emergency protection ability.

In 2011, the Company did not incur any serious accidents or any of the above incidents, nor any environmental pollution issues, or accidents which interrupted the safe operation of the power grids. The Company has maintained an overall stable situation of production safety. The Company incurred four general equipment accidents throughout the year, representing an addition of two cases as compared to the corresponding period of the previous year; 27 breakdowns, representing an addition of seven cases as compared to the corresponding period of the previous year. The average unplanned outage times were 0.39 time/unit annum, representing an addition of 0.03 time/unit annum as compared to the corresponding period of the previous year. Yuhuan Power Plant, Yushe Power Plant and Yingkou Cogeneration did not incur any unplanned outages throughout the year.

### IV. ENVIRONMENT RESPONSIBILITY OF THE COMPANY

#### 1. Energy Saving and Environmental Protection Objectives

During its development, the Company has strictly complied with the country’s environmental regulations, actively fulfilled its environmental responsibilities, promoted technological innovations, enhanced resources utilization efficiency and actively established superior energy saving and environmental friendly coal-fired power plants. In 2011, the Company achieved all of its energy saving and environmental protection objectives, 11 power plants reached the standards of superior energy saving and environmental friendly coal-fired power plants, maintained its primary technical and economic indicators at the forefront both at domestic and international levels.

#### 2. Energy Saving and Environmental Protection Measures

The Company further exploited potential on energy saving, increased efforts in technology renovation for energy saving, fully implemented specific projects related to cold end optimization, energy saving under low-load operations, energy saving under flue gas system, energy saving at environmental facilities, optimizing operation of auxiliary system, and control of small indicators, thereby maintaining its energy consumption indicators at the forefront among the industry players. The Company



implemented cylinder uncovering transformation for 30 generating units and upgraded the circulation systems for 5 generating units throughout the year.

The Company has intensified its management and renovation efforts in the operation of environmental facilities and completed desulphurization and upgraded capacity for 13 generating units; formulated plans on reducing emission of nitrogen oxide in accordance with the 12th Five-Year Plan and completed denitrification for 4 generating units. The pilot power plant became the first to accomplish phase II works assigned to pilot monitoring stations for flue gas mercury emission. The Company also organized exchange forum on technology for the control of PM2.5 emission, and further committed to research on the control of fine particle emission.

The Company has established and improved the technical standard management system and technical expert system, strengthened management of the technology project approval and development process, expedited the development process of technical preparations of high efficiency and large generating units and demonstration projects, and the design optimization program for main equipments and main systems was primarily completed. Such project was nominated to participate in the 2012 National Selection of Major Technology Preparation Project and became one of the candidates. In 2011, the Company approved 95 technology projects. The planned amount for the projects of the year totaled RMB86.53 million.

3. Energy Saving and Environmental Protection Performance

In 2011, the Company achieved remarkable results in energy saving and environmental protection. It accomplished the annual objectives specified in the Letter of Three Energy Saving and Environmental Protection Responsibilities, without violating the environmental laws and regulations of the PRC.

In 2011, the Company consumed 144.07 million tons of natural coal and recorded an average coal consumption for power supply for coal-fired generating units of 312.10 g/kWh, representing a decrease of 3.49 g/kWh as compared to the same period of the previous year.

In 2011, the coal-fired units of Company consumed 278.746 million tons of water, which was primarily derived from rivers, lakes, seas, groundwater, rainwater, and so on.

In 2011, the performance values of sulphur dioxide and nitrogen oxides for the year were 0.57 g/kWh and 1.55 g/kWh respectively, representing a decrease of 0.16 g/kWh and 0.14 g/kWh respectively as compared to the same period of the previous year.

V. STAFF RESPONSIBILITY OF THE COMPANY

1. Protection of Staff Benefits

(1) Staff overview

With the belief that human resources are the forefront important assets, the Company actively implements the strategy of developing the enterprise by talents, focuses on the tri-tasks of attracting, nurturing and making good use of talents, accelerates the establishment of a team with high-level and highly skilled talents as the core members. As a result, a team of talents which is well structured, professionally equipped, of excellent quality, devoted to careers in Huaneng and in line with the Company's developmental and strategic needs was formed.

As at the end of 2011, the Company had 35,903 employees, 63% of whom had tertiary qualifications and above. Intermediate and higher level professional technicians

accounted for 50% of the total staffing with professional and technical qualifications.

(2)

Rights protection

The Company consistently implements a fair, just and open employment policy and endeavors to implement the Labour Law, the Employment Contract Law and the Regulation on the Implementation of the Employment Contract Law, and other laws and regulations, for strengthening the management of employment contracts. The Company signs employment contracts with employees according to related regulations.

The Company focuses on the improvement of the Staff Representative Congress System and the Plant Affairs Publicity System, supports the staff's active participation in democratic management and guarantees the staff's full entitlement to the rights to be informed, participate, express and supervise. The Company improved the responsibility system for complaint handling and formulated the system and standards for staff's benefit claims.

All of the Company's affiliated enterprises have established trade unions in accordance with the Trade Union Law, and the staff's entry rate remained 100%. Trade unions at all levels seriously perform their duties, sign collective contracts with the enterprises on behalf of the staff, safeguard the staff's legal interests, encourage the staff to participate in management decision making, jointly accomplish the economic objectives of the enterprises, and assist in mediating disputes between the staff and the enterprises.

The Company attaches great importance to the staff's health and safety. All of its affiliated enterprises have established a protection mechanism for the staff's health and safety. The enterprises organize physical examinations for all staff annually and also special physical examinations for the staff who are exposed to the sources of occupational hazards.

(3)

#### Incentives and protection

The Company further improved its remuneration allocation system, devised a series of remuneration management procedures in line with the overall strategies, standardized the pay system and criteria, and optimized the income allocation structure. Staff remuneration is determined in accordance with the principles of "determining salaries based on the position, receiving compensation based on performance, giving priority to efficiency and emphasizing fairness" and is linked to individual performance, establishing a scientific and effective incentive mechanism.

The Company actively promoted reform in corporate social security system, improved the basic retirement, medical and unemployment insurance systems, standardized the corporate annuity system, showed concern about the staff's production and living, actively organized "warmth and care delivery" activities, and provided support and help for staff in need.

## 2. Support for Staff Development

(1)

#### Staff training

The Company emphasized training for all staff, took full advantage of Huaneng systematic training resources, strengthened the cooperation with external training organizations, developed multi-level, multi-channel and multi-dimensional training, and strived to reinforce general competence of the staff. The major types of training include: orientation training, position training, skill training, continuing education and international cooperation training.

As at the end of 2011, the Company had 8 state-level talents, including 1 member of the “National Hundred, Thousand and Ten Thousand Talent Project” and 7 persons who enjoyed special government allowance (of whom 2 persons enjoyed an one-off special government allowance for 2011). The Company had 8 national technical experts, 16 technical experts of state-owned enterprises, and 22 technical experts of the power industry.

(2)

#### Development opportunities

The Company emphasized the provision of growth opportunities to its staff so as to realize joint development of the staff and the enterprise. The Company accelerated the development of advanced organizations with “Quaternion Excellence”, established the

exchange and training system for cadres, reinforced the training of substitute cadres, and rejuvenated the cadres. The Company established an employment mechanism of “position competition and talent selection”, and organized multi-level skill competitions and achievement evaluation activities so as to provide high caliber talents with opportunities to stand out.

The Company reinforced the establishment of technical expertise personnel teams, improved the technical expertise qualifications management system, properly selected technical experts and recommended senior technical personnel. The Company reinforced the establishment of technical personnel teams where 2,170 persons were promoted to occupational qualifications.

## VI. SOCIAL RESPONSIBILITY OF THE COMPANY

The Company capitalized on the leading role in the culture of “three-color ” companies, insisted on sustainable development, serving the State, benefitting the community, actively assuming social responsibilities, creating a good internal and external environment, jointly promoting economic and social development with the relevant interested parties and sharing corporate development achievements in order to make contributions for the establishment of a harmonious socialist society.

The Company attaches great importance to power supply protection work. The power plants have formulated corresponding emergency work pre-arranged planning and management measures in order to ensure safe and stable power generation during important periods including the CPC’s 90th Founding Anniversary and the Universiade.

The Company actively participated in social charity activities including new socialist village development, poverty alleviation, education assistance, charitable donations, and actively reciprocated the society and showed their care by means of innovative cooperative services. In 2011, the Company donated a total of RMB1.1 million in its name to support local social charity.

In the future, the Company will continue to strive for the generation of long-term, stable and growing returns for shareholders; strive for the provision of adequate, reliable, environmental friendly electricity for the society; strive for developing itself as a first-class listed power producer with leading technology, excellent management, reasonable distribution, optimized structure, industry synergy and remarkable efficiency.

## Investor Relations

### PHILOSOPHY OF INVESTOR RELATIONS

Huaneng International always highly values the management of investor relations since its listing. The Company communicates with all investors in a wholehearted, equal and respectful manner through timely and diversified two-way channels, enhancing and perfecting the management of investor relations of the Company. In addition, the Company also values the two-way interactive communication of “disclosure” and “adoption”. With its investors “Disclosure” – the Company discloses information including financial position and operating performance to investors accurately, fairly and comprehensively in a responsible manner, which helps investors to understand and recognize the current situation and future development strategy of the Company. “Adoption” – the Company has placed multiple channels to collect opinions of investors to adopt suggestions and ideas related to its operating activities. Such two-way communication effectively improves the operation management ability of the Company and ultimately maximizes the interests of the Company as a whole and all shareholders.

### INVESTOR RELATIONS WORK SYSTEM

- Establishing meticulous organization and enhancing system development

The Company sets up special-purpose information disclosure organizations (Information Disclosure Committee and Information Disclosure Work Team) and holds routine information disclosure meetings every Monday, making clear the work flow for information disclosure of the Company and guaranteeing the compliance and time effectiveness of information disclosure.

In the meantime, the Company has established the Measures on Information Disclosure Management, the Rules on Investor Relations Management, the Detailed Rules on the Work of the Information Disclosure Committees and Measures on Insider Information, setting out in detail the basic principle, targets, contents of disclosure and registration and delivering of insider information. The issue and implementation of these regulations further enhanced the information disclosure system of the Company, strengthened the discipline of the Company’s information disclosure, safeguard and minimise the insider dealing activities, so as to preserve the legal interests of shareholders.

In addition, the Company has also formulated the Internal Control System according to the relevant requirements of the state and Sections 302 and 404 of Sarbanes-Oxley Act of 2002, as well as prepared the Internal Control Handbook, further enhancing corporate governance and ensuring truthful, timely, accurate and complete information disclosure.

In 2011, according to the requirements of regulatory organs and the actual circumstances of the Company, the Company newly established the Annual Report Information Disclosure Significant Errors Accountability Regulations setting out detailed regulations in relation to significant economic losses of the Company or bad social impact as a result of significant errors of information disclosure in the annual report due to violation of regulations by the relevant personnel in information disclosure of the annual report as well as the relevant accountability. The formulation and implementation of such system raised the regulated operation level of the Company, enhanced the authenticity, accuracy, completeness and timeliness of information disclosure as well as enhanced the quality and transparency of information disclosure in the annual report of the Company.

Having established a complete and effective control system targeting the entire process of the Company’s information disclosure, the Company has been able to control potential risks in information disclosure

effectively and ensure that all information disclosed by the Company is regulated and effective since its listing. With its timely, accurate and sufficient information disclosure, the Company has received recognition by domestic and overseas investors and won various awards granted by domestic and overseas investment institutions and professional institutions.



In 2011, the Company won the Most Popular Listed Company Among PRC and Hong Kong Investors Award of the 2011 China Securities Golden Bauhinia Award because of its outstanding performance.

- Expanding channels and effective communication

In view of the different needs and nature of different investors – existing investors, potential investors, institutional investors and retail investors, the Company actively holds a variety of investor relations activities in various forms including telephone, emails, analyst conference, one-to-one meetings, investment forums, roadshows and reverse roadshows according to the characteristics of different investors, with a view to achieve all-round and effective communication and establish long-term and stable relations of mutual trust.

The Company handles daily calls and visits made by investors properly. By consistently updating and sorting out investor database, expanding the investor communication network of the Company, holding two-way interactive investor relations activities, the Company is able to enhance the understanding and knowledge of investors about the Company, adopt suggestions and ideas put forward by investors, create two-way communication channels and platforms for fluid communication with investors and maximize the interests of the Company and investors.

- Timely disclosure and continuous follow-up

The Company discloses information in a truthful, accurate, complete and timely manner strictly according to the requirements of the regulatory authorities of its listing places, increasing the transparency of and attention to the Company and enhancing the image of the Company in capital markets. In the meantime, the Company follows up feedbacks from investors consistently and ensures effective communication, with a view to establish stable investor relations.

The Company made 16 overseas press releases and issued 145 overseas announcements in 2011.

## NOTICE TO SHAREHOLDERS

- Dividend distribution

The Board resolved to propose for the year 2011 a dividend of RMB0.05 (inclusive of tax) per share. Dividends will be denominated and declared in Renminbi. Dividends on domestic shares will be paid in Renminbi. Save for the dividends on foreign shares traded on the Hong Kong Stock Exchange which will be paid in Hong Kong dollars, dividends on other foreign shares will be paid in US dollars. Exchange rates for dividends paid in US dollars and Hong Kong dollars are USD1 to RMB6.32795 and HKD1 to RMB0.815205

respectively. All the dividends payable to shareholders shall be subject to shareholders' approval at the annual general meeting of the Company.

## DIVIDENDS

- Dividend policy

The Company maintains a positive, balanced and stable dividend policy, persistently increases its profitability, striving for realization of increasing returns to shareholders.

- Declaration of dividends

Since listing, Huaneng International has been given tremendous support and concern by shareholders. The Company has also rewarded shareholders with a persistent, stable and increased return over the years. The Company has been declaring dividends every year since 1998. The accumulated dividend paid amounted to RMB28.626 billion.

Year	Dividend per share (RMB)	Earnings per share (RMB)	Dividend Payout Ratio
1994		0.17	
1995		0.24	
1996		0.27	
1997		0.33	
1998	0.08	0.33	24.24%
1999	0.09	0.33	27.27%
2000	0.22	0.44	50.00%
2001	0.30	0.60	50.00%
2002	0.34	0.65	52.31%
2003*	0.50	0.90	55.56%
2004	0.25	0.44	56.82%
2005	0.25	0.40	62.50%
2006	0.28	0.50	56.00%
2007	0.30	0.51	58.82%
2008	0.10	-0.33	
2009	0.21	0.41	51.22%
2010	0.20	0.28	71.43%
2011**	0.05	0.08	62.50%

\* The Company's dividend plan for 2003 included a cash dividend of RMB5.00 together with bonus issue of 10 shares for every 10 shares.

\*\* The profit distribution plan of the Company for 2011 will be implemented after the shareholders' approval is obtained at the annual general meeting.

#### INVESTOR RELATIONS ACTIVITIES HELD BY THE COMPANY

- Press Conferences

In 2011, the Company has organized one press conference in Hong Kong, one large-group presentation with Hong Kong investment analysts and fund managers, one large-group presentation with PRC investment analysts and fund managers, two global telephone conferences for the quarterly results and a global telephone conference for the results of the first half of the year.

- Roadshow

Roadshow is a commitment of the Company to the investors and a specific reflection of respect shown to the investors. The Company believed that periodic face-to-face meetings with investors were instrumental in promoting mutual understanding and providing better service to the shareholders. Since its listing, the Company has all along attached importance to communication with the investors and has a good reputation in the investment field.

In 2011, the Company conducted annual non-dead roadshows in the USA and Europe according to practice. The management conducted more than 50 “one-to-one” meetings with the former investors, existing shareholders and potential investors of the Company detailing the operations, future development and prospects of the Company, thus effectively promoting communication between the Company and the investors and enhancing the investors’ understanding of the Company and the industry.

- Reverse Roadshow

The Company conducted reverse roadshows annually since 1999. The Company organized domestic and overseas analysts and investors to visit its power plants. Through on-the-spot investigations and dialogues with the management of the power plants, the investors had a better understanding of the power generating equipment and the relevant operating conditions. Over the past years, the reverse roadshows of the Company were very effective and were popular and highly commended among the investment field.

In 2011, the Company organized domestic and overseas analysts and investors to visit Shanghai Shidongkou Power Generation Limited Liability Company and Shanghai CCGT power plant. The management of the Company and the responsible personnel of the power plants conducted comprehensive exchanges and communication with the investors in relation to the operations of the power plants. The investors also visited the site of carbon dioxide capture equipment of the power plant. A total of 22 domestic and overseas analysts and investors participated in this reverse roadshow activities.

- Visits and general enquiries from investors

The Company has received more than 100 groups of institutional investors for company visits and about 200 telephone enquiries from investors in the year.

- Investors Forum

In 2011, the management of the Company has attended 3 large investment forums in which they met more than 50 institutional investors.

## Report of the Board of Directors

The Directors hereby submit their annual report together with the audited financial statements for the year ended 31 December 2011.

## RESULTS SUMMARY

The Board of Directors (the “Board”) of Huaneng Power International, Inc. (the “Company” or “Huaneng International”) hereby announces the audited operating results of the Company and its subsidiaries for the year ended 31 December 2011.

For the twelve months ended 31 December 2011, the Company recorded operating revenue of RMB133.421 billion, representing an increase of 27.90% compared to the same period of the previous year, and net profit attributable to equity holders of the Company of RMB1.181 billion, representing a decrease of 64.74% as compared with the same period of 2010. Earnings per share amounted to RMB0.08. The Board is satisfied with the Company’s results last year.

The Board of the Company proposed to declare a cash dividend of RMB0.05 (inclusive of tax) for each ordinary share of the Company held by shareholders.

## BUSINESS REVIEW OF YEAR 2011

In 2011, the Company had attained new progress on many aspects including power generation, energy saving and environmental protection, project development and overseas operation. In respect of domestic operations, despite the unfavourable conditions from sustained increases in fuel prices and Renminbi lending rates, the management and employees of the Company seized opportunities, worked diligently to tackle the adversities, and fulfilled the duties of providing sufficient, reliable and green energy to the society. In respect of overseas operation, the operating results of Tuas Power in Singapore in 2011 improved significantly, thus making important contributions to the overall profit of the Company.

### 1. Operating Results

For the twelve months ended 31 December 2011, the Company recorded operating revenue of RMB133.421 billion, representing an increase of 27.90% compared to the same period last year, realized net profit attributable to equity holders of the Company of RMB1.181 billion, representing a decrease of 64.74% as compared with the same period of last year. Earnings per share was RMB0.08.

As at the end of 2011, net assets per share of the Company amounted to RMB3.62, representing a decrease of 5.48% compared to the same period last year.

The Audit Committee of the Company convened a meeting on 19 March 2012 and reviewed the 2011 annual results of the Company.

### 2. Power Generation

In 2011, the Company grasped the opportunities emerge during the peak electricity consumption period of the country, and explored the market through various channels, thus expanding our market shares. Through optimizing the examination and maintenance work of our generation units and the power generation structure,

the Company has increased power generation in an efficient way. At the same time, with a number of new generating units that have commenced operation, and the completion of the acquisition of Zhanhua Co-generation and Diandong Energy, market share of the Company has been expanded. As a result, total power generated by the Company's operating power plants in China amounted to 313.554 billion kWh, representing an increase of 22.03% compared to the same period last year. The electricity sold amounted to 295.717 billion kWh, representing an increase of 22.30% compared to the same period last year.

In 2011, the annual average utilization hours of the Company's domestic thermal generating units reached 5,552 hours, representing an increase of 133 hours compared to the same period last year and 258 hours higher than the average utilization hours of the thermal generating units in China.

### 3. Cost Control

Fuel cost is the major integral part of the operation cost of the Company. In 2011, the Company purchased a total of 145 million tons of natural coal. The Company continued to enhance the communication and coordination with major contracted suppliers, leverage on it to actively explore new sources and supply channels for coal, and has effectively secured our coal supply. In addition, by capitalizing on the internal resources within China Huaneng Group ("Huaneng Group") and increasing its imports of coal, the Company has helped to control the coal purchasing cost effectively. The fuel cost per unit of power sold of the Company's domestic power plants was RMB270.37 per MWh, representing an increase of 9.24% compared to last year.

### 4. Energy Saving and Environmental Protection

The Company has always placed energy saving and environmental protection work as its utmost priority. In 2011, the Company led the industry in terms of technical and economic indicators and energy consumption indicator. The average equivalent availability ratio of the Company's domestic power plants was 94.23%, and its weighted average house consumption rate was 5.03%. The Company's average coal consumption rate for the power generated by coal-fired generating units was 296.40 grams/kWh, 1.14 grams/kWh lower than that of the same period last year. The Company's average coal consumption rate for power sold was 312.10 grams/kWh, representing a decrease of 3.49 grams/kWh from 2010.

In 2011, the Company kept increasing its effort in implementing, managing, updating and modifying our environmental friendly equipment, all power plants of the Company have met the pollutants emission standard throughout the year.

### 5. Project Development

Construction of power generating projects of the Company progressed smoothly. In 2011, the controlled generation capacity of the newly commissioned coal-fired, combined cycle, wind turbine and hydro-power generating units of the Company was 3,120 MW, 923 MW, 698.5 MW and 20 MW, respectively. The above has increased the total controlled generating capacity and equity-based generation capacity of the Company by 4,761.5 MW and 3,149.4 MW, respectively. The installed generating capacity of the Company also changed as a result of the change of installed generating capacity of some power generation companies invested by the Company and the Company's technological improvement to existing generating units and close-down of small generating units. As of 20 March 2012, the Company's controlled and equity-based generation capacity was 60,375 MW and 55,350 MW, respectively.

### 6. Overseas Business

In 2011, Tuas Power Ltd. ("Tuas Power"), a wholly owned company of the Company in Singapore, seized opportunities and continued to maintain stable operation of the generating units, and improved its operating results significantly. Its market share in the power generating market of Singapore for 2011 was 27.12%, representing an increase of 1.91 percentage point compared to the corresponding period last year. Singapore businesses realized a net profit attributable to the Company of RMB1.282 billion for the whole year, representing an increase of 85.45% as compared to the corresponding period last year.



In 2011, the Company further secured its market position and was widely recognized by the market. Given its outstanding performance, the Company was awarded the “Most Popular Listed Company among Investors in Hong Kong and China” of the 2011 Golden Bauhinia Awards in China securities market; the Company was again named in the “Top 500 Chinese Listed Companies” of Fortune magazine, and ranked 29th on the list. In addition, the Company ranked 57th on the “Top 100 Chinese Listed Companies” in 2010. Besides, the Company was listed on the “Platts Top 250 Global Energy

Listed Companies” for three years consecutively, with an overall ranking of 127th and ranked 4th in the category of global independent power producers and energy traders.

## PROSPECTS FOR 2012

General working direction for 2012 set by the Central Economic Work Conference is “to maintain steady and health growth”, it stressed that progressive fiscal policy and sound monetary policy are still needed to be implemented, the economy of the country will develop in the expected direction set by the macro-economic control measures. However, as global economic environment is still harsh yet complicated, together with the pressure of slowing down in economic growth and price inflation in China, the unstable and uncertain factors in the operation of the macro-economy still persist.

On aspect of production and operation, the increase in demand for electricity nation-wide and the commercial operation of the newly constructed generating units of the Company provide opportunities for the Company to increase the growth of power production and utilization hours. The upward adjustments to tariff by the State and the measures to restrict coal prices last year had greatly improved the Company’s operation environment and increased the profitability. However, following the adjustments to the economic structure of the State and industrial upgrading, the growth in the Company’s power production will have certain impacts as the electricity consumption growth rate in eastern China region and southern China region (in which the Company has majority of its power plants) will be lower than those in central and western regions. At the same time, in the process of electricity reform, price mechanism reform is relatively lagging behind. This will also bring an uncertainty to the Company’s operation.

On aspect of fuel procurement, the moderately easing of the coal supply nation-wide in 2012 will create a favourable condition for the Company to control fuel costs. However, affected by the increased centralization of the coal industry, domestic coal prices may still run high, thereby bringing about a new pressure on the Company’s ability to preserve a stable supply of coal and to reduce fuel costs.

On aspect of funds market, as the People’s Bank lowered its deposit-taking financial institutions’ deposit reserve rate by 0.50 percentage point in February 2012, the market liquidity will be further increased and the tension in the funds market will be eased. The increase in market liquidity will be favourable for the Company to continue the innovative financial instruments, to fully utilize the advantages of direct financing, and to strive to control the costs of finance on basis of ensuring capital needs. However, given the requirements for the loan-to-deposit ratio, capital adequacy ratio and the deposit reserve ratio, the prevailing general capability for credit financing by banks is limited, and the funds from the credit market is still tight. At the same time, the relatively high lending interest rates and the adjustments to the credit structure of part of the banks will also pose new challenges to the financing work of the Company.

The main task of the Company in 2012 is to focus on enhancing economic efficiency, and through which to make our power business become stronger and perform better. The Company will remain sensitive to the changes in the power market, and strive to explore the market and capture every market opportunities. Besides, the Company will improve the power structure and optimize the timing for every project, with an aim to enhance the benefits from power generation, strive to make the annual domestic generating units utilization hours reach 5,600 hours, thus enabling the Company’s domestic power plants to achieve an annual power generation of 340 billion kWh. Another task for the Company is to impose more stringent control of fuel costs, and make endeavors to explore new coal sources and supply channels. The major direction for the Company is to maintain the position of its core business, adjust power structure, enhance efficiency and risk control, which will be achieved through strengthening funds management, enhancing financial analysis ability, and improving risk controls and cost controls.

In respect of the development for 2012 and the years after, the Company will gradually accelerate the transformation of its development mode for further developments, and further consolidate and optimize its geographical coverage. The Company will fine tune the development plan for thermal power generating, and aggressively invest in development and construction of power projects in gas, wind power, hydro power, aiming to enhance the quality and efficiency of the development.

## SUMMARY OF FINANCIAL INFORMATION AND OPERATING RESULTS

Please refer to the Financial Highlights on page 10 for the summary of the operating results and assets and liabilities of the Company and its subsidiaries as at 31 December 2011 and for the accounting year then ended.

Please refer to pages 107 to 108 and page 225 of the financial statements for the operating results of the Company and its subsidiaries for the accounting year ended 31 December 2011, which have been reviewed by the Company's Audit Committee.

## DISTRIBUTABLE RESERVE

Distributable reserve as at 31 December 2011 calculated in accordance with the Company's Articles of Association is set out in Note 20 to the financial statements prepared under the International Financial Reporting Standards ("IFRS").

## DIVIDENDS

Since the listing of the Company, shareholders have given great support to and cared much for the Company. The Company has also generated returns that have been growing continuously and steadily over the years. The Company has been paying dividends to shareholders every year since 1998, with an accumulated dividend of RMB28.626 billion paid.

In the future, the Company will continue to follow a proactive, balanced and stable dividend policy, keep increasing its profitability and achieve continuous growth of return on equity.

In accordance with the requirements of relevant laws and regulations and the articles of association of the Company, the Company adheres to the profit distribution policy whereby the distributable profits shall be the lower of distributable profits in the financial statements prepared under the PRC Accounting Standards and the International Financial Reporting Standards.

The Company proposed to declare a cash dividend of RMB0.05 (inclusive of tax) for each share to all shareholders for the year 2011. All dividend will be paid after the shareholders' approval is obtained at the annual general meeting of the Company.

In accordance with the Corporate Income Tax Law of the PRC and its implementation regulations which came into effect on 1 January 2008, the Company is required to withhold and pay corporate income tax at the rate of 10% on behalf of the non-resident enterprise shareholders whose names appear on the register of members for H share of the Company when distributing final dividends to them. Any H shares of the Company registered other than in the name(s) of individual(s), including HKSCC Nominees Limited, other nominees, trustees, or other organizations or groups, shall be deemed to be shares held by non-resident enterprise shareholder(s). On the basis, corporate income tax shall be withheld from dividends payable to such shareholder(s).

As the Company has not yet confirmed the date for convening the 2011 annual general meeting, or the record date(s) or the period(s) for closure of register for determining eligibility to attend and vote at the 2011 annual general meeting and for determining the entitlement to the final dividend, the Company will upon confirmation thereof announce such details in the notice of the 2011 annual general meeting, such notice is expected to be issued to shareholders in April 2012.

The Company shall comply with the relevant rules and regulations to withhold and pay corporate income tax on behalf of the relevant shareholders based on the register of members of the Company as of the record date.

During the reporting period, there was neither change in the Company's accounting estimates, nor was there any correction of material accounting errors. Please refer to Note 2 to the financial statements prepared under IFRS for details of relevant new standards, amendments to standards and interpretations adopted by the Company and its subsidiaries effective from the financial year beginning 1 January 2011.

## PRINCIPAL BUSINESS

The domestic power plants of the Company and its subsidiaries are located in 19 provinces, provincial-level municipalities and autonomous regions. The Company also has a wholly-owned power plant in Singapore. The core business of the Company is to develop, construct and operate large scale power plants throughout the country by making use of modern technology and equipment and financial resources available domestically and internationally. The power plant facilities of the Company are technically advanced, highly efficient and stable.

## SUBSIDIARIES AND ASSOCIATED COMPANIES

Please refer to Notes 9 and 8 to the financial statements prepared under the IFRS for details of the Company's subsidiaries and associated companies respectively.

## BONDS

During the year, the Company successfully issued RMB10 billion short-term bonds in meeting its operational needs. Please refer to Note 27 to the financial statements prepared under the IFRS for details.

## BANK LOANS AND OTHER BORROWINGS

Please refer to Notes 22 and 28 to the financial statements prepared under the IFRS for details of bank loans and other borrowings of the Company and its subsidiaries as at 31 December 2011.

## CAPITALIZED INTERESTS

Please refer to Note 7 to the financial statements prepared under the IFRS for details of the capitalized interests of the Company and its subsidiaries during the year.

## PROPERTY, PLANTS AND EQUIPMENT

Please refer to Note 7 to the financial statements prepared under the IFRS for details of properties, plants and equipment of the Company and its subsidiaries during the year.

## RESERVES

Please refer to the consolidated statement of changes in equity on page 111 to page 112 of the financial statements prepared under the IFRS for details of statutory reserves of the Company and its subsidiaries.

## PRE-EMPTIVE RIGHTS

According to the articles of association of the Company and the laws of the PRC, there are no provisions for pre-emptive rights requiring the Company to offer new shares to the existing shareholders of the Company in proportion to their shareholdings.

## MAJOR SUPPLIERS AND CUSTOMERS

The five major suppliers of the Company and its subsidiaries for year 2011 were China Shenhua Energy Company Limited, Shanxi Guoyang New Energy Joint Stock Company, Gansu Province Huating Coal Co., Ltd., Inner Mongolia

Yitai Group Co., Ltd. and China Coal Energy Company Limited respectively. The total purchase from them amounted to approximately RMB12.5 billion, representing approximately 14% of the total coal purchase of the year.

As a power producer, the Company sells the electricity generated by its power plants through local grid operators only and has no other customers. The five major customers of the Company and its subsidiaries for the year 2011 were Jiangsu Electric Power Company, Shandong Electric Power Corporation, Singapore Energy

Market Company Pte. Ltd., Zhejiang Electric Power Corporation and Guangdong Power Grid Corporation. The five customers accounted for approximately 47.33% of the operating revenue for the year while the largest customer (Jiangsu Electric Power Company) accounted for approximately 12.08% of the operating revenue.

None of the directors, supervisors and their respective associates (as defined in the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules")) had any interests in the five major suppliers and customers of the Company mentioned above in 2011.

#### CONTINUING CONNECTED TRANSACTIONS AND CONNECTED TRANSACTIONS

The following are the major continuing connected transactions and connected transactions of the Company in 2011 according to the requirements of the Listing Rules:

#### CONTINUING CONNECTED TRANSACTIONS

##### 1. Continuing Connected Transactions with Huaneng Group and HIPDC

The major continuing connected transactions of the Company are those transactions conducted between the Company and certain subsidiaries and/or associates of China Huaneng Group ("Huaneng Group"). Huaneng Group directly and indirectly holds 12.18% of the total issued share capital of the Company. Through its wholly-owned subsidiary, China Hua Neng Group Hong Kong Limited, Huaneng Group indirectly holds certain H shares of the Company, representing 3.70% of the issued shares of the Company. In addition, Huaneng Group holds 51.98% direct interest and a 5% indirect interest in HIPDC which in turn holds 36.05% of the total issued share capital of the Company. Therefore, Huaneng Group is a connected person to the Company and transactions of the Company with those subsidiaries and/or associates of Huaneng Group constitute connected transactions of the Company under the Listing Rules. The purposes of the Company to enter into such continuing connected transactions with those connected persons were to meet the operational needs of the Company and to get the most favourable terms and conditions from the market from the Company's perspective. The relevant information regarding the continuing connected transactions was set out in the announcement and circular of the Company dated 31 December 2010 and 8 January 2011, particulars of which are summarized as follows:

- (i) Huaneng Group Framework Agreement entered into between the Company and Huaneng Group on 30 December 2010 for a term commencing on 1 January 2011 and expiring on 31 December 2011. Pursuant to the framework agreement, the Company would conduct the following transactions with Huaneng Group and its subsidiaries and associates on an ongoing basis:
  - Purchase of ancillary equipment and parts for the purpose of renovation and maintenance, at terms and the prices to be negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the terms and prices no less favourable than those offered to the Company by independent third parties for the same or similar type of ancillary equipments and parts. In addition, the payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the framework agreement.



For the year ended 31 December 2011, the annual cap of the purchase of ancillary equipment and parts was RMB1.615 billion. The actual transaction amount for the year ended 31 December 2011 was RMB252 million.

- Purchase of coal and transportation services for power generation, at prices and charges calculated by reference to RMB/ton and the actual weight of carriage, with arm's length terms taking into account the then market conditions, and in any event the terms of the purchase of coal and the transportation service shall be no less favourable than those offered by independent third parties to the Company for the same or similar type of coal

supply or transportation services. The payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the framework agreement.

For the year ended 31 December 2011, the annual cap of the purchase of coal and transportation was RMB17.140 billion. The actual transaction amount for the year ended 31 December 2011 was RMB6,259 million.

- Sale of products (mainly sale of coal) to be more cost-efficient in management, at the prices and charges of which are calculated by reference to RMB/ton and the actual weight of carriage, with arm's length terms taking into account the then market conditions, and in any event the terms of the purchases of coal and the related products shall be no less favourable than those offered by independent third parties to the Company for the same or similar type of coal supply and the related products services. The payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties pursuant to the framework agreement.

For the year ended 31 December 2011, the annual cap of the sale of products was RMB4.270 billion. The actual transaction amount for the year ended 31 December 2011 was RMB1,033 million.

- Leasing of facilities, land and office spaces (mainly power transmission and transformation assets, vessels, power plants land and office spaces) for operational needs, at terms and prices to be negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the leasing terms and prices no less favourable than those offered to the Company by independent third parties for the same or similar type of facilities, land and office spaces. In addition, the payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the framework agreement.

For the year ended 31 December 2011, the annual cap of the leasing of facilities, land and office spaces was RMB423 million. The actual transaction amount for the year ended 31 December 2011 was RMB252 million.

- Purchase of technical services, engineering contracting services and other services for the Company's operation and production needs, at terms and prices to be negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the terms and prices no less favourable than those offered to the Company by independent third parties for the same or similar type of technical services, engineering contracting services and other services. In addition, the payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the framework agreement.

For the year ended 31 December 2011, the annual cap of the purchase of technical services, engineering contracting services and other services was RMB638 million. The actual transaction amount for the year ended 31 December 2011 was RMB344 million.

- Provision of entrusted sale services (involving mainly the use of power generation quota of Huaneng Group and its subsidiaries and associates for substituted power generation by the Company), at the

terms and prices negotiated at arm's length terms, taking into account the then prevailing market conditions; but in any event at the terms and prices no less favorable than those offered to the Company by independent third parties for the same or similar type of services. The payment of the consideration will be settled in cash in arrears, or in accordance with the payment terms agreed by the relevant parties in the contracts to be entered into pursuant to the framework agreement.

For the year ended 31 December 2011, the annual cap of the provision of entrusted sale services was RMB941 million. There was no such transaction for the year ended 31 December 2011.

- (ii) Huaneng Finance Framework Agreement entered into between the Company and China Huaneng Finance Corporation Limited (“Huaneng Finance”) on 21 October 2008 for a term of three years commencing on 1 January 2009 and expiring on 31 December 2011. Huaneng Group and the Company hold 51% and 20% equity interests in Huaneng Finance, respectively.

Pursuant to the Huaneng Finance Framework Agreement, the Company would from time to time place deposits with Huaneng Finance at rates which would be no less favourable than those offered by independent third parties for provision of similar services to the Company. As no security over the assets of the Company is granted in respect of the note discounting services and loan advancement services provided by Huaneng Finance, such transactions are exempt from reporting, announcement and independent shareholders’ approval requirements under Rule 14A.65(4) of the Listing Rules.

For the period from 1 January 2009 to 31 December 2011, the outstanding balances of the deposits to be placed with Huaneng Finance on a daily basis would not exceed RMB6 billion. For the year ended 31 December 2011, the maximum balances of deposits placed with Huaneng Finance was RMB5,987 million.

## 2. Continuing Connected Transactions with Temasek and its subsidiaries and associates

Upon the completion of the acquisition of SinoSing Power Pte. Ltd. by the Company, TPGS Green Energy Pte. Ltd. became an indirect non-wholly owned subsidiary of the Company of which 75% is owned by Tuas Power Ltd., an indirect wholly-owned subsidiary of the Company, and the remaining 25% is owned by Gas Supply Pte. Ltd., which is a subsidiary of Temasek Holdings (Private) Limited (“Temasek”).

Temasek therefore became a substantial shareholder of a subsidiary of the Company and a connected person of the Company and certain on-going transactions between subsidiaries of the Company and associates of Temasek (“Ongoing Transactions with associates of Temasek”) became continuing connected transaction of the Company under the Listing Rules.

Having considered Rules 14A.31(10) and 14A.33(5) effective 3 June 2010, the Company considers that Temasek meets the criteria for a passive investor under Rule 14A.31(10)(b) of the Listing Rules. As such, any connected transactions or continuing connected transactions of a revenue nature in the ordinary and usual course of our business and on normal commercial terms with an associate of Temasek will be exempt from reporting, annual review, announcement and independent shareholders’ approval requirement under the Listing Rules. This exemption will be applicable to, amongst other things, the types of Ongoing Transactions with associates of Temasek.

If the exemption is no longer applicable in relation to the Ongoing Transactions with associates of Temasek, the Company will comply with the applicable reporting, annual review, announcement and independent shareholders’ approval requirements.



## CONNECTED TRANSACTIONS

### 1. Transfer of Jilin Biological Interest

On 29 June 2011, the Company entered into the Share Transfer Agreement relating to Huaneng Jilin Biological Power Generation Limited Company (“Jilin Biological”) with Huaneng Jilin Power Generation Co., Ltd. (“Huaneng Jilin Company”), which is a wholly-owned subsidiary of Huaneng Group, and Huaneng Group. Huaneng Group and its associates (including Huaneng Jilin Company) are connected persons to the Company. The transaction contemplated under the agreement constitutes a connected transaction of the Company.

Pursuant to the agreement, the Company transferred its 100% interest in Jilin Biological to Huaneng Jilin Company for a consideration of RMB106,303,200, which was determined on arm's length terms between the parties and was paid to the Company in cash by one-off payment.

The biological power plant of Jilin Biological was under construction and given that a sophisticated profit model could not be created in biomass power generation under the then prevailing electricity tariff levels, loss might incur after commencement of production. The transfer was beneficial in streamlining the internal management relationship of Huaneng Group and enhancing management efficiency.

### 2. Capital Increase in Huaneng Finance

On 9 August 2011, the Company entered into the Capital Increase Agreement with China Huaneng Finance Corporation Ltd. (“Huaneng Finance”). Huaneng Group and the Company holds 51% and 20% direct equity interest in Huaneng Finance, respectively. The remaining 29% equity interest in Huaneng Finance are held by associates of Huaneng Group. Huaneng Finance is a connected person to the Company. The transaction contemplated under the agreement constitutes a connected transaction of the Company.

Huaneng Finance would increase its registered capital from RMB2 billion to RMB5 billion and the shareholders of Huaneng Finance would subscribe for additional newly increased registered capital of Huaneng Finance in cash proportionate to their shareholdings in Huaneng Finance. Pursuant to the agreement, the Company would subscribe for an amount of up to RMB600 million of the newly increased registered capital of Huaneng Finance so as to maintain its existing 20% equity interest in Huaneng Finance. The subscription money would be paid in cash, funded by the Company's internal cash surplus.

After implementation of the Capital Increase, the scale of assets and performance of Huaneng Finance is expected to be increased considerably. The Company believes that continuing to invest in Huaneng Finance will enable the Company to enjoy the growth of Huaneng Finance, which is commercially beneficial to the interest of the Company and will bring forward a stable growth of return to the Company.

### 3. Capital Increase in Coal Gasification Co.

On 25 October 2011, the Company entered into the Capital Increase Agreement with Huaneng Group, GreenGen Co., Ltd. (“GreenGen”) (in which Huaneng Group holds 52% of its equity interest) and Tianjin Jinneng Investment Company (“Tianjin Jinneng”), pursuant to which the paid-up capital of Huaneng (Tianjin) Coal Gasification Power Generation Co., Ltd. (“Coal Gasification Co.”) would be increased from RMB400 million to RMB734 million (“Capital Increase”). Prior to completion of the Capital Increase, GreenGen held 75% of the equity interests in Coal Gasification Co.. Huaneng Group and its associates (including GreenGen and Coal Gasification Co.) are connected persons to the Company and the transaction contemplated under the agreement

constitutes a connected transaction of the Company.

Pursuant to the agreement, the Company would contribute RMB264 million and Huaneng Group would contribute RMB70 million to the registered capital of Coal Gasification Co. The subscription amount would be paid by the Company in cash in one lump sum and be funded by the Company's self-raised funds.

Following completion of the Capital Increase, Coal Gasification Co. would be held as to 35.97% by the Company, as to 9.54% by Huaneng Group, as to 40.87% by GreenGen and as to remaining 13.62% by Tianjin Jinneng.

Coal Gasification Co. undertakes the construction of the Integrated Gasification Combined Cycle (“IGCC”) Project. The project comprising one 250MW IGCC power generation unit has been listed as a key new energy project under the State 863 Program. The Capital Increase enables the Company to expand its power development business from the new energy approach, to take a leading position in the coal gasification power generation industry through introduction of engineering design, construction and operation technologies for large-scale coal gasification power plants and to enhance its competitiveness and sustainability. It also helps to improve the layout of energy projects in the Tianjin Binhai New District, which is beneficial to both social and economic development of this region.

The Independent Directors of the Company confirmed that the continuing connected transactions in item 1 above to which the Company was a party:

- (i) had been entered into by the Company and/or any of its subsidiaries in the ordinary and usual course of its business;
- (ii) had been entered into either (1) on normal commercial terms (which expression will be applied by reference to transactions of a similar nature made by similar entities within the PRC), or (2) where there was no available comparison, on terms that were fair and reasonable so far as the shareholders of the Company were concerned; and
- (iii) had been entered into either (1) in accordance with the terms of the agreements governing such transactions, or (2) where there was no such agreement, on terms no less favorable than terms available from third parties.

Further, the Company has engaged its external auditor to report on the Company’s continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 “Assurance Engagements Other Than Audits or Reviews of Historical Financial Information” and with reference to Practice Note 740 “Auditor’s Letter on Continuing Connected Transactions under the Hong Kong Listing Rules” issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued an unqualified letter containing their findings and conclusions in respect of the continuing connected transactions set out in item 1 above in accordance with Listing Rule 14A.38. A copy of the auditor’s letter has been provided by the Company to Hong Kong Stock Exchange.

Several related party transactions as disclosed in Note 34 to the financial statements prepared in accordance with IFRS fall under the definition of “continuing connected transaction” in Chapter 14A of the Hong Kong Listing Rules. The Company has complied with the disclosure requirements in accordance with Chapter 14A of the Hong Kong Listing Rules.

#### BUSINESS COMPETITION WITH CONTROLLING SHAREHOLDERS

The ultimate controlling shareholder of the Company, Huaneng Group, is also engaged in the power industry in China. HIPDC, the direct controlling shareholder of the Company, is also engaged in the power industry in China. The Company, HIPDC (direct controlling shareholder) and Huaneng Group (ultimate controlling shareholder) have power plants located in certain same regions. Huaneng Group and HIPDC have already entrusted the Company to manage certain of their power plants.



On 17 September 2010, the Company received an undertaking from Huaneng Group regarding further avoidance of business competition. On the premises of continuing the undertaking previously provided, Huaneng Group further undertook that: (1) it shall treat the Company as the only platform for integrating the conventional energy business of Huaneng Group; (2) with respect to the conventional energy business assets of

Huaneng Group located in Shandong Province, Huaneng group undertakes that it will take approximately 5 years to improve the profitability of such assets and when the terms become appropriate, it will inject those assets into the Company. The Company has a right of first refusal to acquire from Huaneng Group the newly developed, acquired or invested projects which are engaged in the conventional energy business of Huaneng Group located in Shandong Province; (3) with respect to the other non-listed conventional energy business assets of Huaneng Group located in other provincial administrative regions, Huaneng Group undertook that it will take approximately 5 years, and upon such assets meeting the conditions for listing, to inject such assets into the Company, with a view to supporting the Company's continuous and stable development; and (4) Huaneng Group will continue to perform each of its undertakings to support the development of its subordinated listed companies.

Currently, the Company has 15 directors and only 4 of them have positions in Huaneng Group and/or HIPDC. According to the articles of association of the Company, in case a conflict of interest arises, the relevant directors shall abstain from voting in the relevant resolutions. Therefore, the operation of the Company is independent from Huaneng Group and HIPDC and the operation of the Company is conducted for its own benefit.

#### PURCHASE, SALE OR REDEMPTION OF SHARES OF THE COMPANY

The Company and its subsidiaries did not sell any shares or other securities of the Company and did not purchase or redeem any shares or other securities of the Company in 2011.

#### DIRECTORS OF THE COMPANY

The Directors of the Company in 2011 were:

Cao Peixi	Chairman	Appointed on 17 May 2011
Huang Long	Vice Chairman	Appointed on 17 May 2011
Li Shiqi	Director	Appointed on 17 May 2011
Huang Jian	Director	Appointed on 17 May 2011
Liu Guoyue	Director	Appointed on 17 May 2011
Fan Xi Xia	Director	Appointed on 17 May 2011
Shan Qunying	Director	Appointed on 17 May 2011
Liu Shuyuan*	Director	Appointed on 17 May 2011
Xu Zujian	Director	Appointed on 17 May 2011
Huang Mingyuan	Director	Appointed on 17 May 2011
Shao Shiwei	Independent Director	Appointed on 17 May 2011
Wu Liansheng	Independent Director	Appointed on 17 May 2011
Li Zhensheng	Independent Director	Appointed on 17 May 2011
Qi Yudong	Independent Director	Appointed on 17 May 2011
Zhang Shouwen	Independent Director	Appointed on 17 May 2011

\*On 21 February 2012, Mr. Guo Hongbo was appointed a director of the Company on resignation of Mr. Liu Shuyuan.

#### MODEL CODE FOR SECURITIES TRANSACTIONS BY DIRECTORS AND SUPERVISORS

On 31 March 2009, the Company's Board considered and approved the Amended Management Guidelines Regarding the Holding of the Company's Shares by the Directors, Supervisors and Senior Management of Huaneng Power International, Inc. The standard of such guidelines is not lower than that of the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules. Enquiry has been made

with all Directors and Supervisors and all of them confirmed that they have complied with the code throughout 2011.

## DIRECTORS', CHIEF EXECUTIVE'S AND SUPERVISORS' RIGHT TO PURCHASE SHARES IN THE COMPANY

For the year ended 31 December 2011, none of the Directors, Chief Executives, Supervisors of the Company or their respective associates had any interests in the shares of the Company or any associated corporations (within the meaning of the Securities and Futures Ordinance ("SFO")) which are (a) required to be notified to the Company and The Stock Exchange of Hong Kong Limited ("Hong Kong Stock Exchange") pursuant to Divisions 7 and 8 of Part XV of the SFO; or (b) required to be recorded in the register kept by the Company pursuant to Section 352 of the SFO; (c) required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers.

For the year ended 31 December 2011, none of the Directors, Chief Executives, Supervisors, senior management of the Company or their spouses and children under the age of 18 was given the right to acquire any shares, underlying shares or debentures of the Company or any associated corporations (within the meaning of the SFO).

## INDEPENDENT DIRECTORS' CONFIRMATION OF INDEPENDENCE

Each of the independent directors of the Company, namely Mr. Shao Shiwei, Mr. Wu Liansheng, Mr. Li Zhensheng, Mr. Qi Yudong and Mr. Zhang Shouwen has signed a confirmation letter by independent non-executive directors for 2011 on 19 March 2012 to confirm his compliance with the relevant requirements regarding independence under the Listing Rules and the Company considers them to be independent.

## EMOLUMENTS OF DIRECTORS AND SUPERVISORS

Details of the emoluments of Directors and Supervisors of the Company are set out in Note 36 to the financial statements prepared under the IFRS.

## THE FIVE HIGHEST PAID STAFF

Details of the five highest paid staff in the Company are set out in Note 36 to the financial statements prepared under the IFRS.

## PUBLIC FLOAT

As at the date of this announcement, the Company has maintained the prescribed public float under the Listing Rules and as agreed with the Hong Kong Stock Exchange, based on the information that is publicly available to the Company and within the knowledge of the directors.

## STRUCTURE OF SHARE CAPITAL

As at 31 December 2011, the entire issued share capital of the Company amounted to 14,055,383,440 shares, of which 10,500,000,000 shares were domestic shares, representing 74.70% of the total issued share capital, and 3,555,383,440 shares were foreign shares, representing 25.30% of the total issued share capital of the Company. In respect of domestic shares, Huaneng International Power Development Corporation ("HIPDC") owned a total of 5,066,662,118 shares, representing 36.05% of the total issued share capital of the Company while Huaneng Group held 1,568,001,203 shares, representing 11.16% of the total issued share capital of the Company. Other domestic shareholders held a total of 3,865,336,679 shares, representing 27.50% of the total issued share capital.



## MAJOR SHAREHOLDING STRUCTURE OF THE COMPANY

The following table sets out the shareholdings of the top ten shareholders of the Company as at 31 December 2011:

Names of shareholders	No. of Shares held as at the year end	Percentage of Shareholding (%)
Huaneng International Power Development Corporation	5,066,662,118	36.05
HKSCC Nominees Limited	2,556,425,185	18.19
China Huaneng Group	1,568,001,203	11.16
Hebei Construction & Investment Group Co., Ltd.	603,000,000	4.29
China Hua Neng Group Hong Kong Limited	520,000,000	3.70
HSBC Nominees (Hong Kong) Limited	430,200,200	3.06
Liaoning Energy Investment (Group) Limited Liability Company	422,679,939	3.01
Jiangsu Provincial Investment & Management Limited Liability Company	416,500,000	2.96
Fujian Investment Development (Group) Co., Ltd.	374,466,667	2.66
Dalian Municipal Construction Investment Company Limited	301,500,000	2.15

## MATERIAL INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES OF THE COMPANY

As at 31 December 2011, the interests or short positions of persons who were entitled to exercise or control the exercise of 5% or more of the voting power at any of the Company's general meetings (excluding the Directors, Supervisors and chief executive) in the shares and underlying shares of equity derivatives of the Company as recorded in the register required to be kept under Section 336 of the Securities and Futures Ordinance (Hong Kong Law Cap. 571) (the "SFO") were as follows:

Name of substantial shareholder	Class of shares	Number of shares held (shares)	Capacity	Type of interest	Percentage in the relevant class share capital	Percentage in total of share capital
HIPDC (1)	Domestic Shares	5,066,662,118 (L)	Beneficial owner	Corporate	48.25% (L)	36.05% (L)
H u a n e n g Group	Domestic Shares	1,711,621,203 (L) (2)	Beneficialowner	Corporate	16.30% (L)	12.18% (L)
	H Shares	520,000,000 (L) (3)	Beneficial owner	Corporate	14.63% (L)	3.70% (L)

Note: The letter "L" denotes a long position. The letter "S" denotes a short position.

- As at 31 December 2011, Huaneng Group holds 51.98% equity interest in HIPDC.
-

Huangeng Group through its wholly owned subsidiary, Huaneng Capital Services Company Limited, held 12,876,654 domestic shares. Huaneng Group through its controlling subsidiary, China Huaneng Finance Corporation Limited, held 143,620,000 domestic shares.

3. 520,000,000 H Shares were held by Huaneng Group through its wholly owned subsidiary, Hua Neng HK.

Save as stated above, as at 31 December 2011, in the register required to be kept under Section 336 of the SFO, no other persons were recorded to hold any interests or short positions in the shares or underlying shares of the equity derivatives of the Company.

## DIRECTORS' AND SUPERVISORS' INTERESTS IN CONTRACTS AND SERVICE CONTRACTS

Save for the service contracts mentioned below, as at the end of 2011, the directors and supervisors of the Company did not have any material interests in any contracts entered into by the Company.

No director and supervisor has entered into any service contract which is not terminable by the Company within one year without payment of compensation (other than statutory compensation).

Each and every Director and Supervisor of the Company had entered into a service contract with the Company for a term of three years commencing from the signing of the contract.

## REMUNERATION POLICY

In accordance with the overall development strategy of the Company, the Company has formulated remuneration management system including the "Provisional Regulations on Remuneration Management". Employees' salaries are calculated with reference to the complexity of their jobs, the responsibilities they have to carry and their job performance. The remuneration of the Directors, Supervisors and senior management of the Company mainly consists of the following:

(1) Basic salaries and allowances

The basic salary is mainly set by an evaluation of the job position and a factor analysis, and with reference to the salary level of the relevant position in the labor market. It accounts for about 35% of the total remuneration.

(2) Discretionary bonus

Discretionary bonus is based on the performance of the Directors, Supervisors and senior management. It accounts for about 53% of the total remuneration.

(3) Pension

The Directors, Supervisors and senior management enjoy various social insurances established by the Company, including basic pension insurance, corporate annuity and housing fund. This pension contribution accounts for about 12% of the total remuneration.

According to the resolution at the general meeting, the Company pays each independent Director a subsidy amounted to RMB60,000 (after tax) each year. The Company also reimburses to the independent Directors for the expenses they incur in attending board meetings and general meetings and other reasonable expenses they incur while fulfilling their obligations under the Company Law and the Company's Articles of Association (including travelling expenses and administrative expenses). Besides these, the Company does not give the independent Directors any other benefit.

## STAFF HOUSING

The Company made allocation to the housing fund for the employees of the Company and its subsidiaries in accordance with the relevant PRC regulations.





#### DISPOSAL OF STAFF QUARTERS

According to the relevant PRC regulations, the Company has not provided welfare quarters to its staff.

#### STAFF MEDICAL INSURANCE SCHEME

According to the requirements as prescribed by the relevant local governments, the Company and its subsidiaries have joined a medical insurance scheme for its staff, and have taken measures for its implementation according to planning.

#### RETIREMENT SCHEMES

The Company and its subsidiaries have implemented a series of specified retirement contribution schemes based on the local conditions and policies of the places where the Company and its subsidiaries have operations.

Pursuant to the specified retirement contribution schemes, the Company and its subsidiaries have paid contributions according to the contracted terms and obligations set out in the publicly administered retirement insurance plans. The Company has no other obligations to pay further contributions after paying the prescribed contributions. The contributions payable from time to time will be regarded as expenses in the period during the year they are made and accounted for as labor cost.

#### GENERAL MEETINGS

During the reporting period, the Company convened one annual general meeting and two extraordinary general meetings.

1. The Company's annual general meeting was held on 17 May 2011. The resolutions passed at the meeting were published in China Securities Journal and Shanghai Securities News on 18 May 2011.
2. The Company's first extraordinary general meeting of 2011 was held on 10 March 2011. The resolutions passed at the meeting were published in China Securities Journal and Shanghai Securities News on 11 March 2011.
3. The Company's second extraordinary general meeting of 2011 was held on 27 September 2011. The resolutions passed at the meeting were published in China Securities Journal and Shanghai Securities News on 28 September 2011.

#### DISCLOSURE OF MAJOR EVENTS

1. On 4 January 2011, the Company entered into a share transfer agreement relating to Fushun Suzihe HydroPower Development Company Limited ("Target Company") with Dandong Yalujiang Power Development Company Limited, Liaoning Power Economic Development Company Limited, Dalian Jitong Power Engineering Company Limited, He Shubin, Fushun Power Development Company Limited, whereby the Company agreed to acquire 100% equity interests in the Target Company held by the above companies and individual at a consideration of RMB50 million. The Company completed the change in the industrial and commercial registration in March 2011.

For details of the transaction please refer to the Company's announcement published on the websites of the Shanghai Stock Exchange and the Hong Kong Stock Exchange on 6 January 2011.



2. On 29 June 2011, the Company entered into the share transfer agreement relating to Huaneng Jilin Biological Power Generation Limited Company with Huaneng Jilin Power Generation Co., Ltd. (“Huaneng Jilin Company”) and Huneng Group, whereby the Company transferred its 100% equity interest in Huaneng Jilin Power Generation Co., Ltd. to Huaneng Jilin Company in consideration of RMB106,303,200. The Company received the payment in full from Huaneng Jilin Company in October 2011.

For details of the transaction please refer to the Company’s announcement published on the websites of the Shanghai Stock Exchange and the Hong Kong Stock Exchange on 30 June 2011.

3. On 30 September 2011, the Company entered into the Share Transfer Agreement relating to Enshi City Maweigou Valley Hydro Power Development Co., Ltd. pursuant to which the Company agreed to acquire the 100% equity interest in Hubei Province Enshi City Maweigou Valley Hydro Power Development Co., Ltd. (with a planned installed generating capacity of 55 MW) in consideration of RMB227 million. The Company completed the change to the relevant industrial and business registration in December 2011.
4. On 26 October 2011, the Board of Directors agreed the transfer of not more than 40% equity interest held by the Company in Huaneng Yunnan Diandong Energy Limited Company by way of an open offer. On 4 November 2011, the Company officially listed the 40% equity interest in Diandong Energy in Beijing Property Interest Exchange and the asking price was RMB1,934 million. As of 8 December 2011, the Company did not reach any sale and purchase agreement with any investors. Pursuant to the Exchange rules, the above offer was withdrawn from the Beijing Property Interest Exchange on 8 December 2011.
5. On 17 May 2011, the proposals regarding the change of session of the Company’s Board of Directors and Supervisory Committee were approved at the annual general meeting of the Company.

Members of the new session of the Board of Directors are Cao Peixi (Chairman), Huang Long (Vice Chairman); (Directors) Li Shiqi, Huang Jian, Liu Guoyue, Fan Xiaxia, Shan Qunying, Liu Shuyuan, Xu Zujian and Huang Mingyuan; (Independent directors) Shao Shiwei, Wu Liansheng, Li Zhensheng, Qi Yudong and Zhang Shouwen.

Members of the new session of the Supervisory Committee are Guo Junming (Chairman), Hao Tingwei (Vice Chairman); Supervisors Zhang Mengjiao, Gu Jianguo, Wang Zhaobin and Dai Xinmin.

On 13 August 2011, Mr. Dai Xinmin resigned from the post of staff representative supervisor of the Company due to work re-location. Upon election by employees of the Company, Ms. Zhang Ling was elected as a staff representative supervisor of the Company.

On 21 February 2012, Mr. Guo Hongbo was approved as the director of the Company’s board at the Company’s shareholders’ meeting. Mr. Liu Shuyuan resigned from the post of director of the Company due to change of work requirement.

6. On 2 March 2012, due to change of work requirement, Mr. Gu Biquan, the secretary of the board of directors of the Company, tendered his resignation report to the board of directors. On 20 March 2012, the Company’s board of directors engaged Mr. Du Daming as the secretary to the board of directors of the Company. The resignation of the secretary of the board of directors by Mr. Gu Biquan and the appointment of Mr. Du Dawing as his successor would become effective on the date on which an approval is granted by the Hong Kong Stock Exchange approving Mr. Du Dawing as secretary of the board of directors of the Company.

CODE OF CORPORATE GOVERNANCE PRACTICES

During the year, the Company has complied with the Code of Corporate Governance Practices as set out in Appendix 14 of the Listing Rules. The annual report of the Company will contain a corporate governance report prepared in accordance with the requirements under the Listing Rules.

#### DESIGNATED DEPOSIT

As at 31 December 2011, the Company and its subsidiaries did not have any designated deposit with any financial institutions within the PRC nor any overdue fixed deposit which could not be recovered.

#### DONATIONS

During the year, the total amount of donation made by the Company and its subsidiaries was approximately RMB1.10 million.

#### LEGAL PROCEEDINGS

As at 31 December 2011, Luoyuanwan Harbour, a subsidiary of the Company was involved in a pending lawsuit. Luoyuanwan Harbour entered into an assets transfer agreement with a consideration of RMB96 million in prior year, pursuant to which Luoyuanwan Harbour has paid RMB76.20 million. Due to disputes on the fulfilment of the agreement by the counterparty, the remaining consideration was not paid by 31 December 2011. The counterparty filed a lawsuit in October 2011 claiming the default by Luoyuanwan Harbour and a compensation approximated to RMB37.33 million. Luoyuanwan Harbour filed a counterclaim in December 2011 claiming a compensation of RMB57.82 million for the default of counterparty, which was accepted by the court. There had been no further progress on this pending lawsuit as at the date of these financial statements being approved for publication. As at 31 December 2011, the remaining consideration of RMB19.80 million was accrued according to the original contract, the Company considered no additional liability be required as at 31 December 2011. Meanwhile, the compensation claimed on the counterparty was not recognized in these financial statements as there is no final decision made by the court.

Save as disclosed, as at 31 December 2011, the Company and its subsidiaries were not involved in any material litigation or arbitration and no material litigation or claim was pending or threatened or made against the Company and its subsidiaries.

#### ANNUAL GENERAL MEETING AND CLOSURE OF REGISTER

As the Company has not yet confirmed the date for convening the 2011 annual general meeting, or the record date(s) or the period(s) for closure of register for determining eligibility to attend and vote at the 2011 annual general meeting and for determining the entitlement to the final dividend, the Company will upon confirmation thereof announce such details in the notice of the 2011 annual general meeting, such notice is expected to be issued to shareholders in April 2012.

#### AUDITORS

PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian CPAs Limited Company were engaged as the Company's international and PRC auditors respectively for the years ended 31 December 2011.

There has been no change in the auditors of the Company for the past three financial years.

The Board has resolved to appoint KPMG and KPMG Huazhen CPAs Co. Ltd. as the international and PRC auditors of the Company for the year 2012 respectively, with the proposal of the Audit Committee respectively, where such proposal is subject to the approval by the Shareholders at the 2011 AGM.

By Order of the Board  
CAO Peixi  
Chairman

Beijing, PRC  
20 March 2012

Report of the Supervisory Committee

To All Shareholders,

In 2011, all members of the Supervisory Committee of the Company strictly complied with the laws and regulations of the places where the Company is listed, as well as the Articles of Association of the Company. They have acted honestly and in good faith, and carried out their work diligently so as to better protect the interest of the shareholders and the benefit of the Company. The Committee conducted reviews on the duties of the Directors of the Company and the senior management and the operational situation and management of the Company. We hereby report the major work during the reporting period as follows:

1. WORK OF THE SUPERVISORY COMMITTEE IN 2011

In accordance with the applicable laws and regulations, the Articles of Association of the Company and the practical needs of the Company's development, the Supervisory Committee convened seven meetings and completed the following supervisory tasks in 2011:

- (1) On 29 March 2011, the 13th meeting of the Sixth Session of the Supervisory Committee was convened at the headquarters of the Company. The financial statements of the Company for 2010, the Proposal of Profit Distribution for 2010, the Self-Assessment Report on Internal Control of the Company by the Board of Directors, the special report on the deposit and actual use of funds raised by the Company, the Social Responsibility Report of Huaneng Power International, Inc. for 2010, the Annual Report of 2010 and its summary, the Working Report of the Supervisory Committee of the Company for 2010 and the change of session of Supervisory Committee were considered and approved at the meeting.
- (2) On 19 April 2011, the 14th meeting of the Sixth Session of the Supervisory Committee was held by way of written resolutions. The financial report for the first quarter of 2011 and the first quarterly report of 2011 were considered and approved at the meeting.
- (3) On 17 May 2011, the 1st meeting of the Seventh Session of the Supervisory Committee was convened at the headquarters of the Company. The Company's Supervisory Committee completed its change of session, considered and passed the resolution regarding the election of the Chairman and vice-chairman of the seventh session of the Company's Supervisory Committee.
- (4) On 23 June 2011, the 2nd meeting of the seventh session of the Supervisory Committee was held by way of written resolutions. The proposal regarding the continuing use of part of the idle funds raised in New A Shares to temporarily supplement the working capital was considered and passed.
- (5) On 9 August 2011, the 3rd meeting of the Seventh Session of the Supervisory Committee was convened at the headquarter of the Company. The financial statements for the first half of 2011, the interim report of the Company for 2011 and its summary and special report on the deposit and actual use of funds raised by the Company were considered and approved at



the meeting.

- (6) On 25 October 2011, the 4th meeting of the Seventh Session of the Supervisory Committee was held by way of written resolutions. The financial statements for the third quarter of 2011 and the third quarterly report of the Company for 2011 were considered and approved at the meeting.
- (7) On 23 December 2011, the 5th meeting of the Seventh Session of the Supervisory Committee was held by way of written resolutions. The use of part of the idle fund raised in the New A Share Issue to temporarily supplement the working capital was considered and approved at the meeting.

The Supervisors of the Company attended (or appointed other Supervisors) all of the aforesaid meetings. The convocation of the meetings complied with the requirements of the Company Law of the PRC and the Articles of Association of the Company.

During the reporting period, the Supervisors of the Company attended all board meetings and general meetings of the Company.

2. FULFILLING THE RESPONSIBILITY CONSCIENTIOUSLY, OBJECTIVE EVALUATION, ENHANCING BETTER THE ROLE OF SUPERVISION AND PROTECTION

(1) Lawfulness of the Company's operations

The Supervisory Committee performed effective supervision and examination on the procedures for convening the shareholders' meetings and Board meetings and resolutions thereof, the implementation of the resolutions of the shareholders' meetings by the Board of Directors and the senior managements, performance of duties of the Directors and the senior management of the Company and the implementation of the internal control system of the Company, and expressed their opinions and views in time according to the relevant laws and regulations stipulated by the Articles of Association.

The Supervisory Committee is of the view that the Board of Directors and the senior management are capable of establishing a model and conducting regulated operation in strict compliance with the Articles of Association and applicable laws of the jurisdictions in which the Company's shares are listed, and have performed dutifully, diligently, and in good faith. During the reporting period, the Company's management system further improved as a result of the continuing establishment of systems. The design and implementation of internal control system became reasonable and the implementation of which was effective. The business activities of the Company complied with the legal requirements. In the course of examining the financial position of the Company and supervising the performance of duties of the Directors and senior management, the Supervisory Committee has not found any of their behaviors which contravened any applicable laws or the Articles of Association of the Company or any issues that has caused damage to the interests of the Company.

(2) Examining the financial information of the Company

During the reporting period, the Supervisory Committee has carefully examined and verified the financial reports of the Company for 2011, the profit distribution proposal of the Company for 2011, the annual report of the Company of 2011, and the 2011 financial statements audited by the domestic and international auditors with unqualified opinions issued.

The Supervisory Committee holds the view that in 2011, under the proper leadership of the Board of Directors, the management of the Company, based on scientific development for expediting the transformation of development modes and accelerating economic efficiency, led all staffs to maintain efficiency, act proactively, strive to keep progress, work diligently and take active measures to meet changes in the electricity market, the fuel market and the financing market. They have made considerable achievements in all aspects including market sales, stable and efficient supply of fuel, with distinguishing results in infrastructure development and cultural development, thereby laying a solid foundation for the development of the Company into an international leading listed power producer. The Company's financial statements of 2011 have accurately reflected the financial conditions and operating results of the Company during the reporting period. The Supervisory Committee agreed to the auditor's report on the Company's financial statements of 2011 issued by the auditors and the profit distribution plan for 2011.



(3) Fund raising

The latest fund raising exercise involving the issue of equity shares by the Company was in December 2010 by way of non-public issuance of A + H Share. Through this equity financing, the capital base of the Company was further enhanced, the assets/liabilities structure of the Company was improved, thus releasing room for the Company's development and laying the foundation for the scientific outlook on development by the Company.

The Supervisory Committee is of the view that the Company had strictly complied with the relevant requirements as prescribed by the Management Rules on Listed Companies' Fund Raising by the Shanghai Stock Exchange and the Management Rules on Fund Raising by Huaneng Power International, Inc. etc. and that there had been no change to the project funds.

(4) Major acquisitions and disposals of assets and connected transactions

During the reporting period, the Board of Directors of the Company has examined and approved the proposals regarding the major acquisitions and connected transactions on the proposal regarding the transfer of the equity interests of Huaneng Jilin Biological Power Generation Limited Company, the proposal regarding the capital increase of China Huaneng Finance Corporation Limited, the proposal regarding the capital increase of Huaneng (Tianjin) Coal Gasification Power Generation Co., Ltd. and proposal regarding the relevant fee payable by Huaneng Shanghai Shidongkon Power Generation Limited Liability Company to Huaneng Shannxi Qinling Power Generation Co., Ltd. on closing down of small generating units, etc..

The Supervisory Committee is of the view that the arrangements involved in the above resolutions did not involve any insider dealings and the Supervisory Committee had not found any issues which were prejudicial to the interest of the shareholders or caused the loss of the Company's assets or damaged the interest of the Company. The connected transactions were fair and the prices thereof were determined reasonably.

(5) Examining the information disclosure of the Company

During the reporting period, the Supervisory Committee conducted a persistent supervision over the soundness of the Company's information disclosure system and the approval process of each of the information disclosure.

The Supervisory Committee is of the view that the Company's control over and procedure on the information disclosure was complete and effective. The process of information disclosure had strictly complied with the stipulations as set out in the the Measures on Investor Relations Management and Management Rules for Information Disclosure and met the requirements of the Company's listing places. The Company has provided the investors with information in a timely, accurate, true, complete and fair manner, thus facilitating the investors to have a more objective and comprehensive understanding of the Company. The information disclosure by the Company is conducive to enhancing the reputation and image of the Company in the capital market.

(6) Review of the Internal Control Self-Assessment Report by the Supervisory Committee

During the reporting period, the Supervisory Committee conscientiously listened to the relevant reports on the Company's internal control and reviewed the Company's internal control assessment reports by the board of directors.



The Supervisory Committee is of the view that during the reporting period, the Board of Directors had conducted an investigation on the relevant internal control of the financial reports in accordance with the Fundamental Regulatory Guidelines on Internal Control by Enterprises, thus guaranteeing the truthfulness, accuracy and completeness of the relevant information in the financial reports and effectively safeguarding the risk against any material errors. The Company's internal control system is sound and has been implemented effectively. The Supervisory Committee agreed to the Company's Internal Control Self-Assessment Report of 2011 by the Board of Directors.

In 2012, the Supervisory Committee will continue to perform its duties assigned by the laws and the Articles of Association of the Company diligently and in good faith, so as to safeguard and protect the legal interest of the Shareholders and the Company.

Supervisory Committee of  
Huaneng Power International, Inc.

Beijing, PRC  
20 March 2012

Profiles of Directors, Supervisors and Senior Management

PROFILES OF DIRECTORS AND SUPERVISORS

CAO Peixi, aged 56, is the Chairman of the Company. He is also the President of Huaneng Group and the Chairman of HIPDC and Huaneng Renewables Co., Ltd. He was the Deputy Head and Head of Shandong Qingdao Power Plant; Assistant to the Chief of Shandong Power Bureau; Deputy Chief (Vice President) of Shandong Power Bureau (Corporation); Chairman and President of Shandong Power Group Corporation; Vice President and President of China Huadian Corporation; and Chairman of Huadian Power International Corporation Limited. He graduated from Shandong University specializing in electrical engineering. He holds a postgraduate degree of master in engineering issued by the Party School of the Central Committee and is a researcher-level senior engineer.

HUANG Long, aged 58, is the Vice Chairman of the Company as well as the Vice President of Huaneng Group and the Director of HIPDC, a Director of SinoSing Power Pte. Ltd., the Chairman of Tuas Power Ltd., the Chairman of Tuas Power Supply Pte Ltd. and Tuas Power Utilities Pte Ltd., and a Director of Shenzhen Energy Group Co., Ltd. He has served as manager of the International Co-operation and Business Contracts Department of HIPDC, and as Vice President and Secretary of the Board of Directors of the Company. He graduated with a M.S. Degree from North Carolina State University in the U.S., specializing in communications and auto-control. He is a senior engineer.

LI Shiqi, aged 55, is a Director of the Company and President of HIPDC. He was the Deputy Chief and Chief of the Finance Division, the Deputy Chief Accountant and concurrently Chief of Economic and Financial Division of China Electric Power Research Institute, Chief Accountant of Huaneng Beijing branch. He also served as Deputy Manager and Manager of the Finance Division of HIPDC, Manager of Marketing Division of Huaneng Group, Chief Economist and Vice President of the Company and Chairman and Executive Vice Chairman of Huaneng Capital Services Co., Ltd.. Mr. Li graduated from People's University of China majoring in Finance. He is a senior accountant.

HUANG Jian, aged 49, is a Director of the Company, the Assistant to President of Huaneng Group, Executive Vice Chairman of Huaneng Capital Services Co., Ltd., Chairman of Huaneng Hainan Power Ltd. and the Chairman of Huaneng Carbon Assets Management Company. He was the Deputy Chief of the Cost Office of the Finance Department; Chief of Cost General Office of the Finance Department of HIPDC; Chief Accountant of Beijing Branch of the Company; Deputy Manager of the Finance Department of HIPDC; Deputy Chief Accountant, Chief Accountant, Vice President, Company Secretary of the Company and Deputy Chief Economist and Chief of Financial Planning of Huaneng Group. Mr. Huang graduated from the accounting department of Institute of Fiscal Science of the Ministry of Finance with a postgraduate degree of master in economics. He is a senior accountant.

LIU Guoyue, aged 48, is a Director and President of the Company, the Chairman of Shanghai Times Shipping Limited Company, a director of Xi'an Thermal Research Institute Limited Company, the executive director of Huaneng International Power Fuel Co., Ltd., a Director of Tuas Power Ltd., Tuas Power Supply Pte Ltd. and Tuas Power Utilities Pte Ltd.. He served as Deputy General Manager (Deputy Head) and General Manager (Head) of Huaneng Shijiazhuang Branch (Shang'an Power Plant), Director of Huaneng Dezhou Power Plant, and Vice President of the Company. He graduated from North China Power University, specializing in thermal engineering. He holds a doctor's degree in engineering. He is a senior engineer.

FAN Xiaxia, aged 49, is a Director and Vice President of the Company and Vice Chairman of Huaneng Shidaowan Nuclear Power Co., Ltd.. He served as Deputy Chief of General Administration Division and Project Administration Division of Project Management Department of HIPDC, Deputy General Manager (Deputy Factory Head) of the Company's Nantong Branch (power plant), Deputy Manager of Project Management Department of HIPDC, Deputy Manager (project management) and Manager of International Co-operation and Business Department of the Company, Manager of Project Management Department of the Company, Assistant to President of the Company and General Manager of the Company's Zhejiang Branch Yuhuan Power Plant Preparatory Office. He graduated from Economic Management School of Tsinghua University with an EMBA degree. He is a senior engineer.

SHAN Qunying, aged 58, is a Director of the Company and the Vice President of Hebei Construction & Investment Group Co., Ltd., Chairman of Hebei Xingtai Power Generation Limited Company, Vice Chairman of Guodian Construction Investment Inner Mongolia Energy Limited Company and Vice Chairman of Hebei Construction Investment Energy Investment Limited Company. He had been the Energy & Communication Division Chief of Hebei Provincial Construction Investment Company. He graduated from Management Institute of Tianjin University holding an EMBA degree. He is a senior engineer.

GUO Hongbo, aged 43, is a Director of the Company and the President and Vice Chairman of Liaoning Energy Investment (Group) Limited Liability Company. He has been the Planner of Anshan Chemical Fibre Wool Textile Factory, Assistant to the Factory Head and Deputy Factory Head of Anshan Silk Printing and Dyeing Mill, Deputy General Manager of Anshan Co-operation Limited Liability Company, Assistant to the General Manager, Deputy General Manager and General Manager of Liaoning Engineering Machinery (Group) Limited Liability Company, Chairman and General Manager of Liaoning Libo Hydraulic Mining Co., Ltd, Assistant to the General Manager of Liaoning Chuangye (Group) Limited Liability Company and Liaoning Energy Corporation, Assistant to the General Manager, Deputy Manager, Administrative Deputy General Manager and Director of Liaoning Energy Investment (Group) Limited Liability Company. Mr Guo graduated from Jilin University specializing in administrative management, holding a postgraduate degree of master in management. He is a researcher-level senior engineer.

XU Zujian, aged 57, is a Director of the Company, Vice President of Jiangsu Province Guoxin Asset Management Group Limited Company, Chairman of Jiangsu Investment Management Co. Ltd. and Zking Property & Casualty Insurance Co., Ltd.. He was Vice President of Jiangsu Provincial International Trust & Investment Corporation, and President of Jiangsu Provincial Investment & Management Limited Liability Company. He graduated from Liaoning Finance University majoring in infrastructure finance, holding a bachelor's degree. He is a senior economist.

HUANG Mingyuan, aged 53, is a Director of the Company, Vice President of Fujian Investment & Development Group Co., Ltd., Director of Xiamen International Bank, Macau Luso International Bank, Huafu Securities Company Limited and Industrial Securities Co., Ltd.. She has been the director of the Office of Information Leading Group of Fujian Province, department head to the Management Office of Fujian Province Economic and Trade (Medicine) Committee, and the Secretary General of the Leading Committee for Market Reorganization and Restructuring and Order of Economy of Fujian Province. She graduated from the Business School of De Montfort University in the United Kingdom, specializing in business administration, holding a postgraduate degree and was awarded a master's degree in business administration.

SHAO Shiwei, aged 66, is an Independent Director of the Company. He is also an Independent Director of Shanghai Electric Power Co., Ltd., Shanghai Magus Technology Co., Ltd., Shanghai Zhixin Electric Co., Ltd. and Leshan Electric Power Co., Ltd.. He had been the Deputy Chief of the Electricity for Agriculture of the State Energy Department, the Chief of the Law and Regulation of the State Electricity Department, Assistant General Manager of the National Electric Power Company, Deputy Secretary General of the Office Department, the President of Huadong Yixing Water Pumping and Energy Reserve Company Limited, the President and General Manager of Huadong Grid Network Company and Chairman of the Supervisory Committee of Shanghai Electric Power Co., Ltd. He graduated



from Tianjin University specializing in power plant, power grid and power system. He is a professor-level senior engineer.

WU Liansheng, aged 41, is an Independent Director of the Company, a Professor, Ph. D. Tutor, head of the Department of Accounting and the Director of the MBA Center of the Guanghua Management Institute of Beijing University, an Independent Director of China National Building Materials Company Limited, an Independent Director of Western Mining Co., Ltd and an Independent Director of Wanda International Cinemas Co., Ltd.. He was an Independent Director of Rongsheng Development Joint Stock Limited Company. After obtaining his doctorate, Mr. Wu Liansheng was engaged in a two year post-doctorate research in Xiamen University. Afterwards, he commenced working in the Guanghua Management Institute of Beijing University as Lecturer, Associate Professor, Professor, Ph. D. Tutor and concurrently served as the Deputy Head and Head of the Department of Accounting, and the Director of the MBA Center. He graduated from Zhongnan University with a PhD in Management (Accounting).

LI Zhensheng, aged 67, is an Independent Director of the Company. He is an Independent Non-executive Director of Qingdao TGOOD Electric Co., Ltd. He was the Bureau Chief of Baoding Power Supply Bureau, Hebei Province, the Chief Economist and Deputy Bureau Chief of Hebei Power Industry Bureau, Bureau Chief of Shanxi Power Industry Bureau, Director of Rural Power Working Division of State Electric Power Corporation, and Chief Economist and Consultant of State Grid Corporation. Mr. Li graduated from Hebei University of Technology with a bachelor's degree. He is also a professor-level senior engineer, enjoying special government allowance.

QI Yudong, aged 45, is the Independent Director of the Company and the Assistant of the Principal, Professor (Grade II), and Doctoral Supervisor of Finance of Capital University of Economics and Business. He is also the Director of China Centre for the Research of Industrial Economics, the External Supervisor and concurrently Chairman of the Audit Committee of the Supervisory Committee of Hua Xia Bank Co., Ltd. and an Independent Director and concurrently the Chairman of the Remuneration Committee of China Garments Co., Ltd.. He was an Independent Director of Lucky Film Co., Ltd., Hua Xia Bank Co., Ltd., Zhongtong Bus Holding Co., Ltd. and Zhejiang Chouzhou Commercial Bank. He graduated from the graduate school of Chinese Academy of Social Sciences, majoring in economic science, with a PhD in Economics.

ZHANG Shouwen, aged 45, is an Independent Director of the Company and the Professor and Doctoral Supervisor in the Law School of Peking University, Director of Economic Law Institute of Peking University, Vice President and concurrently Secretary General of the Economic Law Research Society of China Law Society, Vice President of Fiscal and Tax Law Research Society of China Law Society, and Vice President of Beijing Law Research Society. He graduated from Peking University Law School with a PhD in Laws.

GUO Junming, aged 46, is the Chairman of the Company's Supervisory Committee, the Chief Accountant of Huaneng Group, Chairman of Huaneng Capital Services Limited Company. He was the Deputy Director of the Financial Department and the Chief of the Financial Accounting Division of Grid Construction Branch Company (Grid Construction Department) of State Power Corporation, Deputy Manager of the Finance Department of Huaneng Group, Vice President and President of China Huaneng Finance Limited Liability Company, President of Huaneng Capital Services Limited Company, Deputy Chief Accountant and Manager of the Finance Department of Huaneng Group. He graduated from Shanxi Finance and Economic Institute specializing in business finance and accounting and holds a bachelor's degree. He is a senior accountant.

HAO Tingwei, aged 49, is the Vice Chairman of the Supervisory Committee of the Company. He is a Director and Vice President of Dalian Construction Investment Corporation. Mr. Hao was an Executive Officer and Deputy Section Chief of the Basic Studies Department and Academic Affairs Office of Dalian University, and the Deputy Division Chief and Division Chief of Dalian Planning Commission and Dalian Development and Reform Commission. Mr. Hao obtained a postgraduate degree of master in International Trade from Northeastern University of Finance and Economics. He is a senior manager.



ZHANG Mengjiao, aged 47, is the Supervisor of the Company. She is the Manager of the Finance Department of HIPDC, and Supervisor of Huaneng Anyuan Power Generation Limited Liability Company, Huaneng DuanZhai Coal & Electricity Co., Ltd., Huaneng Caohu Power Generation Co., Ltd., and Shannxi Coal Industry Co., Ltd.. She is also the Chairman of the Supervisory Committee of Huaneng Shaanxi Power Generation Co., Ltd.. She was the tutor of Jiangxi University of Finance and Economics, Deputy Chief and Chief of the Second Audit Office and Chief of Audit Division of Finance Department of Huaneng Group, and Deputy Manager of the Finance Department of the Company. She graduated from Xiamen University, specializing in accounting. She has a master's degree in economics and is a senior accountant.

GU Jianguo, aged 45, is a Supervisor of the Company and Chairman of Nantong Investment & Management Limited Company. Mr. Gu has served as Deputy Chief and Chief of Nantong Municipal Planning Committee; Vice President of Nantong Ruici Investment Limited Company; Executive President of Ruici Hospital, President of Ruici (Maanshan) Development Limited Company; Chairman and President of Nantong Zhonghe Guarantee Limited Company, Chief Officer of Nantong Municipal Investment Management Centre and Director and President of Nantong Investment Management Limited Company. He graduated from Nanjing Aviation University holding a master's degree. He is an economic engineer.

WANG Zhaobin, aged 56, is a Supervisor and Manager of the Administration Department of the Company. He served as Commissar of Battalion of PLA 52886 Army, Deputy Division Chief of the Organization Dept. of CCP commission of the Ministry of Energy, the Chief of the Organisation Affairs Bureau of the PRC Electricity Department, Chief of Human Resources Department and Retirement Department of Huaneng Power, the Deputy Secretary of Communist Party Committee, Secretary of Communist Party Disciplinary Inspection Committee, Chairman of the Labour Union of Huaneng Beijing Electric Plant, Deputy Manager, and Manager of the Corporate Culture Department and Manager of Administration Department and Corporate Culture Department of the Company. He graduated from China Beijing Municipal Communist Party School, specializing in economic management, holding a bachelor's degree. He is a corporate culture specialist.

ZHANG Ling, aged 51, is a Supervisor and Manager of the Audit and Supervisory Department of the Company. She had served as Deputy Chief of the Pricing Division of the Economic Adjustment Department of the Ministry of Electricity, Deputy Chief and Chief of the Pricing Administration Division of the Finance Department of HIPDC, Chief of the Pricing Administration Division of the Finance Department, Deputy Manager of the Planning and Operation Department, Deputy Manager of the Marketing Department and Deputy Manager and Manager of the Share Administration Department of the Company. She graduated from Zhongnan University of Economics specializing in financial accounting with a bachelor's degree in management. She is a senior accountant.

#### PROFILES OF SENIOR MANAGEMENT

LIU Guoyue, aged 48, is a Director and President of the Company, Chairman of Shanghai Times Shipping Limited Company, a director of Xi'an Thermal Research Institute Limited Company, an executive director of Huaneng International Power Fuel Co., Ltd., and a Director of Tuas Power Ltd., Tuas Power Supply Pte Ltd. and Tuas Power Utilities Pte Ltd.. He served as Deputy General Manager and General Manager of Huaneng Shijiazhuang Branch (Shang'an Power Plant), Director of Huaneng Dezhou Power Plant, and Vice President of the Company. He graduated from North China Power University, specializing in thermal engineering. He holds a doctor's degree in engineering. He is a senior engineer.

FAN Xiaxia, aged 49, is a Director and Vice President of the Company and Vice Chairman of Huaneng Shidaowen Nuclear Power Co., Ltd.. He served as Deputy Chief of General Administration Division and Project Administration Division of Project Management Department of HIPDC, Deputy General Manager (Deputy Factory Head) of the Company's Nantong Branch (power plant), Deputy Manager of Project Management Department of HIPDC, Deputy

Manager (project management) and Manager of International Co-operation and Business Department of the Company, Manager of Project Management Department of the Company, Assistant to President of the Company and General Manager of the Company's Zhejiang Branch Yuhuan Power Plant Preparatory Office. He graduated from Economic Management School of Tsinghua University with an EMBA degree. He is a senior engineer.

GU Biquan, aged 54, is the Vice President and secretary to the Board of Directors of the Company. He was Deputy Chief and Chief of Capital Market Department, Chief and Deputy Manager of the Secretariat of the Administration Department of HIPDC, and Manager of Capital Market Department, Assistant to the President, Manager of Administration Department of the Company. He also served as Deputy Chief of Power Development Department of Huaneng Group and Vice President and secretary to the Board of Directors of HIPDC. He graduated from Beijing Broadcasting Television University, specializing in electronic engineering. He is an engineer.

LIN Gang, aged 47, was the Vice President of the Company during the reporting period. He was the Deputy Chief of Project Management Department of HIPDC, Assistant to General Manager and Deputy General Manager of Huaneng Beijing Branch (Beijing Thermal Power Plant), Deputy Manager of General Planning Department, Deputy Manager of Marketing and Sales Department of the Company (in charge of the department), President of Huaneng Northeast Branch, Manager of Marketing and Sales Department of the Company and Assistant to President of the Company. Mr. Lin graduated from North China Power University, specializing in thermal power, and holds a master's degree in science. He is a researcher-level senior engineer.

ZHOU Hui, aged 48, is the Chief Accountant of the Company. She has been the Deputy Chief of the Finance Division and Price Management Division of the Finance Department Chief of Division II of Finance Department of HIPDC, Deputy Manager and Manager of the Finance Department of the Company, Deputy Chief Accountant and Chief Accountant and Manager of Finance Department of the Company. Ms. Zhou graduated from Renmin University of China with a postgraduate degree of master in management. She is a senior accountant.

ZHAO Ping, aged 49, is the Chief Engineer of the Company. He was the Deputy Chief of Production Technology Office of the Production Department of HIPDC, Assistant to the General Manager of Huaneng Fuzhou Branch (Fuzhou power plant), Deputy Manager of the Production Department of HIPDC, Deputy Manager of Safety and Production Department and Planning and Development Department, Manager of International Co-operation and Business Department, Manager of Safety and Production Department and Deputy Chief Engineer of the Company. He graduated from Tsinghua University, specializing in thermal engineering and holds a postgraduate degree of master in science and an EMBA degree. He is a researcher-level senior engineer.

DU Daming, aged 45, is the Vice President of the Company. He had been the secretary (deputy director level) of the administration department of HIPDC, the deputy head of the administration department of the Company, Assistant, Deputy Chief and Chief of the office of the Board of Directors of the Company, Deputy Director and Director of the General Manager's Office of Huaneng Group, Deputy Manager of the General Manager's Office, Deputy Chief (in charge of work) and Chief of the Administration Office of the Company. He graduated from North China Power University, specializing in electric system and its automation, holding a postgraduate degree of master in science. He is a senior engineer.

GAO Shulin, aged 51, is Chief Economist of the Company. He was the deputy chief engineer and deputy General Manager of Jinzhou Power Plant, General Manager of Shenhai Thermal Power Plant, deputy chief of the General Planning Department of Liaoning Electric Industry Bureau, Manager of Production Department, director of Liaoning Electric Power Research Institute, General Manager of Huaneng Beijing Co-generation power Plant, Deputy Manager of the Human Resources Department of the Company, President of Huaneng Nuclear Power Development Co., Ltd. and Manager of Planning and Development Department of the Company. He graduated from the School of Economics and Management of Tsinghua University, holding an EMBA degree. He is a senior engineer.

LI Shuqing, aged 48, is the vice-president of the Company. He was the Assistant Chief, Deputy Chief and Chief of Huaneng Shanghai Shidongkou 2nd Power Plant, Deputy General Manager (Deputy Factory Head) and General

Manager (Factory Head) of Huaneng Shanghai Branch (Shidongkou 2nd Power Plant), General Manager of Huaneng Huadong Branch and Shanghai Shidongkou Power Company, and the General Manager of Huaneng Shanghai Branch. He graduated from Shanghai Electric Power Institute with a bachelor's degree in science majored in thermodynamics. He is a senior engineer.

Corporate Information

Legal Address of the Company

WestWing, Building C  
Tianyin Mansion  
2C Fuxingmennan Street  
Xicheng District  
Beijing  
The People's Republic of China

Company Secretary

Gu Biquan  
Huaneng Building  
4 Fuxingmennei Street  
Xicheng District  
Beijing  
The People's Republic of China

Authorized Representatives

Liu Guoyue  
Fan Xi Xia

Hong Kong Share Registrar

Hong Kong Registrars Limited  
Shops 1712-1716  
17th Floor, Hopewell Centre  
183 Queen's Road East  
Hong Kong

Depository

The Bank of New York  
Investor Relations  
P.O. Box 11258  
Church Street Station, New York  
NY 10286-1258 USA

LEGAL ADVISERS TO THE COMPANY

As to Hong Kong law:

Herbert Smith  
23rd Floor, Gloucester Tower  
15 Queen's Road Central  
Central  
Hong Kong

As to PRC law:

Haiwen & Partners  
21st Floor, Beijing Silver Tower  
No.2 Dong San Huan North Road  
Chaoyang District  
Beijing  
The People's Republic of China

As to US law:

Skadden, Arps, Slate, Meagher & Flom  
42/F, Edinburgh Tower  
The Landmark



15 Queen's Road Central  
Central  
Hong Kong

## AUDITORS OF THE COMPANY

Domestic Auditors	PricewaterhouseCoopers Zhong Tian CPAs Limited Company 11/F., PricewaterhouseCoopers Center, 2 Corporate Avenue, 202 Hu Bin Road, Huangpu District, Shanghai 200021, PRC
International Auditors	PricewaterhouseCoopers 22/F Prince's Building Central, Hong Kong

## LISTING INFORMATION

H Shares:	The Stock Exchange of Hong Kong Limited Stock Code: 902
ADs:	The New York Stock Exchange, Inc. Ticker Symbol: HNP
A Shares:	Shanghai Stock Exchange Stock Code: 600011

## PUBLICATIONS

The Company's interim and annual reports (A share version and H share version) were published in August 2011 and April 2012 respectively. As required by the United States securities laws, the Company will file an annual report in Form 20-F with the Securities and Exchange Commission of the U.S. before 30 April 2012. As the Company's A shares have already been issued and listed, the Company shall, in compliance of the relevant regulations of the China Securities Regulatory Commission and the Shanghai Stock Exchange, prepare quarterly reports. Copies of the interim and annual reports as well as the Form 20-F, once filed, will be available at:

Beijing:	Huaneng Power International, Inc. Huaneng Building 4 Fuxingmennei Street Xicheng District Beijing The People's Republic of China  Tel: (8610)-6322 6999 Fax: (8610)-6322 6666 Website: <a href="http://www.hpi.com.cn">http://www.hpi.com.cn</a>
Hong Kong:	Wonderful Sky Financial Group Limited Unit 3102-05, 31/F., Office Tower, Convention Plaza, 1 Harbour Road, Wanchai, Hong Kong

Tel: (852) 2851 1038  
Fax: (852) 2815 1352

Glossary

Equivalent Availability Factor Percentage on deration of usable hours on generating units in period hour, i.e. (EAF):

$$\text{EAF} = \frac{\text{Available Hours (AH)} - \text{Equivalent Unit Derated Hours (EUNDH)}}{\text{Period Hour (PH)}} \times 100\%$$

$$\text{GCF} = \frac{\text{Gross Capacity Factor (GCF):}}{\text{Gross Actual Generation (GAAG)}} \times 100\%$$

$$\text{GCF} = \frac{\text{Gross Actual Generation (GAAG)}}{\text{Period Hour (PH)} \times \text{Gross Maximum Capacity (GMC)}} \times 100\%$$

Weighted Average Coal Consumption Rate for Power sold: The standard of measurement on average consumption of coal for the production of every one kWh of electricity from a coal-fired generating unit. Unit: gram/kWh

Weighted Average Coal Consumption Rate for Power Generated: The standard of measurement on average consumption of coal for the generation of every one kWh of electricity from a coal-fired generating unit. Unit: gram/kWh

Weighted Average House Consumption: The rate of electricity consumption during power production versus power generating unit: %

Average Utilization Hour: The operation hour coefficient converted from actual gross power generation of generating units to maximum gross capacity (or fixed capacity).

Capacity Rate: Ratio between average capacity and maximum capacity which indicates the difference in capacity. The larger the ratio, the more balanced the power production, and the higher the utilization of facilities.

Power Generation: Electricity generated by power plants (generating units) during the reporting period, or “power generation”. It refers to the consumed generated electricity produced by generating units with power energy being processed and transferred, or the product of actual consumed electricity generated by generating units and actual operation hours of generating units.

Electricity Sold: Electricity for consumption or production sold by power producers to customers or power-producing counterparts.

GW: Unit of power generation, = 109W, gigawatt  
 MW: = 106W, megawatt  
 kW: = 103W, kilowatt  
 kWh: Unit of power, kilowatt hour

Independent Auditor's Report

Independent Auditor's Report

To the shareholders of Huaneng Power International, Inc.  
(incorporated in the People's Republic of China with limited liability)

We have audited the consolidated financial statements of Huaneng Power International, Inc. (the "Company") and its subsidiaries set out on pages 107 to 220, which comprise the consolidated and Company balance sheets as at 31 December 2011, and the consolidated statement of comprehensive income, the consolidated and Company statements of changes in equity and the consolidated statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

DIRECTORS' RESPONSIBILITY FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

PricewaterhouseCoopers, 22/F, Prince's Building, Central, Hong Kong  
T: +852 2289 8888, F:+852 2810 9888, www.pwchk.com

## OPINION

In our opinion, the consolidated financial statements give a true and fair view of the state of affairs of the Company and of the Company and its subsidiaries as at 31 December 2011, and of the Company and its subsidiaries' profit and cash flows for the year then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and have been properly prepared in accordance with the disclosure requirements of the Hong Kong Companies Ordinance.

## OTHER MATTERS

This report, including the opinion, has been prepared for and only for you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

PricewaterhouseCoopers  
Certified Public Accountants

Hong Kong, 20 March 2012

## Consolidated Statement of Comprehensive Income

FOR THE YEAR ENDED 31 DECEMBER 2011  
 (Prepared in accordance with International Financial Reporting Standards)  
 (Amounts expressed in thousands of RMB, except per share data)

	Note	For the year ended 31 December	
		2011	2010
Operating revenue	5	133,420,769	104,318,120
Tax and levies on operations		(484,019 )	(147,641 )
Operating expenses			
Fuel		(90,546,192 )	(67,891,547 )
Maintenance		(2,528,850 )	(2,302,018 )
Depreciation		(11,866,705 )	(10,447,021 )
Labor		(4,621,667 )	(4,067,420 )
Service fees on transmission and transformer facilities of HIPDC	34	(140,771 )	(140,771 )
Purchase of electricity		(8,613,264 )	(5,557,219 )
Others	6	(5,871,699 )	(5,135,492 )
Total operating expenses		(124,189,148)	(95,541,488 )
Profit from operations		8,747,602	8,628,991
Interest income		166,183	89,026
Financial expenses, net			
Interest expense		(7,736,186 )	(5,282,549 )
Exchange gain and bank charges, net		76,474	87,964
Total financial expenses, net		(7,659,712 )	(5,194,585 )
Share of profits of associates/jointly controlled entities	8	703,561	568,794
(Loss)/Gain on fair value changes		(727 )	11,851
Other investment income		93,460	60,013
Profit before income tax expense	6	2,050,367	4,164,090
Income tax expense	31	(868,927 )	(842,675 )
Net profit		1,181,440	3,321,415

	Note	For the year ended 31 December	
		2011	2010
Other comprehensive (loss)/income, net of tax			
Available-for-sale financial asset fair value changes		(233,738 )	(258,204 )
Proportionate shares of other comprehensive loss of investees measured using the equity method of accounting		(44,928 )	(35,156 )
Cash flow hedges		(409,377 )	(112,377 )
Currency translation differences		(665,745 )	457,670
Other comprehensive (loss)/income, net of tax		(1,353,788)	51,933
Total comprehensive (loss)/income		(172,348 )	3,373,348
Net profit/(loss) attributable to:			
– Equity holders of the Company		1,180,512	3,347,985
– Non-controlling interests		928	(26,570 )
		1,181,440	3,321,415
Total comprehensive (loss)/income attributable to:			
– Equity holders of the Company		(171,909 )	3,397,720
– Non-controlling interests		(439 )	(24,372 )
		(172,348 )	3,373,348
Earnings per share for profit attributable to the equity holders of the Company (expressed in RMB per share)			
– Basic and diluted	32	0.08	0.28
Dividends paid	21	2,807,084	2,528,050
Proposed dividend	21	702,769	2,811,077
Proposed dividend per share (expressed in RMB per share)	21	0.05	0.20

The notes on pages 117 to 220 are an integral part of these financial statements.



## Balance Sheets

AS AT 31 DECEMBER 2011

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB)

	Note	The Company and its Subsidiaries As at 31 December	2011	2010	The Company As at 31 December	2011	2010
<b>ASSETS</b>							
Non-current assets							
Property, plant and equipment							
Investments in associates/ jointly controlled entities	7 8	177,968,001 13,588,012	155,224,597 11,973,216	65,881,795 11,455,300	66,891,765 10,157,246		
Investments in subsidiaries	9(a)	—	—	39,626,131	28,281,409		
Loans to subsidiaries	9(b)	—	—	1,600,000	9,360,000		
Available-for-sale financial assets	10	2,301,167	2,223,814	2,289,054	2,211,701		
Land use rights	11	4,341,574	4,058,496	1,481,362	1,481,285		
Power generation licence	12	3,904,056	4,105,518	—	—		
Mining rights	39	1,922,655	—	—	—		
Deferred income tax assets	29	526,399	672,475	456,322	494,118		
Derivative financial assets	13	16,389	91,478	—	—		
Goodwill	14	13,890,179	12,640,904	108,938	108,938		
Other non-current assets	15	2,540,104	5,391,566	206,654	4,045,023		
<b>Total non-current assets</b>		<b>220,998,536</b>	<b>196,382,064</b>	<b>123,105,556</b>	<b>123,031,485</b>		
Current assets							
Inventories	16	7,525,621	5,190,435	2,698,251	2,370,070		
Other receivables and assets	17	4,600,250	5,776,038	2,402,715	2,877,893		
Accounts receivable	18	15,377,843	10,909,136	6,768,208	5,325,903		
Trading securities		96,154	—	—	—		
Loans to subsidiaries	9(b)	—	—	21,414,900	11,384,405		
Derivative financial assets	13	147,455	132,632	—	—		
Bank balances and cash	33	8,670,015	9,547,908	2,573,365	5,019,592		
<b>Total current assets</b>		<b>36,417,338</b>	<b>31,556,149</b>	<b>35,857,439</b>	<b>26,977,863</b>		
<b>Total assets</b>		<b>257,415,874</b>	<b>227,938,213</b>	<b>158,962,995</b>	<b>150,009,348</b>		

		The Company and its Subsidiaries		The Company	
	Note	As at 31 December		As at 31 December	
		2011	2010	2011	2010
<b>EQUITY AND LIABILITIES</b>					
Capital and reserves attributable to equity holders of the Company					
Share capital	19	14,055,383	14,055,383	14,055,383	14,055,383
Capital surplus		17,816,495	18,430,746	18,108,742	18,353,447
Surplus reserves	20	7,013,849	6,958,630	7,013,849	6,958,630
Currency translation differences		(570,973 )	93,405	—	—
Retained earnings					
– Proposed dividend	21	702,769	2,811,077	702,769	2,811,077
– Others		11,865,406	11,439,892	8,559,733	8,656,473
		50,882,929	53,789,133	48,440,476	50,835,010
Non-controlling interests		8,674,824	8,636,339	—	—
<b>Total equity</b>		<b>59,557,753</b>	<b>62,425,472</b>	<b>48,440,476</b>	<b>50,835,010</b>
<b>Non-current liabilities</b>					
Long-term loans	22	79,844,872	65,184,903	28,329,926	29,739,136
Long-term bonds	23	17,854,919	13,831,150	17,854,919	13,831,150
Deferred income tax liabilities	29	1,993,155	1,966,387	—	—
Derivative financial liabilities	13	578,198	95,863	202,333	82,158
Other non-current liabilities	24	989,357	797,558	605,594	554,452
<b>Total non-current liabilities</b>		<b>101,260,501</b>	<b>81,875,861</b>	<b>46,992,772</b>	<b>44,206,896</b>
<b>Current liabilities</b>					
Accounts payable and other liabilities	25	25,767,999	19,555,321	9,704,531	7,775,175
Taxes payables	26	1,018,541	744,223	316,179	254,907
Dividends payable		167,643	79,681	—	—
Salary and welfare payables		230,283	271,062	74,683	107,684
Derivative financial liabilities	13	35,549	86,612	—	—
Short-term bonds	27	10,262,042	5,070,247	10,262,042	5,070,247
Short-term loans	28	43,979,200	44,047,184	32,490,611	32,993,184
Current portion of long-term loans	22	14,140,270	13,782,550	9,685,608	8,766,245
Current portion of long-term bonds	23	996,093	—	996,093	—
<b>Total current liabilities</b>		<b>96,597,620</b>	<b>83,636,880</b>	<b>63,529,747</b>	<b>54,967,442</b>
<b>Total liabilities</b>		<b>197,858,121</b>	<b>165,512,741</b>	<b>110,522,519</b>	<b>99,174,338</b>
<b>Total equity and liabilities</b>		<b>257,415,874</b>	<b>227,938,213</b>	<b>158,962,995</b>	<b>150,009,348</b>

These financial statements were approved for issue by the Board of Directors on 20 March 2012 and were signed on its behalf.

Liu Guoyue  
Director

Fan Xiaxia  
Director

The notes on pages 117 to 220 are an integral part of these financial statements.

## Consolidated Statement of Changes in Equity

FOR THE YEAR ENDED 31 DECEMBER 2011

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB)

	Attributable to equity holders of the Company						Subtotal	Currency Surplus reserves	translation differences	
	Share capital	Share premium	Hedging reserve	Available-for-sale financial assets revaluation reserve	Capital surplus	Other capital reserve				
Balance as at 1 January 2010	12,055,383	8,506,769	128,044	896,919	509,471	10,041,203	6,096,100	(362,067)	14,333,839	
Profit for the year ended 31 December 2010	—	—	—	—	—	—	—	—	3,300,000	
Other comprehensive (loss)/income:										
Fair value changes from available-for-sale financial asset – gross	—	—	—	(344,271)	—	(344,271)	—	—	—	
Fair value changes from available-for-sale financial asset – tax	—	—	—	86,067	—	86,067	—	—	—	
Proportionate shares of other comprehensive loss of investees measured using the equity method of accounting – gross	—	—	—	(37,843)	(3,272)	(41,115)	—	—	—	
Proportionate shares of other	—	—	—	5,959	—	5,959	—	—	—	

comprehensive loss of investees measured using the equity method of accounting – tax									
Changes in fair value of effective portion of cash flow hedges – gross	—	—	(199,370)	—	—	(199,370 )	—	—	—
Changes in fair value of effective portion of cash flow hedges – tax	—	—	49,786	—	—	49,786	—	—	—
Cash flow hedges recorded in shareholders’ equity reclassified to inventories – gross	—	—	(70,050 )	—	—	(70,050 )	—	—	—
Cash flow hedges recorded in shareholders’ equity reclassified to inventories – tax	—	—	11,909	—	—	11,909	—	—	—
Cash flow hedges recorded in shareholders’ equity reclassified to exchange gain and bank charges, net – gross	—	—	79,339	—	—	79,339	—	—	—
Cash flow hedges recorded in shareholders’ equity reclassified to exchange gain and bank charges, net – tax	—	—	(13,488 )	—	—	(13,488 )	—	—	—
Cash flow hedges recorded in shareholders’ equity reclassified to interest expense – gross	—	—	42,952	—	—	42,952	—	—	—
Cash flow hedges recorded in shareholders’ equity reclassified to interest expense – tax	—	—	(13,455 )	—	—	(13,455 )	—	—	—

Currency translation differences	—	—	—	—	—	—	—	455,472	—
Total comprehensive (loss)/income for the year ended 31 December 2010	—	—	(112,377)	(290,088)	(3,272 )	(405,737 )	—	455,472	3,3
Issuance of ordinary shares (Note 19)	2,000,000	8,274,155	—	—	—	8,274,155	—	—	—
Capital injection	—	—	—	—	529,375	529,375	—	—	—
Transfer to surplus reserves (Note 20)	—	—	—	—	—	—	862,530	—	(86
Dividends relating to 2009 (Note 21)	—	—	—	—	—	—	—	—	(2,
Net capital injection from non-controlling interests of subsidiaries	—	—	—	—	—	—	—	—	—
Acquisitions of subsidiaries (Note 39)	—	—	—	—	—	—	—	—	—
Others	—	—	—	—	(8,250 )	(8,250 )	—	—	—
Balance as at 31 December 2010	14,055,383	16,780,924	15,667	606,831	1,027,324	18,430,746	6,958,630	93,405	14,

	Attributable to equity holders of the Company							Currency Surplus translation reserves differences	
	Share capital	Available-for-sale financial assets			Other capital reserve	Subtotal			
		Share premium	Hedging reserve	revaluation reserve					
Balance as at 1 January 2011	14,055,383	16,780,924	15,667	606,831	1,027,324	18,430,746	6,958,630	93,405	14,055,383
Profit for the year ended 31 December 2011	—	—	—	—	—	—	—	—	1,100,000
Other comprehensive (loss)/income:									
Fair value changes from available-for-sale financial asset – gross	—	—	—	(311,647)	—	(311,647)	—	—	—
Fair value changes from available-for-sale financial asset – tax	—	—	—	77,909	—	77,909	—	—	—
Proportionate shares of other comprehensive loss of investees measured using the equity method of accounting – gross	—	—	—	(19,592)	(30,233)	(49,825)	—	—	—
Proportionate shares of other comprehensive loss of investees measured using the equity method of accounting – tax	—	—	—	4,897	—	4,897	—	—	—
Changes in fair value of effective portion of cash flow hedges –	—	—	(22,676)	—	—	(22,676)	—	—	—

gross

Changes in fair value of effective portion of cash flow hedges – tax	—	—	19,408	—	—	19,408	—	—	—
Cash flow hedges recorded in shareholders' equity reclassified to inventories – gross	—	—	(822,892)	—	—	(822,892 )	—	—	—
Cash flow hedges recorded in shareholders' equity reclassified to inventories – tax	—	—	139,892	—	—	139,892	—	—	—
Cash flow hedges recorded in shareholders' equity reclassified to exchange gain and bank charges, net – gross	—	—	113,663	—	—	113,663	—	—	—
Cash flow hedges recorded in shareholders' equity reclassified to exchange gain and bank charges, net – tax	—	—	(19,323 )	—	—	(19,323 )	—	—	—
Cash flow hedges recorded in shareholders' equity reclassified to interest expense – gross	—	—	227,094	—	—	227,094	—	—	—
Cash flow hedges recorded in shareholders' equity reclassified to interest expense – tax	—	—	(44,543 )	—	—	(44,543 )	—	—	—
Currency translation differences	—	—	—	—	—	—	—	(664,378)	—
T o t a l comprehensive (loss)/income for the year ended 31 December 2011	—	—	(409,377)	(248,433)	(30,233 )	(688,043 )	—	(664,378)	1,1



Capital injection	—	—	—	—	79,163	79,163	—	—	—
Transfer to surplus reserves (Note 20)	—	—	—	—	—	—	55,219	—	(55,219)
Dividends relating to 2010 (Note 21)	—	—	—	—	—	—	—	—	(2,000)
Net capital injection from non-controlling interests of subsidiaries	—	—	—	—	—	—	—	—	—
Acquisitions of subsidiaries (Note 39)	—	—	—	—	—	—	—	—	—
Changes in ownership interest in subsidiaries without change of control	—	—	—	—	(5,371)	(5,371)	—	—	(1,000)
Balance as at 31 December 2011	14,055,383	16,780,924	(393,710)	358,398	1,070,883	17,816,495	7,013,849	(570,973)	12,000,000

The notes on pages 117 to 220 are an integral part of these financial statements.

Statement of Changes in Equity  
FOR THE YEAR ENDED 31 DECEMBER 2011  
(Prepared in accordance with International Financial Reporting Standards)  
(Amounts expressed in thousands of RMB)

	Share capital		Attributable to equity holders of the Company			Subtotal	Surplus reserves	Retained earnings	Total
	Share premium	Share premium	Hedging reserve	Capital surplus Available for-sale financial asset revaluation reserve	Other capital reserve				
Balance as at 1 January 2010	12,055,383	8,506,769	29,689	877,616	485,354	9,899,428	6,096,100	12,794,596	4
Profit for the year ended 31 December 2010	—	—	—	—	—	—	—	2,063,534	2
Other comprehensive (loss)/income:									
Fair value changes from available-for-sale financial asset – gross	—	—	—	(344,271)	—	(344,271)	—	—	(
Fair value changes from available-for-sale financial asset – tax	—	—	—	86,067	—	86,067	—	—	8
Changes in fair value of effective portion of cash flow hedges – gross	—	—	(198,656)	—	—	(198,656)	—	—	(
Changes in fair value of effective portion of cash flow hedges – tax	—	—	49,665	—	—	49,665	—	—	4
Cash flow hedges recorded in shareholders' equity reclassified to interest	—	—	76,912	—	—	76,912	—	—	7

expense – gross									
Cash flow hedges									
recorded in									
shareholders’									
equity reclassified									
to interest									
expense – tax	—	—	(19,228 )	—	—	(19,228 )	—	—	(
Total									
comprehensive									
(loss)/income for									
the year ended 31									
December 2010	—	—	(91,307 )	(258,204)	—	(349,511 )	—	2,063,534	1
Issuance of									
ordinary shares	2,000,000	8,274,155	—	—	—	8,274,155	—	—	1
Capital injection	—	—	—	—	529,375	529,375	—	—	5
Transfer to									
surplus									
reserves (Note									
20)	—	—	—	—	—	—	862,530	(862,530 )	—
Dividends									
relating to									
2009 (Note 21)	—	—	—	—	—	—	—	(2,528,050 )	(
Balance as at 31									
December 2010	14,055,383	16,780,924	(61,618 )	619,412	1,014,729	18,353,447	6,958,630	11,467,550	5

	Share capital	Share premium	Attributable to equity holders of the Company			Other capital Subtotal	Surplus reserves	Retained earnings	Total
			Hedging reserve	Capital surplus Available-for-sale financial asset revaluation reserve					
Balance as at 1 January 2011	14,055,383	16,780,924	(61,618 )	619,412	1,014,729	18,353,447	6,958,630	11,467,550	5
Profit for the year e n d e d 3 1 December 2011	—	—	—	—	—	—	—	657,255	6
Other comprehensive (loss)/income:									
Fair value changes from available-for-sale financial asset – gross	—	—	—	(311,647)	—	(311,647 )	—	—	(
Fair value changes from available-for-sale financial asset – tax	—	—	—	77,909	—	77,909	—	—	7
Changes in fair value of effective portion of cash flow hedges – gross	—	—	(194,390)	—	—	(194,390 )	—	—	(
Changes in fair value of effective portion of cash flow hedges – tax	—	—	48,599	—	—	48,599	—	—	4
Cash flow hedges recorded in shareholders’ equity reclassified to interest expense – gross	—	—	74,215	—	—	74,215	—	—	7
Cash flow hedges recorded in shareholders’ equity reclassified to interest	—	—	(18,554 )	—	—	(18,554 )	—	—	(

expense – tax

Total comprehensive (loss)/income for the year ended 31									
December 2011	—	—	(90,130 )	(233,738)	—	(323,868 )	—	657,255	3
Capital injection	—	—	—	—	79,163	79,163	—	—	7
Transfer to surplus reserves (Note 20)	—	—	—	—	—	—	55,219	(55,219 )	—
D i v i d e n d s relating to 2010 (Note 21)	—	—	—	—	—	—	—	(2,807,084 )	(
Balance as at 31									
December 2011	14,055,383	16,780,924	(151,748)	385,674	1,093,892	18,108,742	7,013,849	9,262,502	4

The notes on pages 117 to 220 are an integral part of these financial statements.

## Consolidated Statement of Cash Flows

FOR THE YEAR ENDED 31 DECEMBER 2011

(Prepared in accordance with International Financial Reporting Standards)

(Amounts expressed in thousands of RMB)

	For the year ended 31 December	
Note	2011	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Profit before income tax expense	2,050,367	4,164,090
Adjustments to reconcile profit before income tax expense to net cash provided by operating activities:		
Depreciation	11,866,705	10,447,021
Provision for impairment loss on property, plant and equipment	80,828	8,477
Provision for impairment loss on intangible assets	15,661	23,706
Provision for impairment on goodwill	291,734	5,276
Amortization of land use rights	128,465	112,706
Amortization of other non-current assets	81,276	64,964
Amortization of housing loss	3,104	17,234
(Reversal of)/Provision for doubtful accounts	(19,747 )	2,750
Reversal of inventory obsolescence	(3,353 )	(155 )
Loss/(Gain) on fair value changes	727	(11,851 )
Other investment income	(81,298 )	(63,578 )
Net gain on disposals or write-off of property, plant and equipment	(7,911 )	(33,129 )
Unrealized exchange gain, net	(349,186 )	(199,456 )
Share of profits of associates/jointly controlled entities	(703,561 )	(568,794 )
Interest income	(166,183 )	(89,026 )
Interest expense	7,736,186	5,282,549
Changes in working capital:		
Inventories	(1,807,503 )	(1,031,869 )
Other receivables and assets	925,358	(797,412 )
Accounts receivable	(4,194,500 )	(650,910 )
Restricted cash	4,238	103,597
Accounts payable and other liabilities	4,155,406	955,293
Taxes payable	1,448,802	1,495,179
Salary and welfare payables	(46,832 )	(40,817 )
Others	48,936	(72,593 )
Interest received	95,951	54,738
Income tax expense paid	(604,515 )	(1,111,266 )
Net cash provided by operating activities	20,949,155	18,066,724

	For the year ended 31 December	
Note	2011	2010
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Purchase of property, plant and equipment	(16,673,632)	(20,704,224)
Proceeds from disposals of property, plant and equipment	85,601	105,816
Prepayments of land use rights	(68,370 )	(2,879 )
Increase in other non-current assets	(46,657 )	(24,614 )
Cash dividends received	447,654	315,205
Capital injections in associates	(995,804 )	(533,630 )
Cash paid for acquiring available-for-sale financial assets	(310,000 )	(12,113 )
Cash consideration paid for acquisitions	(4,121,280 )	(850,763 )
Cash consideration prepaid for acquisitions	—	(4,178,214 )
Cash from acquisitions of subsidiaries	349,245	90,524
Cash paid for acquiring trading securities	(101,707 )	—
Cash paid for acquiring associates	(302,250 )	(174,000 )
Cash paid for acquiring a jointly controlled entity	—	(1,058,000 )
Cash received from disposal of a subsidiary	104,258	—
Short-term loan to an associate	(100,000 )	—
Others	68,111	46,354
Net cash used in investing activities	(21,664,831)	(26,980,538)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Issuance of short-term bonds	9,959,600	9,959,850
Repayments of short-term bonds	(5,000,000 )	(15,000,000)
Drawdown of short-term loans	63,517,251	63,190,307
Repayments of short-term loans	(64,216,571)	(44,611,278)
Drawdown of long-term loans	22,877,988	9,215,500
Repayments of long-term loans	(20,677,814)	(11,682,182)
Issuance of long-term bonds	4,985,000	—
Proceed received from issuance of shares	—	10,280,169
Repayment of a loan from former shareholder of a subsidiary	(600,000 )	—
Interest paid	(8,144,957 )	(5,997,296 )
Net capital injection from non-controlling interests of the subsidiaries	219,215	283,521
Government grants	78,869	50,410
Dividends paid to shareholders of the Company	(2,807,084 )	(2,528,050 )
Dividends paid to non-controlling interests of the subsidiaries	(120,130 )	(249,043 )

	Note	For the year ended 31 December	
		2011	2010
Cash paid for acquisition of non-controlling interests of a subsidiary		(4,266 )	—
Others		2,547	151,415
Net cash provided by financing activities		69,648	13,063,323
Exchange (loss)/gain		(227,627 )	49,946
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS		(873,655 )	4,199,455
Cash and cash equivalents as at beginning of the year		9,426,437	5,226,982
CASH AND CASH EQUIVALENTS AS AT END OF THE YEAR	33	8,552,782	9,426,437

The notes on pages 117 to 220 are an integral part of these financial statements.



Notes to the Financial Statements

FOR THE YEAR ENDED 31 DECEMBER 2011  
(Prepared in accordance with International Financial Reporting Standards)  
(Amounts expressed in thousands of RMB unless otherwise stated)

1. COMPANY ORGANIZATION AND PRINCIPAL ACTIVITIES

Huaneng Power International, Inc. (the “Company”) was incorporated in the People’s Republic of China (the “PRC”) as a Sino-foreign joint stock limited company on 30 June 1994. The registered address of the Company is West Wing, Building C, Tianyin Mansion, 2C Fuxingmennan Street, Xicheng District, Beijing, the PRC. The Company and most of its subsidiaries are principally engaged in the generation and sale of electric power to the respective regional or provincial grid companies in the PRC. SinoSing Power Pte. Ltd. (“SinoSing Power”) and its subsidiaries, subsidiaries of the Company, are principally engaged in the power generation and sale in the Republic of Singapore (“Singapore”).

The directors consider Huaneng International Power Development Corporation (“HIPDC”) and China Huaneng Group (“Huaneng Group”) as the parent company and ultimate parent company of the Company, respectively. Both HIPDC and Huaneng Group are incorporated in the PRC. Neither Huaneng Group nor HIPDC produced financial statements available for public use.

2. PRINCIPAL ACCOUNTING POLICIES

The principal accounting policies adopted in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

(a) Basis of preparation

These financial statements have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (the “IASB”). These financial statements have been prepared under the historical cost convention, as modified by the revaluation of available-for-sale financial assets, trading securities and derivative financial assets and liabilities.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company and its subsidiaries’ accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 4.

As at and for the year ended 31 December 2011, a portion of the Company and its subsidiaries’ funding requirements for capital expenditures were partially satisfied by short-term financing. Consequently, as at 31 December 2011, the Company and its subsidiaries have a negative working capital balance of approximately RMB60.18 billion. Taking into consideration of the expected operating cash flows of the Company and its subsidiaries and the undrawn available banking facilities, the Company and its subsidiaries will refinance and/or restructure certain short-term borrowings into long-term borrowings and also consider alternative sources of financing, where applicable. Therefore, the directors of the Company are of the opinion that the Company and its subsidiaries will be able to meet its liabilities as and when they fall due within the next twelve months and have prepared these consolidated financial statements on a going concern basis.



The following new standards and amendments to standards are adopted for the first time to the financial year beginning 1 January 2011.

IAS 24 (revised), 'Related party disclosures', issued in November 2009. It supersedes IAS 24, 'Related party disclosures', issued in 2003. IAS 24 (revised) is mandatory for annual periods beginning on or after 1 January 2011. The revised standard clarifies and simplifies the definition of a related party and removes the requirement for government-related enterprises to disclose details of all transactions with the government and other government-related enterprises. The Company and its subsidiaries have early adopted the partial exemption of disclosure requirements for transactions with government-related enterprises on 1 January 2010 and apply the remaining requirements of this standard from 1 January 2011 onwards. The adoption of the remaining requirements results in additional disclosures on transactions and balances with associates/jointly controlled entities of Huaneng Group and its subsidiaries and the commitment with related parties. Please refer to Note 34 for the details of disclosures.

Amendments to IFRS 7, 'Financial instruments: disclosures'. The amendments were as a result of the May 2010 Improvements to IFRSs (the "May 2010 Improvements") (effective for financial year beginning 1 January 2011). The May 2010 Improvements clarified certain quantitative disclosures and removed the disclosure requirements on financial assets with renegotiated terms. The Company and its subsidiaries adopt the May 2010 Improvements on IFRS 7 on 1 January 2011. These amendments have no material impact on the financial statements.

(b)

Consolidation

The consolidated financial statements include the financial statements of the Company and all of its subsidiaries made up to 31 December.

Subsidiaries are investees over which the Company and its subsidiaries have the power to exercise control, i.e., the power to govern the financial and operating policies and obtains benefits from the operating activities of the investees. When determining whether the Company and its subsidiaries exercise control over an investee, the impact from potential voting rights of the investee, such as currently convertible bonds and exercisable warrants, etc. is taken into account. The Company and its subsidiaries also assesses existence of control where it does not have more than 50% of the voting power but is able to govern the financial and operating policies by virtue of de-facto control. De-facto control may arise from circumstances such as enhanced minority rights or contractual terms between shareholders, etc.

Subsidiaries are fully consolidated from the date when control is transferred to the Company and its subsidiaries. They are de-consolidated from the date when control ceases. All the significant intra-group balances, transactions and unrealized profit or loss are eliminated in the preparation of the consolidated financial statements. The portion of the shareholders' equity of the subsidiaries, which is not attributable to the parent company, is separately presented as non-controlling interests in the shareholders' equity in the consolidated financial statements.

When there is any inconsistency on the accounting policies or financial period adopted between subsidiaries and the Company, the financial statements of subsidiaries are adjusted according to the accounting policies or financial period adopted by the Company.

(i) Business combinations

The acquisition method is used to account for the business combinations of the Company and its subsidiaries (including business combination under common controls). The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Company and its subsidiaries. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Company and its subsidiaries recognise any non-controlling interests in the acquiree either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of acquiree's identifiable net assets. The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill (Note 2(i)). If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognised in profit or loss.

(ii) Changes in ownership interests in subsidiaries without change of control

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions – that is, as transactions with the equity owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

(iii) Associates and jointly controlled entities

Associates are investees over which the Company and its subsidiaries have significant influence on the financial and operating decisions. Jointly controlled entities are investees over which the Company and its subsidiaries have contractual arrangements to jointly share control with one or more parties and none of the participating parties has unilateral control over the investees.

Investments in associates/jointly controlled entities are initially recognized at cost and are subsequently measured using the equity method of accounting. The excess of the initial investment cost over the proportionate share of the fair value of identifiable net assets of investee acquired is included in the initial investment cost (Note 2(i)). Any shortfall of the initial investment cost to the proportionate share of the fair value of identifiable net assets of investee acquired is recognized in current period profit or loss and long-term investment cost is adjusted accordingly.

When applying equity method, the Company and its subsidiaries adjust net profit or loss of the investees, including the fair value adjustments on the net identifiable assets of the associates/jointly controlled entities and the adjustments to align with the accounting policies of the Company and different financial periods. Current period investment income is then recognized based on the proportionate share of the Company and its subsidiaries in the investees' net profit or loss. Net losses of investees are recognized to the extent of book value of long-term equity investments and any other constituting long-term equity investments in investees in substance. The Company and its subsidiaries will continue to recognize investment losses and provision if they bear additional obligations which meet the recognition criteria under the provision standard.

The Company and its subsidiaries adjust the carrying amount of the investment and directly recognize into related other comprehensive income and equity items based on their proportionate share on other shareholders' other comprehensive income and equity movements of the investees other than net profit or loss, given there is no change in shareholding ratio.

When the investees appropriate profit or declare dividends, the book value of long-term equity investments are reduced correspondingly by the proportionate share of the distribution.

The Company and its subsidiaries determine at each reporting date whether there is any objective evidence that the investment in the associate/jointly controlled entities is impaired. If this is the case, the Company and its subsidiaries calculate the amount of impairment as the difference between the recoverable amount of the associate/jointly controlled entities and its carrying value and recognises the amount adjacent to 'share of profit of associates/jointly controlled entities' in the consolidated statement of comprehensive income.

Profits or losses resulting from transactions between the Company and its subsidiaries and the associates/jointly controlled entities are recognised in the Company and its subsidiaries financial statements only to the extent of interest of unrelated investor's interests in the associates and jointly controlled entities. Loss from transactions between the Company and its subsidiaries and the associates/jointly controlled entities is fully recognized and not eliminated when there is evidence for asset impairment.

Gains and losses arising from dilution of investments in associates/jointly controlled entities are recognized in the consolidated statement of comprehensive income.

In balance sheet of the Company, investments in associates/jointly controlled entities are stated at costs less provision for impairment losses (Note 2(j)). Investment income from investments in associates/jointly controlled entities is accounted for by the Company based on dividends received and receivable.

(c) Separate financial statements of the Company

Investments in subsidiaries are accounted for at cost less impairment. Cost also includes direct attributable costs of investment. The results of subsidiaries are accounted for by the Company on the basis of dividend and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving dividends from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

(d) Segment reporting

The Company and its subsidiaries determine the operating segment based on the internal organization structure, management requirement and internal reporting system and thereafter determine the reportable segment and present the segment information.

An operating segment represents a component of the Company and its subsidiaries that meets all the conditions below: (i) the component earns revenue and incurs expenses in its daily operating activities; (ii) chief operating decision makers of the Company and its subsidiaries can regularly review the operating results of the component in order to make decisions on allocating resources and assessing performance; (iii) the financial position, operating results, cash flows and other related financial information of the component are available. When the two or more operating segments exhibit similar economic characteristics and meet certain conditions, the Company and its subsidiaries will combine them as one reportable segment.

(e) Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements of each of the Company and its subsidiaries are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in Renminbi ("RMB"), which is the Company's functional and presentation currency.

(ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the spot exchange rate on the transaction dates. On balance sheet date, foreign currency monetary items are translated into functional currency at the spot exchange rate on balance sheet date. Exchange differences are directly expensed in current period profit or loss unless they arise from foreign currency loans borrowed for purchasing or construction of qualifying assets which is eligible for capitalization and qualifying cash flow hedges which are deferred in equity.

(iii) Group companies

The operating results and financial position of the foreign subsidiaries are translated into presentation currency as follows:

Asset and liability items in each balance sheet of foreign operations are translated at the closing rates at the balance sheet date; equity items excluding retained earnings are translated at the spot exchange rates at the date of the transactions. Income and expense items in the statement of comprehensive income of the foreign operations are translated at average exchange rates approximating the rate on transaction dates. All resulting translation differences above are recognized in other comprehensive income.



The cash flows denominated in foreign currencies and cash flows of overseas subsidiaries are translated at average exchange rates approximating the rates at the dates when cash flows incurred. The impact of the foreign currency translation on the cash and cash equivalents is presented in the statement of cash flows separately.

On the disposal of a foreign operation (that is, a disposal of the Company and its subsidiaries' entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a jointly controlled entity that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the equity holders of the company are reclassified to profit or loss.

In the case of a partial disposal that does not result in the Company and its subsidiaries losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognized in profit or loss. For all other partial disposals (that is, reductions in the Company and its subsidiaries' ownership interest in associates or jointly controlled entities that do not result in the Company and its subsidiaries losing significant influence or joint control), the proportionate share of the accumulated exchange difference is reclassified to profit or loss.

(f) Property, plant and equipment

Property, plant and equipment consists of dam, port facilities, buildings, electric utility plant in service, transportation facilities, others and construction-in-progress ("CIP"). Property, plant and equipment acquired or constructed are initially recognized at cost and carried at the net value of cost less accumulated depreciation and accumulated impairment loss.

Cost of CIP comprises construction expenditures, other expenditures necessary for the purpose of preparing the CIP for its intended use and those borrowing costs incurred before the assets ready for intended use that are eligible for capitalization. CIP is not depreciated until such time as the relevant asset is completed and ready for its intended use.

Subsequent costs about property, plant and equipment are included in the asset's carrying amount only when it is probable that future economic benefits associated with the item will flow to the Company and its subsidiaries and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. Other subsequent expenditures not qualifying for capitalization are charged in the current period profit or loss when they are incurred.



Depreciation of property, plant and equipment is provided based on book value less estimated residual value over estimated useful life using straight-line method. For those impaired property, plant and equipment, depreciation is provided based on book value after deducting impairment provision over estimated useful life. The estimated useful lives are as follows:

	Estimated useful lives
Dam	8 – 40 years
Port facilities	20 – 40 years
Buildings	6 – 45 years
Electric utility plant in service	5 – 35 years
Transportation facilities	6 – 20 years
Others	3 – 18 years

At the end of each year, the Company and its subsidiaries review the estimated useful life, residual value and the depreciation method of the property, plant and equipment for adjustment when necessary.

Property, plant and equipment is derecognized when they are disposed of, or expected that cannot bring economic benefit through use or disposal. The amount of disposal income arising from sale, transfer, disposal or write-off of the property, plant and equipment less book value and related tax expenses is recorded in ‘operating expenses – others’ in the statement of comprehensive income.

The carrying amount of property, plant and equipment is written down immediately to its recoverable amount when its carrying amount is greater than its recoverable amount (Note 2(j)).

(g) Power generation licence

The Company and its subsidiaries acquired the power generation licence as part of the business combination with Tuas Power Ltd. (“Tuas Power”). The power generation licence is initially recognized at fair value at the acquisition date. It is of indefinite useful life and is not amortized. It is tested annually for impairment and carried at cost less accumulated impairment loss. Useful life of the power generation licence is reviewed by the Company and its subsidiaries each financial period to determine whether events and circumstances continue to support the indefinite useful life assessment.

(h) Mining rights

Mining rights are stated at cost less accumulated amortisation and impairment losses and are amortised based on the units of production method utilising only recoverable coal reserves as the depletion base.

(i) Goodwill

Goodwill arising from the acquisitions of subsidiaries, associates and joint ventures represents the excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the share of the Company and its subsidiaries on net fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree at the date of acquisition.



For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units (“CGUs”), or groups of CGUs, that is expected to benefit from the synergies of the combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs to sell. Any impairment is recognised immediately as an expense and is not subsequently reversed.

(j) Impairment of non-financial assets

Separately presented goodwill and intangible assets with indefinite useful lives are tested for impairment at least annually regardless of whether there are indications of impairment. Property, plant and equipment, intangible assets with definite useful lives, land use rights under finance leases and long-term equity investments not accounted for as financial assets are tested for impairment when there is any impairment indication on balance sheet date. If impairment test result shows that the recoverable amount of asset is less than its book value, that difference is recognized as impairment provision. Recoverable amount is the higher of fair value less cost to sell of the asset and value in use. Asset impairment is calculated and recognized on individual asset basis. If it is difficult to estimate recoverable amount for the individual assets, the recoverable amount is determined based on the recoverable amount of the CGU to which asset belongs. CGU is the smallest group of assets that independently generates cash flows.

Except for goodwill, all impaired non-financial assets are subject to review for possible reversal of impairment at each reporting date.

(k) Financial assets

Financial assets are classified as the following categories at initial recognition: at fair value through profit or loss, loans and receivables and available-for-sale. The classification depends on the intention and ability of the Company and its subsidiaries to hold the financial assets.

(i) Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and designated upon initial recognition as at fair value through profit or loss. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term. Derivatives are classified as held for trading unless they are designated as hedges. Assets in this category are classified as current assets if expected to be settled within 12 months; otherwise, they are classified as non-current.

(ii) Loans and receivables

Loans and receivables refer to the non-derivative financial assets for which there is no quotation in the active market with fixed or determinable amount. They are included in current assets, except for maturities greater than 12 months after the balance sheet



date which these are classified as non-current assets. Loans and receivables are primarily included in as ‘accounts receivable’, ‘other receivables and assets’, ‘loans to subsidiaries’, ‘other non-current assets’ and ‘bank balances and cash’ in the balance sheets.

(iii) Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are either designated in this category or not classified in any of the other categories. They are included in current assets when management intends to dispose of the available-for-sale financial assets within 12 months of the balance sheet date.

(iv) Recognition and measurement

Regular purchases and sales of financial assets are recognized at fair value initially on trade-date – the date on which the Company and its subsidiaries commit to purchase or sell the asset. Transaction costs relating to financial assets at fair value through profit or loss are directly expensed in the profit or loss as incurred. Transaction costs for other financial assets are included in the carrying amount of the asset at initial recognition. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and all risks and rewards related to the ownership of the financial assets have been transferred to the transferee.

Financial assets at fair value through profit or loss and available-for-sale are subsequently measured at fair value. When an active market exists for a financial instrument, fair value is determined based on quoted prices in the active market. When no active market exists, fair value is determined by using valuation techniques. Valuation techniques includes making reference to the prices used by knowledgeable and willing parties in a recent transaction, the current fair value of other financial assets that are same in substance, discounted cash flow method and option pricing model, etc.. When applying valuation techniques, the Company and its subsidiaries use market parameters to the fullest extent possible and use specific parameters of the Company and its subsidiaries as little as possible. Loans and receivables are carried at amortized cost using the effective interest method.

Changes in the fair value of financial assets at fair value through profit or loss are recorded in ‘gain/(loss) on fair value changes’.

Except for impairment loss and translation differences on monetary financial assets, changes in the fair value of available-for-sale financial assets are recognized in other comprehensive income. When these financial assets are derecognized, the accumulated fair value adjustments recognized in equity are included in the statement of comprehensive income as ‘other investment income’. Dividends on available-for-sale financial assets are recorded in ‘other investment income’ when the right of the Company and its subsidiaries to receive payments is established.

(v) Impairment of financial assets

Except for financial assets at fair value through profit or loss, the Company and its subsidiaries perform assessment on the book value of financial assets on balance sheet date. Provision for impairment is made when there is objective evidence showing that a financial asset is impaired.

In the case of equity investments classified as available for sale, a significant or prolonged decline in the fair value of the investment below its cost is evidence that the assets are impaired. If any such evidence exists for available-for-sale financial assets, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognized in profit or loss – is removed from equity and recognized in profit or loss. Impairment losses recognized in the profit or loss on equity instruments are not reversed through the profit or loss.

When financial assets carried at amortized cost are impaired, the carrying amount of the financial assets is reduced to the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The impaired amount is recognized as assets impairment loss in the current period. If there is objective evidence that the value of the financial assets is recovered as a result of objective changes in circumstances occurring after the impairment loss was originally recognized, the originally recognized impairment loss is reversed through profit or loss. For the impairment test of receivables, please refer to Note 2(l).

(vi) Derivative financial instruments and hedging activities

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. Gain or loss arising from subsequent change in the fair value of derivative financial instruments is recognized in profit or loss except for those effective portion of gain or loss on the derivative financial instruments designated as cash flow hedges which is recognized directly in other comprehensive income. Cash flow hedge represents a hedge against the exposure to variability in cash flows, which such cash flow is originated from a particular risk associated with highly probable forecast transactions and variable rate borrowings and could affect the statement of comprehensive income.

The hedged items of cash flow hedge are the designated items with respect to the risks associated with future cash flow change of the Company and its subsidiaries. Hedging instruments are designated derivative for cash flow hedge whose cash flows are expected to offset changes in the cash flows of a hedged item.

The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedge item is more than 12 months.

The Company and its subsidiaries document their assessments, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in cash flows of hedged items. The Company and its subsidiaries apply ratio analysis method to evaluate the ongoing effectiveness of the cash flow hedge.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in the statement of comprehensive income within 'gain/(loss) on fair value changes'.

Amounts accumulated in equity are reclassified to the profit or loss in the periods when the hedged item affects profit or loss. The gain or loss relating to the effective portion of interest rate swaps hedging variable rate borrowings is recognized in the statement of comprehensive income within 'interest expense'. The gain or loss relating to the effective portion of exchange forward hedging foreign currency denominated payables is recognized in the statement of comprehensive income within 'exchange gain and bank charges, net'. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset. In case the Company and its subsidiaries expect all or a portion of net loss previously recognized directly in other comprehensive income will not be recovered in future financial periods, the irrecoverable portion will be reclassified into profit or loss.

When a hedging instrument expires or is sold, terminated or exercised or when a hedge no longer meets the criteria for hedge accounting, the Company and its subsidiaries will discontinue hedge accounting. Any cumulative gain or loss existing in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in the profit or loss. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the statement of comprehensive income within 'gain/(loss) on fair value changes'.

(l) Loans and receivables

Loans and receivables primarily including accounts receivable, notes receivable, other receivables, loan to subsidiaries and other non-current assets, etc. are recognized initially at fair value. Loans and receivables are subsequently measured at amortized cost less provision for doubtful debts using the effective interest method.

When there is objective evidence that the Company and its subsidiaries will not be able to collect all amounts due according to the original terms of the receivables, impairment test is performed on individual account and related provision for doubtful accounts is made based on the shortfall between carrying amounts and respective present value of estimated future cash flows. The carrying amounts of the receivables are reduced through the use of allowance accounts, and the amount of the provision is recognized in the statement of comprehensive income within 'operating expenses – others'. When a receivable is uncollectible, it is written off against the allowance account for the receivable. Subsequent recoveries of amounts previously written off are credited against 'operating expenses – others' in the statement of comprehensive income.

(m) Inventories

Inventories include fuel for power generation, materials for repairs and maintenance and spare parts, etc. and are stated at lower of cost and net realizable values.

Inventories are initially recorded at cost and are charged to fuel costs or repairs and maintenance, respectively when used, or capitalized to property, plant and equipment when installed, as appropriate, using weighted average cost basis. Cost of inventories includes costs of purchase and transportation costs.

When the forecast transaction that is hedged results in the recognition of the inventory, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the inventory.

Provision for inventory obsolescence is determined by the excess of cost over net realizable value. Net realizable values are determined based on the estimated selling price less estimated conversion costs during power generation, selling expenses and related taxes in the ordinary course of business.

(n) Related parties

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also considered to be related if they are subject to common control or jointly control of the same third party; one party is controlled or jointly controlled by a third party and the other party is a associate or a joint venture of the same third party.

(o) Cash and cash equivalents

Cash and cash equivalents listed in the statement of cash flows represents cash in hand, deposits held at call with banks, and other short-term (3 months or less), highly-liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

(p) Borrowings

Borrowings are recognized initially at fair value less transaction costs and subsequently measured at amortized cost using the effective interest method. Borrowings are classified as current liabilities unless the Company and its subsidiaries have an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

(q) Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

(r) Payables

Payables primarily including accounts payable and other liabilities, etc. are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.





(s) Taxation

(i) Value-added tax (“VAT”)

The domestic power, heat and coal sales of the Company and its subsidiaries are subjected to VAT. VAT payable is determined by applying 17% (or 13% on heat) on the taxable revenue after offsetting deductible input VAT of the period.

(ii) Business Tax (“BT”)

Port and transportation services of the Company and its subsidiaries are subject to BT, with applicable tax rate of 3%.

(iii) Goods and service tax (“GST”)

The overseas power sales of the Company and its subsidiaries are subjected to goods and service tax of the country where they operate. GST payable is determined by applying 7% on the taxable revenue after offsetting deductible GST of the period.

(iv) Current and deferred income tax

The income tax expense for the period comprises current and deferred income tax. Income tax expense is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

On 16 March 2007, the National People’s Congress promulgated the “Corporate Income Tax Law of the People’s Republic of China” which became effective from 1 January 2008. Domestic entities of the Company and its subsidiaries which originally enjoyed preferential tax treatments will transit to 25% gradually in five years from 1 January 2008 onwards. Domestic subsidiaries with original applicable tax rate of 33% apply tax rate of 25% from 1 January 2008 onwards. Pursuant to Guo Fa [2007] 39 document, starting from 1 January 2008, entities which originally enjoyed two-year tax exemption and three-year 50% reduction tax treatments, continue to follow the original tax laws, administrative regulations and relevant documents until respective expiration dates. However, those not being entitled to preferential tax treatment as a result of tax losses, the preferential period started from 2008 onwards.

The income tax rate applicable to Singapore subsidiaries is 17% (2010: 17%).

Pursuant to Guo Shui Han [2009] 33 document, starting from 1 January 2008, the Company and its branches calculate and pay income tax on a combined basis according to relevant tax laws and regulations. The original regulation specifying locations for power plants and branches of the Company to make enterprise income tax payments was abolished. The income tax of subsidiaries remains to be calculated individually based on their individual operating results.

Deferred income tax assets and liabilities are recognized based on the differences between tax bases of assets and liabilities and respective book values (temporary differences). For deductible tax losses or tax credit that can be brought forward in accordance with tax law requirements for deduction of taxable income in subsequent years, it is considered as temporary differences and related deferred income tax assets are recognized. No deferred income tax liability is recognized for temporary difference



arising from initial recognition of goodwill. For those temporary differences arising from initial recognition of an asset or liability in a non-business combination transaction that affects neither accounting profit nor taxable profit (or deductible loss) at the time of the transaction, no deferred income tax asset and liability is recognized.

The Company and its subsidiaries recognize deferred income tax assets to the extent that it is probable that taxable profit will be available to offset the deductible temporary difference, deductible tax loss and tax credit.

On the balance sheet date, deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or liability is settled.

Deferred income tax assets and deferred income tax liabilities are offset when meeting all the conditions below:

- (1) The Company and its subsidiaries have the legal enforceable right to offset current income tax assets and current income tax liabilities;
- (2) Deferred income tax assets and deferred income tax liabilities are related to the income tax levied by the same tax authority of the Company and its subsidiaries.

(t)

#### Employee benefits

Employee benefits include all expenditures relating to the employees for their services. The Company and its subsidiaries recognize employee benefits as liabilities during the accounting period when employees render services and allocates to related cost of assets and expenses based on different beneficiaries.

In connection with pension obligations, the Company and its subsidiaries operate various defined contribution plans in accordance with the local conditions and practices in the countries and provinces in which they operate. A defined contribution plan is a pension plan under which the Company and its subsidiaries pay fixed contributions into a separate publicly administered pension insurance plan on mandatory and voluntary bases. The Company and its subsidiaries have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. The contributions are recognized as employee benefit expenses when incurred. Prepaid contributions are recognized as assets to the extent that a cash refund or a reduction in the future payment is available.

(u)

#### Government grants

Government grants are recognized when the Company and its subsidiaries fulfill the conditions attaching to them and are able to receive them. When government grants are received in the form of monetary assets, they are measured at the amount received or receivable. When the grant is in the form of non-monetary assets, it is measured at fair value. When fair value cannot be measured reliably, nominal amount is assigned.

Asset-related government grant is recognized as deferred income and is amortized evenly in profit or loss over the useful lives of related assets.

Income-related government grant that is used to compensate subsequent related expenses or losses of the Company and its subsidiaries are recognized as deferred income and recorded in the profit or loss when related expenses or losses incurred. When the grant is used to compensate expenses or losses that were already incurred, they are directly recognized in current period profit or loss.

(v) Revenue and income recognition

Revenue is recognized based the following methods:

Revenue and income are recognized when it is probable that the economic benefits associated with the transaction will flow to the Company and its subsidiaries and the amount of the revenue and income can be measured reliably.

(i) Electricity sales revenue

Electricity sales revenue represents the fair value of the consideration received or receivable for electricity sold in the ordinary course of the activities of the Company and its subsidiaries (net of VAT or GST and after taking into account amounts received in advance). Revenue is earned and recognized upon transmission of electricity to the customers and the power grid controlled and owned by the respective regional or provincial grid companies.

(ii) Coal sales revenue

Coal sales revenue represents the fair value of the consideration received or receivable for the sale of the coal in the ordinary course of the activities of the Company and its subsidiaries. Coal sales revenue is recognized when the coal delivered to the customers and there is no unfulfilled obligation that could affect the customer's acceptance of the coal.

(iii) Service revenue

Service revenue refers to amounts received from service of port loading and conveying. The Company and its subsidiaries recognize revenue when the relevant service was provided.

(iv) Interest income

Interest income from deposits is recognized on a time proportion basis using effective interest method. Interest income from the finance lease is recognized on a basis that reflects a constant periodic rate of return on the net investment in the finance lease.

(w) Leases

Leases where all the risks and rewards incidental to ownership of the assets are in substance transferred to the lessees are classified as finance leases. All other leases are operating leases.

(i) Operating leases (lessee)

Operating lease expenses are capitalized or expensed on a straight-line basis over the lease term.



(ii) Finance lease (lessor)

The Company and its subsidiaries recognize the aggregate of the minimum lease receipts and the initial direct costs on the lease inception date as the receivable. The difference between the aggregate of the minimum lease receipts and the initial direct costs and sum of their respective present values is recognized as unrealized finance income. The Company and its subsidiaries adopt the effective interest method to allocate such unrealized finance income over the lease term. On balance sheet date, the Company and its subsidiaries present the net amount of finance lease receivable after deducting any unrealized finance income in non-current assets and current assets, respectively.

Please refer to Note 2(k)(v) for impairment test on finance lease receivables.

(x) Purchase of electricity

The overseas subsidiary of the Company recognized electricity purchase cost when it purchases the electricity and transmits to its customers.

(y) Financial guarantee contracts

(i) Classification

The Company issues financial guarantee contracts that transfer significant insurance risk.

Financial guarantee contracts are those contracts that require the issuer to make specified payments to reimburse the holders for losses they incur because specified debtors fail to make payments when due in accordance with the original or modified terms of debt instruments.

(ii) Liability adequacy test

At each balance sheet date, the Company and its subsidiaries perform liability adequacy tests to ensure the adequacy of the contract liabilities. In performing these tests, current best estimates of future contractual cash flows and related administrative expenses are used. Any deficiency is immediately charged to the statement of comprehensive income and by subsequently establishing a provision for losses arising from liability adequacy test.

(z) Dividend distribution

Dividend distribution to the shareholders of the Company and its subsidiaries is recognized as a liability in the period when the dividend is approved in the shareholders' meeting.

(aa) Contingencies

Contingent liabilities are not recognized in the financial statements. They are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are not recognized in the financial statements but disclosed when an inflow of economic benefit is probable.





(ab) Standards and amendments to published standards that are not yet effective but relevant to the Company and its subsidiaries

The following standards and amendments to existing standards have been published that are mandatory for the accounting periods of the Company and its subsidiaries beginning on or after 1 January 2012 or later, but the Company and its subsidiaries have not early adopted:

Amendments to IFRS 7, 'Financial instruments: disclosures'. The amendments were as a result of amendments on disclosure requirements of transfers of financial assets released in October 2010 (effective for financial year beginning 1 July 2011). The amendments clarified and strengthened the disclosure requirements of transfers of financial assets which help users of financial statements evaluating related risk exposures and the effect of those risks on the financial position of the Company and its subsidiaries. The Company and its subsidiaries will adopt the amendments from 1 January 2012. The Company and its subsidiaries are in the process of assessing of the impact of the amendments.

- IFRS 9, 'Financial instruments' addresses the classification, measurement and recognition of financial assets and financial liabilities. IFRS 9 was issued in November 2009. It replaces the parts of IAS 39 that relate to the classification and measurement of financial instruments. IFRS 9 requires financial assets to be classified into two measurement categories: those measured as at fair value and those measured at amortised cost. The determination is made at initial recognition. The classification depends on the entity's business model for managing its financial instruments and the contractual cash flow characteristics of the instrument. For financial liabilities, the standard retains most of the IAS 39 requirements. The main change is that, in cases where the fair value option is taken for financial liabilities, the part of a fair value change due to an entity's own credit risk is recorded in other comprehensive income rather than current period profit or loss, unless this creates an accounting mismatch. The Company and its subsidiaries are yet to assess full impact of IFRS 9 and intends to adopt IFRS 9 upon its effective date, which is for the accounting period beginning on or after 1 January 2015.

IFRS 10, 'Consolidated financial statements' builds on existing principles by identifying the concept of control as the determining factor in whether an entity should be included within the consolidated financial statements of the parent company. The standard provides additional guidance to assist in the determination of control where this is difficult to assess. The Company and its subsidiaries are yet to assess full impact of IFRS 10 and intends to adopt IFRS 10 no later than the accounting period beginning on or after 1 January 2013.

IFRS 11, "Joint arrangements" is a more realistic reflection of joint arrangements by focusing on the rights and obligations of the arrangement rather than its legal form. There are two types of joint arrangement: joint operations and joint ventures. Joint operations arise where a joint operator has rights to the assets and obligations relating to the arrangement and hence accounts for its interest in assets, liabilities, revenue and expenses. Joint ventures arise where the joint operator has rights to the net assets of the arrangement and hence equity accounts for its interest. Proportionate consolidation of the joint ventures is no longer allowed. The Company and its subsidiaries are yet to assess the full impact of IFRS 11 and intends to adopt IFRS 11 no later than the accounting period beginning on or after 1 January 2013.

IFRS 12 ‘Disclosures of interests in other entities’ includes the disclosure requirements for all forms of interests in other entities, including joint arrangements, associates, special purpose vehicles and other off-balance sheet vehicles. The Company and its subsidiaries are yet to assess full impact of IFRS 12 and intends to adopt IFRS 12 no later than the accounting period beginning on or after 1 January 2013.

IFRS 13 ‘Fair value measurement’ aims to improve consistency and reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across IFRSs. The requirements do not extend the use of fair value accounting but provide guidance on how it should be applied where its use is already required or permitted by other standards within IFRSs. The Company and its subsidiaries are yet to assess full impact of IFRS 13 and intends to adopt IFRS 13 no later than the accounting period beginning on or after 1 January 2013.

### 3. FINANCIAL, CAPITAL AND INSURANCE RISKS MANAGEMENT

#### (a) Financial risk management

Risk management, including the management on the financial risks, is carried out under the instructions of the Strategic Committee of Board of Directors and the Risk Management Team. The Company works out general principles for overall management as well as management policies covering specific areas. In considering the importance of risks, the Company identifies and evaluates risks at head office and individual power plant level, and requires analysis and proper communication for the information collected periodically.

SinoSing Power and its subsidiaries are subject to financial risks that are different from the entities operating within the PRC. They have a series of controls in place to maintain the cost of risks occurring and the cost of managing the risks at an acceptable level. Management continually monitors the risk management process to ensure that an appropriate balance between risk and control is achieved. SinoSing Power and its subsidiaries have their written policies and financial authorization limits in place they are reviewed periodically. These financial authorization limits seek to mitigate and eliminate operational risks by setting approval thresholds required for entering into contractual obligations and investments.

#### (i) Market risk

##### (1) Foreign exchange risk

Foreign exchange risk of the entities operating within the PRC primarily arises from loans denominated in foreign currencies of the Company and its subsidiaries. SinoSing Power and its subsidiaries are exposed to foreign exchange risk on accounts payable and other payables that are denominated primarily in US\$, a currency other than Singapore dollar (“S\$”), their functional currency. Please refer to Notes 22 and 25 for details. The Company and its subsidiaries manage exchange risk through closely monitoring interest and exchange market.

As at 31 December 2011, if RMB had weakened/strengthened by 5% (2010: 5%) against US\$ and 3% (2010: 3%) against EUR (“€”) with all other variables constant, exchange gain of the Company and its subsidiaries would have been RMB243 million (2010: RMB312 million) and RMB21 million (2010: RMB25 million) lower/higher, respectively. The ranges of such sensitivity disclosed above were based on the observation on the historical trend of related exchange rates during the previous year under analysis.

As at 31 December 2011, if S\$ had weakened/strengthened by 10% (2010: 10%) against US\$ with all other variables constant, exchange gain of the Company and its subsidiaries would have been RMB44 million (2010: RMB121 million) lower/higher, respectively. The ranges of such sensitivity disclosed above were based on the management’s experience and forecast.

SinoSing Power and its subsidiaries also exposed to foreign exchange risk on fuel purchases that are denominated primarily in US\$. They substantially hedge their estimated foreign currency exposure in respect of forecast fuel purchases over the following three months. They primarily use foreign currency contracts to hedge its foreign currency risk. As at the balance sheet date, they entered into foreign currency contracts with notional amounts of RMB191.04 million (2010: RMB67.47 million) to hedge its financial liabilities exposure in US Dollar.

(2)

Price risk

The available-for-sale financial assets and trading securities of the Company and its subsidiaries are exposed to equity security price risk.

Detailed information relating to the available-for-sale financial assets are disclosed in Note 10. Being a strategic investment in nature, the Company has a supervisor in the supervisory committee of the investee and exercises influence in safeguarding the interest. The Company also closely monitors the pricing trends in the open market in determining its long-term strategic stakeholding decisions.

As at 31 December 2011, the Company and its subsidiaries are exposed to equity security price risk arising from the investments classified as financial assets at fair value through profit or loss. These securities are listed in Hong Kong. To manage the risk, the Company and its subsidiaries closely monitors the market prices of these securities. If prices of the trading securities had increased/decreased by 10% with all other variables constant, the gain/(loss) on fair value changes would have been higher/lower by RMB9.62 million respectively.

The Company and its subsidiaries exposed to fuel price risk on fuel purchases. In particular, SinoSing Power and its subsidiaries use fuel oil swap to hedge against such a risk and designate them as cash flow hedges. Please refer to Note 13 for details.

(3)

## Cash flow interest rate risk

The interest rate risk of the Company and its subsidiaries primarily arises from long-term loans. Loans borrowed at variable rates expose the Company and its subsidiaries to cash flow interest rate risk. The exposures of these risks are disclosed in Note 22 to the financial statements. The Company and its subsidiaries have entered into interest rate swap agreements with banks to hedge against a portion of cash flow interest rate risk.

As at 31 December 2011, if interest rates on RMB-denominated borrowings had been 50 basis points (2010: 50 basis points) higher/lower with all other variables held constant, interest expense for the year would have been RMB500 million (2010: RMB334 million) higher/lower. If interest rates on US\$-denominated borrowings had been 50 basis points (2010: 50 basis points) higher/lower with all other variables held constant, interest expense for the year would have been RMB11 million (2010: RMB14 million) higher/lower. If interest rates on S\$-denominated borrowings had been 100 basis points (2010: 100 basis points) higher/lower with all other variables held constant, interest expense for the year would have been RMB73 million (2010: RMB89 million) higher/lower. The ranges of such sensitivity disclosed above were based on the observation on the historical trend of related interest rates during the previous year under analysis.

The Company has entered into a floating-to-fixed interest rate swap agreement to hedge against cash flow interest rate risk of a loan. According to the interest rate swap agreement, the Company agrees with the counterparty to settle the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amounts quarterly until 2019. Tuas Power Generation Pte. Ltd. (“TPG”) also entered into a number of floating-to-fixed interest rate swap agreements to hedge against cash flow interest rate risk of a loan. According to these interest rate swap agreements, TPG agrees with the counterparty to settle the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amount semi-annually until 2020. Please refer to Note 13 for details.

(ii)

## Credit risk

Credit risk arises from bank deposits, credit exposures to accounts receivable, other receivables, other non-current assets and loans to subsidiaries. The maximum exposures of bank deposits, accounts and other receivables are disclosed in Notes 33, 18, 17 and 15 to the financial statements, respectively, while maximum exposures of loans to subsidiaries are presented on the balance sheets.

Bank deposits are placed with reputable banks and financial institutions, including which a significant portion is deposited with a non-bank financial institution which is a related party of the Company. The Company has a director on the Board of this non-bank financial institution and exercises influence. Corresponding maximum exposures of these bank deposits are disclosed in Note 34(a)(i) to the financial statements.

Most of the power plants of the Company and its subsidiaries operating within the PRC sell electricity generated to their sole customers, the power grid companies of their respective provinces or regions where the power plants operate. These power plants communicate with their individual grid companies periodically and believe that adequate provision for doubtful accounts have been made in the financial statements.

Singapore subsidiaries derive revenue mainly from sale of electricity to the National Electricity Market of Singapore operated by Energy Market Company Pte. Ltd., which is not expected to have high credit risk. They also derive revenue mainly from retailing electricity to consumers with monthly consumption of more than 10,000kWh. These customers engage in a wide spectrum of manufacturing and commercial activities in a variety of industries. They hold cash deposits RMB164.56 million (2010: RMB141.06 million) and guarantees from creditworthy financial institutions to secure substantial obligations of the customers.

The concentrations of accounts receivable are disclosed in Note 5.

Regarding balances with subsidiaries, the Company and its subsidiaries obtain the financial statements of all subsidiaries and assess the financial performance and cash flows of those subsidiaries periodically to manage the credit risk of loans.

(iii) Liquidity risk

Liquidity risk management is to primarily ensure the ability of the Company and its subsidiaries to meet its liabilities as and when they are fall due. The liquidity reserve comprises the undrawn borrowing facility and cash and cash equivalents available as at each month end in meeting its liabilities.

The Company and its subsidiaries maintained flexibility in funding by cash generated by their operating activities and availability of committed credit facilities.

Financial liabilities due within 12 months are presented as the current liabilities in the balance sheets. The repayment schedules of the long-term loans and long-term bonds and cash flows of derivative financial liabilities are disclosed in Notes 22, 23 and 13, respectively.

(b) Fair value estimation

(i) Fair value measurements

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1– Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2– Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3– Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

The following table presents the assets and liabilities of the Company and its subsidiaries that are measured at fair value at 31 December 2011.

	The Company and its subsidiaries				The Company			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets</b>								
Financial assets at fair value through profit or loss								
- Trading derivatives (Note 13)	—	226	—	226	—	—	—	—
- Trading securities*	96,154	—	—	96,154	—	—	—	—
Derivatives used for hedging (Note 13)								
Available-for-sale financial assets	—	163,618	—	163,618	—	—	—	—
- Equity securities (Note 10)	1,638,080	—	—	1,638,080	1,638,080	—	—	1,638,080
<b>Total assets</b>	<b>1,734,234</b>	<b>163,844</b>	<b>—</b>	<b>1,898,078</b>	<b>1,638,080</b>	<b>—</b>	<b>—</b>	<b>1,638,080</b>
<b>Liabilities</b>								
Financial liabilities at fair value through profit or loss								
- Trading derivatives (Note 13)	—	142	—	142	—	—	—	—
Derivatives used for hedging (Note 13)								
<b>Total liabilities</b>	<b>—</b>	<b>613,747</b>	<b>—</b>	<b>613,747</b>	<b>—</b>	<b>202,333</b>	<b>—</b>	<b>202,333</b>

\*In December 2011, SinoSing Power acquired 70,320,000 shares of Beijing Jingneng Clean Energy Co., Ltd. ("Beijing Jingneng"), a listed entity in Hong Kong. The fair value of such trading securities was determined based on quoted market price of HKD 1.68 per share as at 31 December 2011.

The following table presents the assets and liabilities of the Company and its subsidiaries that are measured at fair value at 31 December 2010.

	The Company and its subsidiaries				The Company			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets</b>								
Financial assets at fair value through profit or loss (Note 13)								
- Trading derivatives	—	3,810	—	3,810	—	—	—	—
Derivatives used for hedging (Note 13)	—	220,300	—	220,300	—	—	—	—
Available-for-sale financial assets								
- Equity securities (Note 10)	1,949,727	—	—	1,949,727	1,949,727	—	—	1,949,727
<b>Total assets</b>	<b>1,949,727</b>	<b>224,110</b>	<b>—</b>	<b>2,173,837</b>	<b>1,949,727</b>	<b>—</b>	<b>—</b>	<b>1,949,727</b>
<b>Liabilities</b>								
Financial liabilities at fair value through profit or loss (Note 13)								
- Trading derivatives	—	2,397	—	2,397	—	—	—	—
Derivatives used for hedging (Note 13)	—	180,078	—	180,078	—	82,158	—	82,158
<b>Total liabilities</b>	<b>—</b>	<b>182,475</b>	<b>—</b>	<b>182,475</b>	<b>—</b>	<b>82,158</b>	<b>—</b>	<b>82,158</b>

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Company and its subsidiaries is the current bid price. These instruments are included in level 1. Instruments included in level 1 comprise equity investments in Beijing Jingneng and Yangtze Power classified as trading securities and available for sale, respectively.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.



Specific valuation techniques used to value financial instruments include:

• The forward exchange contracts and fuel oil swaps are both valued using quoted market prices or dealer quotes for similar instruments.

• The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.

Instruments included in level 2 comprise forward exchange contracts, fuel oil swaps and interest rate swaps.

There were no significant transfers of financial assets between level 1 and level 2 fair value hierarchy classifications in 2011.

(ii) Fair value disclosures

The carrying value less provision for doubtful accounts of accounts receivable, other receivables and assets, accounts payable and other liabilities, short-term bonds and short-term loans are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Company and its subsidiaries for similar financial instruments.

The estimated fair value of long-term loans and long-term bonds (both including current maturities) was approximately RMB93.67 billion and RMB18.95 billion as at 31 December 2011 (2010: RMB78.81 billion and RMB14.73 billion), respectively. The aggregate book value of these liabilities was approximately RMB93.99 billion and RMB18.85 billion as at 31 December 2011 (2010: RMB78.97 billion and RMB13.83 billion), respectively.

(c) Capital risk management

The objectives of the Company and its subsidiaries when managing capital are to safeguard the ability of the Company and its subsidiaries in continuing as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Company and its subsidiaries monitor capital by using debt ratio analysis. This ratio is calculated as total liabilities (sum of current liabilities and non-current liabilities) divided by total assets as shown in the consolidated balance sheet. During 2011, the strategy of the Company and its subsidiaries remained unchanged from 2010. The debt ratio of the Company and its subsidiaries as at 31 December 2011 was 76.86% (2010: 72.61%).

(d) Insurance risk management

The Company and its subsidiaries issue contracts that transfer significant insurance risk.

The risk relates to the financial guarantees provided to banks by the Company on the borrowings of a subsidiary. The risk under this financial guarantee contract is the possibility that the insured event (default of a specified debtor) occurs and the uncertainty of the amount of the resulting claims. By the nature of a financial guarantee contract, this risk is predictable.



Experience shows credit risks from the specified debtors are relatively remote. The Company maintains a close watch on the financial position and liquidity of the subsidiary for which financial guarantee has been granted in order to mitigate such risks (Note 2(y) (ii)). The Company takes all reasonable steps to ensure that they have appropriate information regarding any claim exposures.

#### 4. CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Company and its subsidiaries make estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

##### (a) Accounting estimates on impairment of goodwill and power generation licence

The Company and its subsidiaries perform test annually whether goodwill and power generation licence have suffered any impairment in accordance with the accounting policies stated in Notes 2(i) and 2(g), respectively. The recoverable amounts of CGU or CGUs have been determined based on value-in-use calculations. These calculations require the use of estimates (Notes 14 and 12). It is reasonably possible, based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a material adjustment to the carrying amounts of goodwill and power generation licence.

For goodwill allocated to CGUs in the PRC, changes of assumptions in tariff and fuel price could have affected the results of goodwill impairment assessment. As at 31 December 2011, if tariff had decreased by 1% or 5% from management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against goodwill by approximately RMB550 million and RMB1,452 million, respectively. If fuel price had increased by 1% or 5% from the management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against goodwill by approximately RMB406 million and RMB1,452 million, respectively.

For sensitivity analysis of goodwill and power generation licence of Tuas Power, please refer to Note 12.

##### (b) Useful life of power generation licence

As at year end, management of the Company and its subsidiaries considered the estimated useful life for its power generation licence as indefinite. This estimate is based on the expected renewal of power generation licence without significant restriction and cost, together with the consideration on related future cash flows generated and the expectation of management in continuous operations. Based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a change on carrying amount of power generation licence.



(c) Useful lives of property, plant and equipment

Management of the Company decided the estimated useful lives of property, plant and equipment and respective depreciation. The accounting estimate is based on the expected wears and tears incurred during power generation. Wears and tears can be significantly different following renovation each time. When the useful lives differ from the original estimated useful lives, management will adjust the estimated useful lives accordingly. It is possible that the estimates made based on existing experience are different to the actual outcomes within the next financial period and could cause a material adjustment to the depreciation and carrying amount of property, plant and equipment.

(d) Estimated impairment of property, plant and equipment

The Company and its subsidiaries test whether property, plant and equipment suffered any impairment whenever any impairment indication exists. In accordance with Note 2(j), an impairment loss is recognized for the amount by which the carrying amount of the asset exceeds its recoverable amount. It is reasonably possible, based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a material adjustment to the carrying amount of property, plant and equipment.

Changes of assumptions in tariff and fuel price will affect the result of property, plant and equipment impairment assessment. As at 31 December 2011, if tariff had decreased by 1% or 5% from management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against property, plant and equipment by approximately RMB355 million and RMB5,994 million, respectively. If fuel price had increased by 1% or 5% from the management's estimates with other variables constant with the expectations, the Company and its subsidiaries would have to further recognize impairment against property, plant and equipment by approximately RMB139 million and RMB3,145 million, respectively.

(e) Approval of construction of new power plants

The receiving of the ultimate approvals from National Development and Reform Commission ("NDRC") on certain power plant construction projects of the Company and its subsidiaries is a critical estimate and judgment of the directors. Such estimates and judgments are based on initial approval documents received as well as their understanding of the projects. Based on historical experience, the directors believe that the Company and its subsidiaries will receive final approvals from NDRC on the related power plant projects. Deviation from the estimate and judgment could result in significant adjustment to the carrying amount of property, plant and equipment.

## 5. REVENUE AND SEGMENT INFORMATION

Revenues recognized during the year are as follows:

	For the year ended 31 December	
	2011	2010
Sales of power and heat	131,225,050	102,519,813
Sales of coal	972,317	861,875
Port service	319,388	229,700
Transportation service	104,253	10,914
Others	799,761	695,818
<b>Total</b>	<b>133,420,769</b>	<b>104,318,120</b>

Directors and certain senior management of the Company perform the function as chief operating decision makers (collectively referred to as the “senior management”). The senior management reviews the internal reporting of the Company and its subsidiaries in order to assess performance and allocate resources. The Company has determined the operating segments based on these reports. The operating segments of the Company were grouped into PRC power segment, Singapore segment and all other segments (mainly including port and transportation operations).

Senior management assesses the performance of the operating segments based on a measure of profit before income tax expense under China Accounting Standard for Business Enterprises (“PRC GAAP”) in related periods excluding dividend income received from available-for-sale financial assets and operating results of those centrally managed and resource allocation functions in headquarters. Other information provided, except as noted below, to the senior management of the Company is measured under PRC GAAP.

Segment assets exclude prepaid income tax, deferred income tax assets, available-for-sale financial assets and assets related to those centrally managed and resource allocation functions in headquarters that are not attributable to any operating segment (“corporate assets”). Segment liabilities exclude current income tax liabilities, deferred income tax liabilities and liabilities related to those centrally managed and resource allocation functions in headquarters that are not attributable to any operating segment (“corporate liabilities”). These are part of the reconciliation to total balance sheet assets and liabilities.

All sales among the operating segments were performed at market price or close to market price, and have been eliminated as internal transactions when preparing consolidated financial statements.

(Under PRC GAAP)

	PRC power segment	Singapore segment	All other segments	Total
For the year ended 31 December 2011				
Total revenue	111,618,962	21,366,067	691,110	133,676,139
Inter-segment revenue	—	—	(255,370 )	(255,370 )
Revenue from external customers	111,618,962	21,366,067	435,740	133,420,769
Segment results	622,256	1,579,205	29,544	2,231,005
Interest income	88,498	77,043	642	166,183
Interest expense	(6,852,893 )	(475,848 )	(100,489 )	(7,429,230 )
Depreciation and amortization	(11,114,793 )	(611,041 )	(141,242 )	(11,867,076 )
Net (loss)/gain on disposal of property, plant and equipment	(3,380 )	8,531	937	6,088
Share of profits of associates/jointly controlled entities	552,225	—	26,298	578,523
Income tax expense	(666,424 )	(308,254 )	(9,206 )	(983,884 )
For the year ended 31 December 2010				
Total revenue	88,895,807	15,171,281	426,072	104,493,160
Inter-segment revenue	—	—	(185,458 )	(185,458 )
Revenue from external customers	88,895,807	15,171,281	240,614	104,307,702
Segment results	3,809,097	853,370	3,845	4,666,312
Interest income	50,012	38,787	227	89,026
Interest expense	(4,590,503 )	(421,399 )	(39,672 )	(5,051,574 )
Depreciation and amortization	(9,690,057 )	(561,847 )	(52,726 )	(10,304,630 )
Net gain on disposal of property, plant and equipment	10,613	12,827	—	23,440
Share of profits of associates	493,046	—	12,763	505,809
Income tax expense	(739,005 )	(172,659 )	(1,432 )	(913,096 )

(Under PRC GAAP)

	PRC power segment	Singapore segment	All other segments	Total
31 December 2011				
Segment assets	210,274,298	30,791,094	8,707,163	249,772,555
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	33,535,107	3,449,725	3,865,074	40,849,906
Investments in associates	9,851,537	—	1,018,397	10,869,934
Investments in jointly controlled entities	160,000	—	1,084,073	1,244,073
Segment liabilities	(166,068,006)	(17,526,440)	(3,332,315)	(186,926,761)
31 December 2010				
Segment assets	183,608,308	27,994,439	4,544,367	216,147,114
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	23,048,297	619,373	933,981	24,601,651
Investments in associates	9,103,960	—	984,545	10,088,505
Investment in a jointly controlled entity	—	—	1,058,000	1,058,000
Segment liabilities	(135,144,759)	(17,037,144)	(1,163,361)	(153,345,264)

A reconciliation of revenue from external customers to operating revenue is provided as follows:

	For the year ended 31 December	
	2011	2010
Revenue from external customers (PRC GAAP)	133,420,769	104,307,702
Reconciling item:		
Impact of IFRS adjustment*	—	10,418
Operating revenue per consolidated statement of comprehensive income	133,420,769	104,318,120



A reconciliation of segment result to profit before income tax expense is provided as follows:

	For the year ended 31 December	
	2011	2010
Segment results (PRC GAAP)	2,231,005	4,666,312
Reconciling items:		
Loss related to the headquarters	(129,683 )	(202,706 )
Investment income from China Huaneng Finance Co., Ltd. (“Huaneng Finance”)	81,939	66,241
Dividend income of available-for-sale financial assets	164,881	63,578
Impact of IFRS adjustments*	(297,775 )	(429,335 )
Profit before income tax expense per consolidated statement of comprehensive income	2,050,367	4,164,090

Reportable segments’ assets are reconciled to total assets as follows:

	As at 31 December 2011	As at 31 December 2010
Total segment assets (PRC GAAP)	249,772,555	216,147,114
Reconciling items:		
Investment in Huaneng Finance	1,178,633	560,213
Deferred income tax assets	710,571	867,183
Prepaid income tax	101,959	76,429
Available-for-sale financial assets	2,351,167	2,223,814
Corporate assets	250,509	4,077,994
Impact of IFRS adjustments*	3,050,480	3,985,466
Total assets per consolidated balance sheet	257,415,874	227,938,213

Reportable segments' liabilities are reconciled to total liabilities as follows:

	As at 31 December 2011	As at 31 December 2010
Total segment liabilities (PRC GAAP)	(186,926,761)	(153,345,264)
Reconciling items:		
Current income tax liabilities	(503,252 )	(280,917 )
Deferred income tax liabilities	(1,736,907 )	(1,605,716 )
Corporate liabilities	(7,038,611 )	(7,861,633 )
Impact of IFRS adjustments*	(1,652,590 )	(2,419,211 )
Total liabilities per consolidated balance sheet	(197,858,121)	(165,512,741)

Other material items:

	Reportable segment total	Headquarters	Investment income from Huaneng Finance	Impact of IFRS adjustments*	Total
For the year ended 31 December 2011					
Interest expense	(7,429,230 )	(306,956 )	—	—	(7,736,186 )
Depreciation and amortization	(11,867,076)	(33,017 )	—	(179,457 )	(12,079,550)
Share of profits of associates/jointly controlled entities	578,523	—	81,939	43,099	703,561
Income tax expense	(983,884 )	—	—	114,957	(868,927 )
For the year ended 31 December 2010					
Interest expense	(5,051,574 )	(230,975 )	—	—	(5,282,549 )
Depreciation and amortization	(10,304,630)	(25,582 )	—	(311,713 )	(10,641,925)
Share of profits of associates	505,809	—	66,241	(3,256 )	568,794
Income tax expense	(913,096 )	—	—	70,421	(842,675 )

\*The GAAP adjustments above were primarily represented the classification adjustments and other adjustments, and the GAAP adjustments other than classification were primarily brought forward from prior years. Such differences will be gradually eliminated following subsequent depreciation and amortization of related assets or the extinguishment of liabilities.

Geographical information (Under IFRS):

(i) External revenue generated from the following countries:

	For the year ended 31 December	
	2011	2010
PRC	112,054,702	89,146,839
Singapore	21,366,067	15,171,281
Total	133,420,769	104,318,120

(ii) Non-current assets (excluding financial assets and deferred income tax assets) are located in the following countries:

	As at	As at
	31 December 2011	31 December 2010
PRC	193,794,549	170,736,472
Singapore	23,618,372	22,070,398
Total	217,412,921	192,806,870

The information on the portion of external revenue of the Company and its subsidiaries which is generated from sales to major customers of the Company and its subsidiaries at amount equal to or more than 10% of external revenue is as follows:

	For the year ended 31 December			
	2011		2010	
	Amount	Proportion	Amount	Proportion
JiangSu Electric Power Company	16,121,843	12 %	13,445,612	13 %
ShanDong Electric Power Corporation (“Shandong Power”)	15,151,313	11 %	12,486,065	12 %

## 6. PROFIT BEFORE INCOME TAX EXPENSE

Profit before income tax expense was determined after charging and (crediting) the following:

	For the year ended 31 December	
	2011	2010
Interest expense on bank loans:		
– wholly repayable within five years	4,330,834	2,982,660
– not wholly repayable within five years	2,718,545	1,756,466
Interest expense on long-term loans from Huaneng Group:		
– wholly repayable within five years	36,220	34,674
Interest expense on other long-term loans:		
– wholly repayable within five years	353,872	307,631
– not wholly repayable within five years	1,475	1,528
Interest expense on long-term bonds	783,156	736,986
Interest expense on short-term bonds	386,408	277,121
<b>Total interest expense</b>	<b>8,610,510</b>	<b>6,097,066</b>
Less: amounts capitalized in property, plant and equipment	(874,324 )	(814,517 )
	7,736,186	5,282,549
Auditors' remuneration	33,935	36,448
Gain on disposals/write-off of property, plant and equipment, net	(7,911 )	(33,129 )
Operating leases:		
– Property, plant and equipment	167,644	173,686
– Land use rights	131,930	113,379
Depreciation of property, plant and equipment	11,866,705	10,447,021
Impairment loss of intangible assets	15,661	23,706
Impairment loss of property, plant and equipment	80,828	8,477
Impairment of goodwill	291,734	5,276
Amortization of other non-current assets	81,276	64,964
Cost of inventories consumed	91,749,996	68,839,975
(Reversal of)/provision for doubtful accounts	(19,747 )	2,750
Bad debts recovery	—	(50 )
Reversal of inventory obsolescence	(3,353 )	(155 )

Other operating expenses consist of impairment loss of property, plant and equipment and goodwill, environmental protection expenses, substituted power arrangement expenses, insurance, cost of coal sales and other miscellaneous expenses, etc.

## 7. PROPERTY, PLANT AND EQUIPMENT

	The Company and its subsidiaries							
	Electric		Transportation		Others		CIP	
	Dam	Port facilities	Buildings	utility plants in service	facilities			Tot
As at 1 January 2010								
Cost	—	1,315,393	3,160,319	173,909,736	233,023	3,389,767	32,401,862	214,410,10
Accumulated depreciation	—	(37,411 )	(1,106,319)	(66,075,937 )	(138,598)	(1,876,936)	—	(69,235,20
Accumulated impairment loss	—	—	—	(4,397,563 )	—	—	—	(4,397,563
Net book value	—	1,277,982	2,054,000	103,436,236	94,425	1,512,831	32,401,862	140,777,33
Year ended 31 December 2010								
Beginning of the year								
	—	1,277,982	2,054,000	103,436,236	94,425	1,512,831	32,401,862	140,777,33
Reclassification	—	—	113,520	(108,441 )	—	(5,079 )	—	—
Acquisitions	—	—	266,228	794,500	278,231	91,316	920,993	2,351,268
Additions	—	—	33,882	210,191	2,577	169,706	22,407,300	22,823,656
Transfer from CIP	—	—	67,438	22,838,698	—	181,925	(23,088,061)	—
Disposals/Write-off	—	—	(4,877 )	(131,713 )	—	(3,225 )	(412,905 )	(552,720
Depreciation charge	—	(37,411 )	(131,457 )	(10,021,743 )	(16,357 )	(254,217 )	—	(10,461,18
Impairment charge	—	—	—	(8,477 )	—	—	—	(8,477
Currency translation differences	—	—	—	261,223	—	4,644	28,852	294,719
End of the year	—	1,240,571	2,398,734	117,270,474	358,876	1,697,901	32,258,041	155,224,59
As at 31 December 2010								
Cost	—	1,315,393	3,743,183	197,907,242	631,198	3,692,177	32,258,041	239,547,23
Accumulated depreciation	—	(74,822 )	(1,344,449)	(76,030,260 )	(272,322)	(1,994,276)	—	(79,716,12
Accumulated impairment loss	—	—	—	(4,606,508 )	—	—	—	(4,606,508
Net book value	—	1,240,571	2,398,734	117,270,474	358,876	1,697,901	32,258,041	155,224,59
Year ended 31 December 2011								

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Beginning of the year	—	1,240,571	2,398,734	117,270,474	358,876	1,697,901	32,258,041	155,224,59
Reclassification	—	—	(159,059 )	(61,661 )	(4,569 )	225,289	—	—
Acquisitions	105,030	1,019,572	577,354	11,905,540	—	224,649	4,819,652	18,651,797
Additions	—	2,430	59,681	279,368	111,729	141,552	16,287,011	16,881,771
Transfer from CIP	—	452	303,481	28,473,739	52,650	83,214	(28,913,536)	—
Disposals/Write-off	—	—	(1,667 )	(55,120 )	—	(19,905 )	—	(76,692)
Disposal of a subsidiary	—	—	—	—	—	(4,731 )	(308,130 )	(312,861)
Depreciation charge	—	(67,030 )	(152,936 )	(11,335,566 )	(37,179 )	(288,646 )	—	(11,881,35
Impairment charge	—	—	—	(50,854 )	—	(20,423 )	(9,551 )	(80,828
Currency translation differences	—	—	—	(233,140 )	—	(3,178 )	(202,108 )	(438,426
End of the year	105,030	2,195,995	3,025,588	146,192,780	481,507	2,035,722	23,931,379	177,968,00
As at 31 December 2011								
Cost	110,802	2,407,271	4,470,124	239,281,405	793,339	4,235,895	23,940,930	275,239,76
Accumulated depreciation	(5,772 )	(211,276 )	(1,444,536)	(88,717,256 )	(311,832)	(2,156,766)	—	(92,847,43
Accumulated impairment loss	—	—	—	(4,371,369 )	—	(43,407 )	(9,551 )	(4,424,327
Net book value	105,030	2,195,995	3,025,588	146,192,780	481,507	2,035,722	23,931,379	177,968,00

## The Company

	Buildings	Electric utility plant in service	Transportation facilities	Others	CIP	Total
As at 1 January 2010						
Cost	1,456,358	95,944,030	181,200	1,892,476	9,380,533	108,854,597
Accumulated depreciation	(565,967 )	(40,291,715 )	(117,975 )	(1,189,600)	—	(42,165,257 )
Accumulated impairment loss	—	(550,090 )	—	—	—	(550,090 )
Net book value	890,391	55,102,225	63,225	702,876	9,380,533	66,139,250
Year ended 31 December 2010						
Beginning of the year	890,391	55,102,225	63,225	702,876	9,380,533	66,139,250
Reclassification	73,006	(71,536 )	—	(1,470 )	—	—
Acquisitions	—	—	—	181	37,563	37,744
Additions	29,881	3,911	2,426	104,608	6,032,433	6,173,259
Transfer from CIP	19,108	6,738,559	—	134,673	(6,892,340)	—
Disposals/Write-off	(4,326 )	(63,227 )	—	(4,830 )	(281,088 )	(353,471 )
Depreciation charge	(54,977 )	(4,899,283 )	(10,473 )	(140,284 )	—	(5,105,017 )
End of the year	953,083	56,810,649	55,178	795,754	8,277,101	66,891,765
As at 31 December 2010						
Cost	1,572,301	102,110,874	183,643	2,062,814	8,277,101	114,206,733
Accumulated depreciation	(619,218 )	(44,750,135 )	(128,465 )	(1,267,060)	—	(46,764,878 )
Accumulated impairment loss	—	(550,090 )	—	—	—	(550,090 )
Net book value	953,083	56,810,649	55,178	795,754	8,277,101	66,891,765
Year ended 31 December 2011						
Beginning of the year	953,083	56,810,649	55,178	795,754	8,277,101	66,891,765
Reclassification	(22,733 )	35,018	(2,426 )	(9,859 )	—	—
Acquisitions	—	—	—	363	110,858	111,221
Additions	44,393	48,731	—	64,227	3,809,775	3,967,126
Transfer from CIP	273,317	7,147,208	—	61,208	(7,481,733)	—
Disposals/Write-off	(1,379 )	(7,396 )	—	(418 )	—	(9,193 )
Depreciation charge	(58,376 )	(4,865,772 )	(10,409 )	(144,567 )	—	(5,079,124 )
End of the year	1,188,305	59,168,438	42,343	766,708	4,716,001	65,881,795

As at 31 December 2011

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Cost	1,867,485	109,453,980	181,217	2,139,809	4,716,001	118,358,492
Accumulated depreciation	(679,180 )	(49,735,485 )	(138,874 )	(1,373,101)	—	(51,926,640 )
Accumulated impairment loss	—	(550,057 )	—	—	—	(550,057 )
Net book value	1,188,305	59,168,438	42,343	766,708	4,716,001	65,881,795

129

---



Interest expense of approximately RMB874 million (2010: RMB815 million) arising on borrowings for the construction of property, plant and equipment were capitalized during the year and are included in 'Additions' in property, plant and equipment. A capitalization rate of approximately 5.86% (2010: 5.08%) per annum was used.

In late 2011, upon the initiation of a preliminary disposal plan, the Company and its subsidiaries performed impairment re-assessment and made provision for impairment on property, plant and equipment of Huaneng Huaiyin Power Generation Co. Ltd. ("Huaiyin Power Company") amounting to RMB50.96 million. The recoverable amounts are determined based on fair value less cost to sell. The fair value is determined by reference to the market price.

The Company and its subsidiaries also recorded impairment loss of property, plant and equipment of Fujian Xinhuan Yuan Industrial Limited Company ("Xinhuan Yuan") amounted to RMB20.31 million upon its operation restructuring. Recoverable amount was determined based on value in use of the related CGU assessed by an independent valuer. A discount rate of 7.78% was adopted in the model. Xinhuan Yuan was principally engaged in production and sales of mineral water and was included in "all other segments".

In 2010, due to continuous increase of coal price and lower profitability, Huaneng Zhuozhou Liyuan Cogeneration Limited Liability Company ("Zhuozhou Cogeneration") has recorded impairment losses of certain property, plant and equipment amounted to RMB8.48 million. The recoverable amounts are determined based on value in use of the related CGU assessed by an independent valuer.

As at 31 December 2011, certain property, plant and equipment was secured to a bank as collateral against a long-term loan of RMB169 million (2010: nil) (Note 22).

As at 31 December 2011, property, plant and equipment with net book value amounting to RMB332.43 million was secured to a bank as collateral against long-term loans of RMB234.65 million (2010: nil) (Note 22).

## 8. INVESTMENTS IN ASSOCIATES/JOINTLY CONTROLLED ENTITIES

	The Company and its subsidiaries		The Company	
	2011	2010	2011	2010
Beginning of the year	11,973,216	9,568,576	10,157,246	8,034,616
Additional capital injections in associates	995,805	520,630	995,804	520,630
Establishments of associates	38,250	13,000	38,250	13,000
Acquisitions of associates	264,000	531,000	264,000	531,000
Acquisition of a jointly controlled entity	—	1,058,000	—	1,058,000
Establishment of a jointly controlled entity	160,000	—	—	—
Share of other comprehensive loss	(44,928 )	(35,156 )	—	—
Share of profits before income tax expense	957,843	780,405	—	—
Share of income tax expense	(254,282 )	(211,611 )	—	—
Dividends	(501,892 )	(251,628 )	—	—
End of the year	13,588,012	11,973,216	11,455,300	10,157,246

As at 31 December 2011, investments in associates/jointly controlled entities of the Company and its subsidiaries, all of which are unlisted except for Shenzhen Energy Corporation (“SEC”) which is listed on the Shenzhen Stock Exchange, were as follows:

Name	Country of incorporation	Registered capital	Business nature and scope of operation	Percentage of equity interest held		
				Direct		Indirect
Associates:						
Shandong Rizhao Power Company Ltd. (“Rizhao Power Company”)	PRC	RMB1,245,587,900	Power generation	44	%	–
Shenzhen Energy Group Co., Ltd. (“SEG”)	PRC	RMB230,971,224	Development, production and sale of regular energy, new energy and energy construction project, etc.	25	%	–
Shenzhen Energy Management Corporation*	PRC	RMB724,584,330	Management of energy projects	25	%	–
SEC**	PRC	RMB2,202,495,332	Energy and investment in related industries	9.08	%	–
Hebei Hanfeng Power Generation Limited Liability Company	PRC	RMB1,975,000,000	Power generation	40	%	–
Chongqing Huaneng Lime Company Limited (“Lime Company”)	PRC	RMB50,000,000	Lime production and sale, construction materials, chemical engineering product	–		25 %
Huaneng Finance	PRC	RMB5,000,000,000	Provision for financial service including fund deposit services, lending, finance lease arrangements, notes discounting and entrusted loans and investment arrangement within Huaneng Group	20	%	–
Huaneng Sichuan Hydropower Co., Ltd.	PRC	RMB1,469,800,000	Development, investment, construction, operation and management of hydropower	49	%	–



Name	Country of incorporation	Registered capital	Business nature and scope of operation	Percentage of equity interest held		
				Direct	Indirect	
Associates:						
Yangquan Coal Industry Group Huaneng Coal-fired Power Investment Co., Ltd.	PRC	RMB1,000,000,000	Investment, development, consulting and management services of coal and power generation projects	49	%	–
Huaneng Shidaowan Nuclear Power Development Co., Ltd.	PRC	RMB1,000,000,000	Preparation for construction of pressurized water reactor power plant project	30	%	–
Bianhai Railway Co., Ltd.	PRC	RMB389,000,000	Railway construction, freight transportation, materials supplies, agency service, logistics and storage at coastal industrial base in Yingkou, Liaoning	37	%	–
Huaneng Shenbei Co-generation Limited Liability Company	PRC	RMB70,000,000	Production and sales of electricity and heat, construction and operation of power plants	40	%	–
Hainan Nuclear Power Co., Ltd. (“Hainan Nuclear Power”)	PRC	RMB673,076,000	Construction and operation of nuclear power plants, production and sales of electricity	30	%	–
Shanxi Luan Group Zuoquan Wulihou Coal Co., Ltd.***	PRC	RMB6,452,910	Coal production and sales	34	%	–
Huaneng (Tianjin) Coal Gasification Power Generation Co., Ltd. (“IGCC”)	PRC	RMB533,176,000	Power generation, facilities installation, heat supply	35.97	%	–
Huaneng Jinling Combined Cycle Co-generation Co., Ltd. (“Jinling CCGT”)**	PRC	RMB75,000,000	Construction, operation and management of power generation and related projects	51	%	–
Jointly controlled entities:						
Shanghai Time Shipping Co. Ltd. (“Shanghai Time Shipping”)	PRC	RMB1,200,000,000	International and domestic sea transportation	50	%	–
	PRC	RMB1,560,000,000	Power generation	–		50 %

Jiangsu Nantong  
Power Generation  
Co., Ltd.

- \* In 2011, SEG was restructured into two entities, namely, SEG and Shenzhen Energy Management Corporation. After restructuring, the shares of SEC originally held by SEG were transferred to Shenzhen Energy Management Corporation.
- \*\* The Company holds 240 million shares, representing 9.08% shareholding of SEC, which is a subsidiary of Shenzhen Energy Management Corporation, one of the Company's associates. Considered the equity interest effectively held by the Company directly and indirectly through Shenzhen Energy Management Corporation, and directors as well as supervisors appointed by the Company in SEC, the Company exercises significant influence on operations of SEC and classified it as an associate. As at 31 December 2011, the fair value of the Company's shares in SEC was RMB1,464 million. In 2010, as these shares were still in lock-up period, there was no published price quotation and no price information available for the disclosure purpose.
- \*\*\* In 2011, Zuoquan Longquan Metallurgy Casting Co., Ltd. was renamed as Shanxi Luan Group Zuoquan Wulihou Coal Co., Ltd.
- \*\*\*\* In accordance with relevant terms stipulated in the memorandum and articles of association of Jinling CCGT, since the Company only exercises significant influence, Jinling CCGT is accounted for as an associate.

The gross amounts of operating results, assets and liabilities (excluding goodwill) of the associates of the Company and its subsidiaries were as follows:

	2011	2010
Assets	99,389,071	86,409,821
Liabilities	(59,605,330)	(52,408,864)
Operating revenue	26,291,581	22,932,949
Profit attributable to equity holders of associates	1,662,704	1,490,081

The following amounts represent the 50% share of the assets, liabilities (excluding goodwill) and operating results of the jointly controlled entities of the Company and its subsidiaries.

	2011	2010
Assets		
Non-current assets	2,868,179	2,769,306
Current assets	442,772	130,408
	3,310,951	2,899,714
Liabilities		
Non-current liabilities	(1,178,902)	(1,229,493)
Current liabilities	(906,300 )	(630,544 )
	(2,085,202)	(1,860,037)
Net assets	1,225,749	1,039,677
Income	1,162,160	—
Less: expense	(1,086,124)	—
Net income	76,036	—

## 9. INVESTMENTS IN SUBSIDIARIES AND LOANS TO SUBSIDIARIES

## (a) Investments in subsidiaries

As at 31 December 2011, the investments in subsidiaries of the Company and its subsidiaries, all of which are unlisted, were as follows:

## (i) Subsidiaries acquired from business combinations under common control

Name of subsidiary	Country of incorporation	Type of legal entity	Registered capital	Business nature and scope of operations	Percentage of equity interest held	
					Direct	Indirect
Huaneng (Suzhou Industrial Park) Power Generation Co. Ltd.	PRC	Limited liability company	RMB632,840,000	Power generation	75 %	–
Huaneng Qinbei Power Co., Ltd.	PRC	Limited liability company	RMB810,000,000	Power generation	60 %	–
Huaneng Yushe Power Generation Co., Ltd. (“Yushe Power Company”)	PRC	Limited liability company	RMB615,760,000	Power generation	60 %	–
Huaneng Hunan Yueyang Power Generation Limited Liability Company (“Yueyang Power Company”)	PRC	Limited liability company	RMB1,055,000,000	Power generation	55 %	–
Huaneng Chongqing Luohuang Power Generation Limited Liability Company	PRC	Limited liability company	RMB1,748,310,000	Power generation	60 %	–
Huaneng Pingliang Power Generation Co., Ltd. (“Pingliang Power Company”)	PRC	Limited liability company	RMB924,050,000	Power generation	65 %	–
Huaneng Nanjing Jinling Power Co., Ltd.	PRC	Limited liability company	RMB1,902,000,000	Power generation	60 %	–
Huaneng Qidong Wind Power Generation Co., Ltd.	PRC	Limited liability company	RMB200,000,000	Development of wind power project, production and sales of	65 %	–

Tianjin Huaneng Yangliuqing Co-generation Limited Liability Company (“Yangliuqing Power Company”)	PRC	Limited liability company	RMB1,537,130,909	electricity Power generation, heat supply, facilities installation, maintenance and related services	55	%	–
Huaneng Beijing Co-generation Limited Liability Company (“Beijing Cogeneration”) (i)	PRC	Limited liability company	RMB1,600,000,000	Construction and operation of power plants and related construction projects	41	%	–

The subsidiaries above and the Company are all controlled by Huaneng Group before and after the acquisitions.



(ii) Subsidiaries acquired from business combinations not under common control or acquired through other ways

Name of subsidiary	Country of incorporation	Type of legal entity	Registered capital	Business nature and scope of operations	Percentage of equity interest held		
					Direct		Indirect
Huaneng Weihai Power Limited Liability Company	PRC	Limited liability company	RMB761,838,300	Power generation	60	%	–
Huaneng Taicang Power Co., Ltd.	PRC	Limited liability company	RMB804,146,700	Power generation	75	%	–
Huaiyin Power Company	PRC	Limited liability company	RMB265,000,000	Power generation	100	%	–
Huaneng Huaiyin II Power Limited Company	PRC	Limited liability company	RMB930,870,000	Power generation	63.64	%	–
Huaneng Xindian Power Co., Ltd.	PRC	Limited liability company	RMB100,000,000	Power generation	95	%	–
Huaneng Shanghai Combined Cycle Power Limited Liability Company	PRC	Limited liability company	RMB699,700,000	Power generation	70	%	–
Huaneng International Power Fuel Limited Liability Company	PRC	Limited liability company	RMB200,000,000	Wholesale of coal	100	%	–
Huaneng Shanghai Shidongkou Power Generation Limited (i)	PRC	Limited liability company	RMB990,000,000	Power generation	50	%	–
Huade County Daditaihong Wind Power Utilization Limited Liability Company	PRC	Limited liability company	RMB5,000,000	Wind power development and utilization	100	%	–
Huaneng Nantong Power Generation Limited Liability Company	PRC	Limited liability company	RMB1,560,000,000	Power generation	70	%	–
Huaneng Yingkou Port Limited Liability Company (i)	PRC	Limited liability company	RMB720,235,000	Loading and conveying service	50	%	–
Huaneng Hunan Xiangqi	PRC	Limited liability	RMB180,000,000	Construction, operation and	100	%	–

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Hydropower Co., Ltd.		company		management of hydropower and related projects			
Huaneng Yingkou Power Generation Limited Liability Company	PRC	Limited liability company	RMB830,000,000	Production and sales of electricity and heat	100	%	–
Zhuozhou Cogeneration	PRC	Limited liability company	RMB5,000,000	Construction, operation and management of cogeneration power plants and related projects	100	%	–
Huaneng Zuoquan Coal-fired Power Generation Limited Liability Company	PRC	Limited liability company	RMB960,000,000	Preparation of power plant construction and related operation service	80	%	–
Huaneng Kangbao Wind Power Utilization Limited Liability Company	PRC	Limited liability company	RMB5,000,000	Construction, operation and management of wind power generation and related projects	100	%	–

Name of subsidiary	Country of incorporation	Type of legal entity	Registered capital	Business nature and scope of operations	Percentage of equity interest held		
					Direct		Indirect
Huaneng Jiuquan Wind Power Generation Co., Ltd.	PRC	Limited liability company	RMB1,667,000,000	Construction, operation and management of wind power generation and related projects	100	%	–
Huaneng Wafangdian Wind Power Generation Co., Ltd.	PRC	Limited liability company	RMB50,000,000	Construction, operation and management of wind power generation and related projects	100	%	–
Huaneng Changtu Wind Power Generation Co., Ltd.	PRC	Limited liability company	RMB50,000,000	Construction, operation and management of wind power generation and related projects	100	%	–
Huaneng Rudong Wind Power Generation Co., Ltd.	PRC	Limited liability company	RMB127,500,000	Construction, operation and management of wind power generation projects	90	%	–
Huaneng Guangdong Haimen Port Limited Liability Company	PRC	Limited liability company	RMB10,000,000	Loading and conveying services	100	%	–
Huaneng Taicang Port Limited Liability Company	PRC	Limited liability company	RMB20,000,000	Port service, cargo loading and warehousing	100	%	–
Kaifeng Xinli Power Generation Co., Ltd.	PRC	Limited liability company	RMB146,920,000	Power generation	–		100 %
Huaneng Zhanhua Co generation Limited Liability Company (“Zhanhua Cogeneration”)	PRC	Limited liability company	RMB190,000,000	Production and sales of electricity and heat	100	%	–
Shandong Hualu Sea Transportation Limited Company (“Hualu Sea Transportation”)*	PRC	Limited liability company	RMB45,000,000	Cargo transportation along domestic coastal areas	53	%	–

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Huaneng Qingdao Port Limited Company (“Qingdao Port”)	PRC	Limited liability company	RMB300,000,000	Loading and conveying services	100	%	–
Yunnan Diandong Energy Limited Company (“Diandong Energy”) (Note 39)	PRC	Limited liability company	RMB1,800,000,000	Power generation	100	%	–
Yunnan Diandong Yuwang Energy Limited Company (“Diandong Yuwang”) (Note 39)	PRC	Limited liability company	RMB1,139,000,000	Power generation	100	%	–
Huaneng Luoyuan Ludao Pier Limited Company (“Ludao Pier”) (Note 39)	PRC	Limited liability company	RMB70,000,000	Port water supply, cargo loading, and warehousing	100	%	–
Huaneng (Fuzhou) Luoyuanwan Pier Limited Company (“Luoyuanwan Pier”) (Note 39)	PRC	Limited liability company	RMB85,000,000	Port management, cargo loading, information advisory; transporting and warehousing in the port, cargo transport and transfer centre operation; port investment and development	58.3	%	–

Name of subsidiary	Country of incorporation	Type of legal entity	Registered capital	Business nature and scope of operations	Percentage of equity interest held		
					Direct	Indirect	
Huaneng (Fujian) Harbour Limited Company (“Luoyuanwan Harbour”) (Note 39)	PRC	Limited liability company	RMB652,200,000	Port management, cargo loading, water transport material supply	100	%	–
Huaneng Suzihe Hydropower Development Limited Company	PRC	Limited liability company	RMB50,000,000	Hydropower, aquaculture, agriculture irrigation	100	%	–
Fujian Yingda Property Development Limited Company	PRC	Limited liability company	RMB50,000,000	Real estate development, leasing	–		100 %
Xinhuanyuan	PRC	Limited liability company	RMB93,200,000	Mineral water production and sale	–		100 %
Enshi City Mawei Valley Hydropower Development Co., Ltd. (“Enshi Hydropower”) (Note 39)	PRC	Limited liability company	RMB101,080,000	Hydro resource development, hydropower, aquaculture	100	%	–
SinoSing Power	Singapore	Limited liability company	US\$1,400,020,585	Investment holding	100	%	–
Tuas Power	Singapore	Limited liability company	S1,338,050,000	Investment holding	–		100 %
Tuas Power Supply Pte Ltd.	Singapore	Limited liability company	S500,000	Power sales, electricity and gas supply	–		100 %
TPG	Singapore	Limited liability company	S1,183,000,001	Power generation and related by products, derivatives; developing power supply resources, operating electricity and power sales	–		100 %
	Singapore		S2		–		100 %

TP Asset Management Pte Ltd.		Limited liability company		Rendering of environment engineering services			
TPGS Green Energy Pte Ltd.	Singapore	Limited liability company	\$1,000,000	Provision of utility services	–	75	%
New Earth Pte Ltd.	Singapore	Limited liability company	\$10,111,841	Consultancy in waste recycling	–	60	%
New Earth Singapore Pte Ltd.	Singapore	Limited liability company	\$17,816,050	Industrial waste management and recycling	–	82.08	%
TP Utilities Pte Ltd.	Singapore	Limited liability company	\$160,000,001	Provision of utility services	–	100	%

\* In 2011, Shandong Luneng Sea Transportation Limited Company was renamed as Hualu Sea Transportation.

Note:

(i) Pursuant to agreements with other shareholders, the Company has controls over these entities.

In 2011, impairment loss of RMB408.13 million was recorded for the investment in Zhanhua Cogeneration at company level. Please refer to Note 14 for detailed information of impairment assessment. In 2010, no impairment was recognized for investments in subsidiaries.

(b) Loans to subsidiaries

As at 31 December 2011, the unsecured current portion of loans to subsidiaries amounted to approximately RMB21.41 billion (2010: RMB11.38 billion) with annual interest rates ranging from 4.20% to 7.22% (2010: from 3.79% to 5.56%). The unsecured non-current portion loans to subsidiaries amounted to approximately RMB1.60 billion (2010: RMB9.36 billion) with annual interest rates ranging from 3.72% to 7.32% (2010: 3.72% to 5.20%). Since all interest rates were similar to the interest rates offered by the market, the carrying value of the loans to subsidiaries approximated their fair value.

10. AVAILABLE-FOR-SALE FINANCIAL ASSETS

	The Company and its subsidiaries		The Company	
	2011	2010	2011	2010
Beginning of the year	2,223,814	2,555,972	2,211,701	2,555,972
Investment in Shanxi Xishan Jinxing Energy Co., Ltd. ("Jinxing Energy")	49,000	—	49,000	—
Investment in Inner Mongolia Hohhot PumpStorage Power Generation Co., Ltd.	—	12,113	—	—
Investment in Taiyuan Coal Trading Center	40,000	—	40,000	—
Investment in Ganlong Double-track Railway Co., Ltd.	300,000	—	300,000	—
Revaluation loss	(311,647 )	(344,271 )	(311,647 )	(344,271 )
End of the year	2,301,167	2,223,814	2,289,054	2,211,701

Available-for-sale financial assets include the following:

	The Company and its subsidiaries		The Company	
	2011	2010	2011	2010
Listed securities				
257.56 million shares (representing 1.56% shareholding) of Yangtze Power	1,638,080	1,949,727	1,638,080	1,949,727
Unlisted securities				
10% of Jinxing Energy	310,974	261,974	310,974	261,974
Others	352,113	12,113	340,000	—
	663,087	274,087	650,974	261,974
Total	2,301,167	2,223,814	2,289,054	2,211,701

There were no impairment provisions on available-for-sale financial assets in 2011 and 2010.





## 11. LAND USE RIGHTS

Details of land use rights are as follows:

	The Company and its subsidiaries		The Company	
	2011	2010	2011	2010
Outside Hong Kong, held on:				
Leases of between 10 to 50 years	4,293,876	4,009,966	1,464,088	1,463,734
Leases of over 50 years	47,698	48,530	17,274	17,551
Total	4,341,574	4,058,496	1,481,362	1,481,285

Including in the land use rights above, there are land use rights located in Singapore classified as finance lease and amortized over 30 years using straight-line method. Movements of related land use rights are as follows:

	2011	2010
Beginning of the year		
Cost	1,029,915	977,887
Accumulated amortization	(279,301 )	(229,778 )
Accumulated impairment loss	(234,423 )	(222,580 )
Net book value	516,191	525,529
Opening net book value	516,191	525,529
Amortization charge	(37,494 )	(36,225 )
Currency translation differences	(23,303 )	26,887
Closing net book value	455,394	516,191
End of the year		
Cost	979,376	1,029,915
Accumulated amortization	(301,063 )	(279,301 )
Accumulated impairment loss	(222,919 )	(234,423 )
Net book value	455,394	516,191

All the land located in the PRC and Singapore are leased from respective governments according to corresponding regulations applied across the countries. The Company and its subsidiaries will renew those leases according to the operation requirements of the Company and its subsidiaries and the related regulations of respective countries.

As at 31 December 2010, land use rights of the Company and its subsidiaries amounted to approximately RMB28 million were secured to a bank as collateral against a long-term loan of RMB30 million. This loan was renegotiated and renewed as an unsecured loan in April 2011 (Note 22).



## 12. POWER GENERATION LICENCE

The movements in the carrying amount of power generation licence during the years are as follows:

	2011	2010
Beginning of the year	4,105,518	3,898,121
Movement:		
Opening net book value	4,105,518	3,898,121
Currency translation differences	(201,462 )	207,397
Closing net book value	3,904,056	4,105,518
End of the year	3,904,056	4,105,518

#### Impairment test of power generation licence

Power generation licence belongs to Tuas Power. The recoverable amount of the CGU is determined based on value-in-use calculation. Management prepared the impairment model based on budget approved by the Board and various factors, such as inflation, power demand and other factors as well as the terminal value.

#### Key assumptions used for value-in-use calculation:

Management has assessed that, amongst all assumptions used in the value-in-use calculations, the most sensitive key assumption is the discount rate which was arrived at based on weighted average cost of capital. The discount rate applied in determining the recoverable amounts of the CGU was 7.42% (2010: 6.85%). An absolute change in the discount rate of 0.5% (2010: 0.5%) would result in approximately RMB1,689 million (2010: RMB1,520 million) change in the recoverable amount of the CGU.

Other key assumptions include projection of its business performance based on estimation of future electricity tariffs, volume of electricity sold, fuel prices and other operating expenses, which are largely with reference to advices from the financial advisor engaged and an external study conducted by industry specialist to project the market demand and supply situation, as well as forward trend of electricity prices. On average, the growth and inflation rates of 3.8% and 2.1% (2010: 2.5% and 2.7%) were used in consideration of future expansion plans and new development projects as part of the long-term strategy. The growth rate applied did not exceed the long-term average growth rate of the Singapore market.

Based on the assessments, no impairment was provided for power generation licence.

## 13. DERIVATIVE FINANCIAL INSTRUMENTS

Details of derivative financial instruments are as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
<b>Derivative financial assets</b>				
–Hedging instruments for cash flow hedge (fuel swap contracts)	98,976	144,289	—	—
–Hedging instruments for cash flow hedge (exchange forward contracts)	64,642	117	—	—
–Hedging instruments for cash flow hedge (interest rate swap contracts)	—	75,894	—	—
–Financial instruments at fair value through profit or loss (fuel swap contracts)	226	3,810	—	—
<b>Total</b>	<b>163,844</b>	<b>224,110</b>	<b>—</b>	<b>—</b>
<b>Less: non-current portion</b>				
–Hedging instruments for cash flow hedge (fuel swap contracts)	3,756	15,486	—	—
–Hedging instruments for cash flow hedge (exchange forward contracts)	12,633	98	—	—
–Hedging instruments for cash flow hedge (interest rate swap contracts)	—	75,894	—	—
<b>Total non-current portion</b>	<b>16,389</b>	<b>91,478</b>	<b>—</b>	<b>—</b>
<b>Current portion</b>	<b>147,455</b>	<b>132,632</b>	<b>—</b>	<b>—</b>
<b>Derivative financial liabilities</b>				
–Hedging instruments for cash flow hedge (fuel swap contracts)	35,118	3,399	—	—
–Hedging instruments for cash flow hedge (exchange forward contracts)	10,800	94,521	—	—
–Hedging instruments for cash flow hedge (interest rate swap contract)	567,687	82,158	202,333	82,158
–Financial instruments at fair value through profit or loss (fuel swap contracts)	142	2,397	—	—
<b>Total</b>	<b>613,747</b>	<b>182,475</b>	<b>202,333</b>	<b>82,158</b>
<b>Less: non-current portion</b>				
–Hedging instruments for cash flow hedge (fuel swap contracts)	10,055	582	—	—
	456	13,123	—	—

–Hedging instruments for cash flow hedge (exchange forward contracts)				
–Hedging instruments for cash flow hedge (interest rate swap contract)	567,687	82,158	202,333	82,158
Total non-current portion	578,198	95,863	202,333	82,158
Current portion	35,549	86,612	—	—

For the years ended 31 December 2010 and 2011, no material ineffective portion was recognized in the profit or loss arising from cash flow hedges.

The Company uses an interest rate swap contract to hedge its interest rate risk against one of its variable-rate loans. The notional principal amount of the outstanding interest rate swap contract at 31 December 2011 was US\$368 million (RMB equivalents of RMB2,318.73 million) (2010: US\$400 million (RMB equivalents of RMB2,649.08 million)), through this arrangement, the Company pays an annual fixed interest of 4.40% while the original annual floating interest expense (6-month LIBOR+1%) attached in the loan is offset by the receivable leg of the interest rate swap. Such a swap is settled on a quarterly basis from September 2009 to September 2019.

TPG uses exchange forward contracts to hedge its foreign exchange risk arising from highly probable forecast purchase transactions. It also uses fuel oil swap contracts to hedge its fuel price risk arising from highly probable forecast purchases of fuel purchases.

TPG also uses various interest rate swap contracts to hedge floating semi-annual interest payments on borrowings with maturity dates up to 2020. The notional principal amount of these outstanding interest rate swap contracts at 31 December 2011 was S\$1,564 million (RMB equivalents of RMB7,613.76 million) (2010: S\$1,346 million (RMB equivalents of RMB6,888.62 million)). Through these arrangements, TPG swaps original floating interest (6-month SOR) to annual fixed interest determined by individual swap contracts. Such swap contracts are settled semi-annually from September 2011 to March 2020. As at 31 December 2011, these interest rate swap contracts are carried on the balance sheet as financial liability of RMB365.355 million (2010: financial assets of RMB75.894 million).

The analysis of contractual cash inflows/(outflows) of major derivative financial instruments are as follows:

	Carrying amounts	Contractual cash flows	Within 1 year	Cash flows	
				Between 1 and 5 years	After 5 years
As at 31 December 2011					
Derivative financial assets					
Fuel derivatives used for hedging (net settlement)	98,976	98,976	95,220	3,756	—
Forward exchange contracts used for hedging					
– inflows		2,993,086	2,589,057	404,029	—
– outflows		(2,926,888)	(2,537,998)	(388,890)	—
	64,642	66,198	51,059	15,139	—
Fuel derivatives that do not qualify as hedges (net settlement)	226	226	226	—	—
Derivative financial liabilities					
Fuel derivatives used for hedging (net settlement)	35,118	(35,118)	(25,063)	(10,055)	—
Forward exchange contracts used for hedging					
– inflows		1,503,309	1,457,508	45,801	—
– outflows		(1,513,664)	(1,467,733)	(45,931)	—
	10,800	(10,355)	(10,225)	(130)	—
Net-settled interest rate swaps used for hedging					
– net cash inflows/(outflows)	567,687	(591,912)	(216,818)	(444,208)	69,114
Fuel derivatives that do not qualify as hedges (net settlement)	142	(142)	(142)	—	—
As at 31 December 2010					
Derivative financial assets					
Fuel derivatives used for hedging (net settlement)	144,289	144,289	128,803	15,486	—
Forward exchange contracts used for hedging					
– inflows		22,855	5,579	17,276	—
– outflows		(22,842)	(5,587)	(17,255)	—
	117	13	(8)	21	—
Net-settled interest rate swaps used for hedging					

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

-net cash inflows/(outflows)	75,894	78,701	(90,388 )	(77,252 )	246,341
Fuel derivatives that do not qualify as hedges (net settlement)	3,810	3,810	3,810	—	—
Derivative financial liabilities					
Fuel derivatives used for hedging (net settlement)	3,399	(3,399 )	(2,817 )	(582 )	—
Forward exchange contracts used for hedging					
- inflows		3,854,530	3,609,449	245,081	—
- outflows		(3,950,469)	(3,692,238)	(258,231 )	—
	94,521	(95,939 )	(82,789 )	(13,150 )	—
Net-settled interest rate swaps used for hedging					
- net cash inflows/(outflows)	82,158	(69,965 )	(74,596 )	(64,089 )	68,720
Fuel derivatives that do not qualify as hedges (net settlement)	2,397	(2,397 )	(2,397 )	—	—



## 14. GOODWILL

The movements in the carrying amount of goodwill during the years are as follows:

	The Company and its subsidiaries	The Company
As at 31 December 2009		
Cost	11,741,222	108,938
Accumulated impairment loss	(130,224 )	—
Net book value	11,610,998	108,938
Movement in 2010:		
Opening net book value	11,610,998	108,938
Acquisitions (Note 39)	467,980	—
Subsequent adjustment	(8,198 )	—
Impairment charge	(5,276 )	—
Currency translation differences	575,400	—
Closing net book value	12,640,904	108,938
As at 31 December 2010		
Cost	12,776,404	108,938
Accumulated impairment loss	(135,500 )	—
Net book value	12,640,904	108,938
Movement in 2011:		
Opening net book value	12,640,904	108,938
Acquisitions	2,134,275	—
Disposal	(34,331 )	—
Impairment charge	(291,734 )	—
Currency translation differences	(558,935 )	—
Closing net book value	13,890,179	108,938
As at 31 December 2011		
Cost	14,317,413	108,938
Accumulated impairment loss	(427,234 )	—
Net book value	13,890,179	108,938



## Impairment tests for goodwill

Goodwill is allocated to the CGUs of the Company and its subsidiaries.

The carrying amounts of major goodwill allocated to individual CGUs are as follows:

	2011	2010
PRC Power segment:		
Yueyang Power Company	100,907	100,907
Pingliang Power Company	107,735	107,735
Beijing Cogeneration	95,088	95,088
Yangliuqing Power Company	151,459	151,459
Zhanhua Cogeneration	—	291,734
Diandong Energy	1,197,574	N/A
Diandong Yuwang	414,407	N/A
All other segments:		
Qingdao Port	107,002	107,002
Luoyuanwan Harbour	309,270	N/A
Singapore segment:		
Tuas Power	10,919,538	11,478,473

The recoverable amount of a CGU is determined based on value-in-use calculations. For domestic CGUs, these calculations use cash flow projections based on management's financial budgets covering periods of no more five years. The Company expects cash flows beyond such periods will be similar to that of the respective final forecast years on existing production capacity. In connection to the goodwill attached to Tuas Power, management has based their assessment of recoverable amount on value-in-use calculations. Management prepared the impairment model based on budget approved by the Board and various factors, such as inflation, power demand and other factors as well as the terminal value. On average, the growth and inflation rates of 3.8% and 2.1%, were used in consideration of future expansion plans and new development projects as part of the long-term strategy. The growth rate applied did not exceed the long-term average growth rate for the Singapore market.

Discount rates used for value-in-use calculations:

Yueyang Power Company	8.27%
Pingliang Power Company	8.27%
Tuas Power	7.42%
Beijing Cogeneration	8.27%
Yangliuqing Power Company	8.27%
Zhanhua Cogeneration	8.27%
Qingdao Port	9.15%
Diandong Energy	8.27%
Luoyuanwan Harbor	9.15%
Diandong Yuwang	8.27%

Key assumptions used for value-in-use calculations:

Key assumptions applied in the impairment tests include the expected tariff rates, demands of electricity in specific regions where these power plants are located, fuel cost and the expected throughput and price of the related port. Management determined these key assumptions based on past performance and its expectations on market development. The discount rates used reflect specific risks relating to individual CGUs. Management believes that any reasonably possible change in any of these key assumptions on which recoverable amounts of individual CGUs are based may cause carrying amounts of individual CGUs to exceed their recoverable amounts. Please refer to Notes 4 and 12 for details of respective sensitivity analysis on domestic and overseas CGU impairment testing.

In 2011, based on the assessments, except for the goodwill arising from acquisition of Zhanhua Cogeneration, no goodwill was impaired. Due to the continuous lower profitability, management expects ongoing loss of Zhanhua Cogeneration will be incurred in the future, full impairment of related goodwill was provided based on the result of impairment assessment.

In 2010, based on the assessments, except for the goodwill arising from acquisition of Yushe Power Company, no goodwill was impaired. Due to the continuous increase in coal price and lower profitability, full impairment of related goodwill was provided based on the result of impairment test.

#### 15. OTHER NON-CURRENT ASSETS

Details of other non-current assets are as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Prepayments for acquisitions*	—	3,834,774	—	3,834,774
Intangible assets**	376,859	388,705	49,094	47,420
Deferred housing loss	8,975	12,078	—	771
Prepayments for switchhouse and metering station	14,408	16,472	—	—
Prepaid connection fees	135,101	103,769	—	—
Prepaid territorial waters use right***	828,918	142,981	139,457	142,505
Finance lease receivables	619,528	587,427	—	—
VAT recoverable	250,041	—	—	—
Others	306,274	305,360	18,103	19,553
<b>Total</b>	<b>2,540,104</b>	<b>5,391,566</b>	<b>206,654</b>	<b>4,045,023</b>

\* Prepayments for acquisitions primarily represent prepayments for acquisitions of certain equity interests. These acquisitions have been completed in January 2011. Please refer to Note 39 for details.

\*\* The intangible assets consist of software, patented technologies and land use rights granted by government. In 2011, impairment amounted to RMB15.66 million was provided on patented technology (2010: RMB23.71 million).

\*\*\* The prepaid territorial waters use right mainly consists of territorial waters use right of Luoyuanwan Pier, Luoyuanwan Harbour and Ludao Pier acquired in January 2011.



As at 31 December 2011, territorial waters use right with net book value amounting to RMB86.37 million was secured to a bank as collateral against a long-term loan of RMB78 million (2010: nil) (Note 22).

16. INVENTORIES

Inventories comprised:

	The Company and its subsidiaries		The Company	
	As at 31 December		As at 31 December	
	2011	2010	2011	2010
Fuel (coal and oil) for power generation	6,312,592	4,024,586	2,065,167	1,792,278
Material and supplies	1,392,753	1,357,201	668,718	615,796
	7,705,345	5,381,787	2,733,885	2,408,074
Less: provision for inventory obsolescence	(179,724 )	(191,352 )	(35,634 )	(38,004 )
	7,525,621	5,190,435	2,698,251	2,370,070

Movements of provision for inventory obsolescence during the years are analyzed as follows:

	The Company and its subsidiaries		The Company	
	2011	2010	2011	2010
Beginning of the year	(191,352 )	(185,678 )	(38,004 )	(38,017 )
Provision	(1 )	—	—	—
Reversal	3,354	155	—	13
Write-offs	2,408	411	2,370	—
Currency translation differences	5,867	(6,240 )	—	—
End of the year	(179,724 )	(191,352 )	(35,634 )	(38,004 )

## 17. OTHER RECEIVABLES AND ASSETS

Other receivables and assets comprised the following:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Prepayments for inventories	901,560	926,602	401,126	599,154
Prepayments for constructions	243,853	457,593	22,195	233,229
Prepayments for investments	—	373,440	—	373,440
Prepaid income tax	101,959	76,429	78,867	57,537
Others	106,536	188,980	13,707	54,667
<b>Total prepayments</b>	<b>1,353,908</b>	<b>2,023,044</b>	<b>515,895</b>	<b>1,318,027</b>
Staff advances	17,877	15,558	7,539	6,477
Dividends receivable	120,118	—	270,470	78,750
Financial lease receivables	22,061	101,333	—	—
Fuel receivables	208,051	260,448	—	—
Interest receivables	17	730	59,076	15,718
Others	891,432	655,400	1,086,955	710,765
Subtotal other receivables	1,259,556	1,033,469	1,424,040	811,710
Less: provision for doubtful accounts	(26,505 )	(42,045 )	(17,780 )	(17,781 )
<b>Total other receivables, net</b>	<b>1,233,051</b>	<b>991,424</b>	<b>1,406,260</b>	<b>793,929</b>
VAT recoverable	2,013,291	2,761,570	480,560	765,937
<b>Gross total</b>	<b>4,626,755</b>	<b>5,818,083</b>	<b>2,420,495</b>	<b>2,895,674</b>
<b>Net total</b>	<b>4,600,250</b>	<b>5,776,038</b>	<b>2,402,715</b>	<b>2,877,893</b>

Please refer to Note 34 for details of other receivables and assets due from the related parties.

The gross amounts of other receivables of the Company and its subsidiaries are denominated in the following currencies:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
RMB	1,161,340	926,218	1,424,040	811,710
S\$ (RMB equivalent)	59,966	53,760	—	—
US\$ (RMB equivalent)	38,250	53,491	—	—
<b>Total</b>	<b>1,259,556</b>	<b>1,033,469</b>	<b>1,424,040</b>	<b>811,710</b>





Other receivables and assets do not contain significant impaired assets. Movements of provision for doubtful accounts during the years are analyzed as follows:

	The Company and its subsidiaries		The Company	
	2011	2010	2011	2010
Beginning of the year	(42,045 )	(38,628 )	(17,781 )	(17,820 )
Acquisitions	(1,355 )	—	—	—
Provision	—	(5,457 )	—	—
Reversal	16,895	2,040	1	39
End of the year	(26,505 )	(42,045 )	(17,780 )	(17,781 )

As at 31 December 2011, there was no indication of impairment relating to other receivables which were not past due and no provision was made. Other receivables of RMB91 million (2010: RMB86 million) were past due but not impaired. These receivables were contracts bounded with repayment terms on demand. The ageing analysis of these other receivables was as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Between 1 to 2 years	7,434	10,375	—	5,893
Between 2 to 3 years	10,374	23,656	5,892	26
Over 3 years	72,703	51,991	3,324	3,327
	90,511	86,022	9,216	9,246

As at 31 December 2011, other receivables of RMB33 million (2010: RMB48 million) were impaired. The individually impaired receivables have been long outstanding without any repayment agreements in place or possibility of renegotiation. It was assessed that a portion of the receivables is expected to be recovered. The ageing of these other receivables was as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Over 3 years	32,591	48,140	24,170	24,117

18.

## ACCOUNTS RECEIVABLE

Accounts receivable comprised the following:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Accounts receivable	14,838,513	10,297,602	6,542,467	5,186,803
Notes receivable	563,363	636,542	225,741	139,100
	15,401,876	10,934,144	6,768,208	5,325,903
Less: provision for doubtful accounts	(24,033 )	(25,008 )	—	—
	15,377,843	10,909,136	6,768,208	5,325,903

The gross amounts of account receivables of the Company and its subsidiaries are denominated in the following currencies:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
RMB	13,885,301	9,754,539	6,786,208	5,325,903
S\$ (RMB equivalent)	1,493,043	1,130,623	—	—
US\$ (RMB equivalent)	23,532	48,982	—	—
Total	15,401,876	10,934,144	6,786,208	5,325,903

The Company and its subsidiaries usually grant about one month's credit period to local power grid customers from the end of the month in which the sales are made, except for SinoSing Power which credit period ranged from 5 to 60 days from the dates of billings. Certain accounts receivables of Singapore subsidiaries are backed by bankers' guarantees and/or deposit from customers. It is not practicable to determine the fair value of the collaterals that correspond to these accounts receivables.

As at 31 December 2011, accounts receivable of the Company and its subsidiaries of approximately RMB2,771 million (2010: RMB1,513 million) was secured to a bank as collateral against short-term loans of RMB2,490 million (2010: RMB1,389 million) (Note 28).

As at 31 December 2011, notes receivable of the Company and its subsidiaries of approximately RMB15 million (2010: RMB10 million) was secured to a bank as collateral against notes payable of RMB10.84 million (2010: RMB7 million) (Note 25).



Movements of provision for doubtful accounts during the years are analyzed as follows:

	The Company and its subsidiaries		The Company	
	2011	2010	2011	2010
Beginning of the year	(25,008 )	(26,408 )	—	—
Acquisition	(3,237 )	—	—	—
Provision	(79 )	—	—	—
Reversal	2,931	667	—	—
Write-off	393	4	—	—
Currency translation differences	967	729	—	—
End of the year	(24,033 )	(25,008 )	—	—

Ageing analysis of accounts receivable was as follows:

	The Company and its subsidiaries		The Company	
	As at 31 December		As at 31 December	
	2011	2010	2011	2010
Within 1 year	15,335,719	10,904,522	6,728,201	5,325,903
Between 1 to 2 years	40,158	535	40,007	—
Between 2 to 3 years	219	24,957	—	—
Over 3 years	25,780	4,130	—	—
	15,401,876	10,934,144	6,768,208	5,325,903

As at 31 December 2011, the maturity period of the notes receivable ranged from 1 to 6 months (2010: from 1 to 6 months).

As at 31 December 2011, there was no indication of impairment relating to accounts receivable which were not past due and no provision was made. Accounts receivable of RMB14 million (2010: RMB18 million) were past due but not impaired. These mainly related to overdue notes receivable which will be collected when related supporting documents are provided and certain accounts receivables of Singapore subsidiaries which are backed by bankers' guarantees and/or deposits from customers.

The ageing analysis of these accounts receivable was as follows:

	The Company and its subsidiaries		The Company	
	As at 31 December		As at 31 December	
	2011	2010	2011	2010
2 months to 1 year	13,746	18,429	—	—

As at 31 December 2011, accounts receivable of RMB24 million (2010: RMB25 million) were impaired due to the bankruptcy of the clients. The amount of the provision was RMB24 million as at 31 December 2011 (2010: RMB25 million). The ageing of these accounts receivable was as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Less than 1 year	31	27	—	—
Between 1 to 2 years	170	489	—	—
Between 2 to 3 years	50	24,492	—	—
Over 3 years	23,782	—	—	—
	24,033	25,008	—	—

#### 19. SHARE CAPITAL

	2011		The Company 2010	
	Number of shares	Share capital RMB '000	Number of shares	Share capital RMB '000
As at 1 January				
A shares	10,500,000,000	10,500,000	9,000,000,000	9,000,000
Overseas listed foreign shares	3,555,383,440	3,555,383	3,055,383,440	3,055,383
Subtotal	14,055,383,440	14,055,383	12,055,383,440	12,055,383
Issuance of shares				
A shares	—	—	1,500,000,000	1,500,000
Overseas listed foreign shares	—	—	500,000,000	500,000
Subtotal	—	—	2,000,000,000	2,000,000
As at 31 December				
A shares	10,500,000,000	10,500,000	10,500,000,000	10,500,000
Overseas listed foreign shares	3,555,383,440	3,555,383	3,555,383,440	3,555,383
Total	14,055,383,440	14,055,383	14,055,383,440	14,055,383

In December 2010, the Company issued 1,500,000,000 A shares (par value of RMB1.00 each) and 500,000,000 H shares (par value of RMB1.00 each) through a private placement, respectively. Net proceeds from the issuance amounted to RMB10.274 billion after deducting issuance costs of RMB107 million from gross proceeds of RMB10.381 billion. The difference between the net proceeds and the addition to paid-in capital is recorded in capital surplus. In addition, the additions to other capital surplus mainly represented the capital funds allocated from government budget received from the Ministry of Finance of the PRC through Huaneng Group. As at 31 December 2011, capital funds allocated from government budget received from the Ministry of Finance of the PRC through Huaneng Group was RMB552 million (2010: RMB487 million).



All shares issued by the Company were fully paid. The holders of domestic shares and overseas listed foreign shares, with minor exceptions, are entitled to the same economic and voting rights. Of the issued A shares 7,298,283,321 shares (2010: 7,621,786,667 shares) are still within the lock-up period.

20. **SURPLUS RESERVES**

According to the Company Law of the PRC, the Company's articles of association and board resolutions, the Company appropriates 10% of each year's net profit under PRC GAAP to the statutory surplus reserve. The Company has the option to cease provision for such reserve when it reaches 50% of the registered share capital. Upon the approval from relevant authorities, this reserve can be used to make up any losses incurred or to increase share capital. Except for offsetting against losses, this reserve cannot fall below 25% of the share capital after being used to increase share capital. According to the Company's articles of association and board resolutions on 20 March 2012, the Company intends to appropriate 10% (2010: 10%) of this year's net profit attributable the Company's shareholders under PRC GAAP to the statutory surplus reserve, amounting to RMB127 million (2010: RMB354 million), in which RMB72 million (2010: nil), being the excess of the consequent surplus reserve balance over 50% of the registered share capital, is subject to the approval of the shareholders at the annual general meeting. Therefore, only RMB55 million of the aforementioned appropriation of statutory surplus reserve is reflected in these consolidated financial statements for the year ended 31 December 2011.

On 22 June 2010, upon the approval from the annual general meeting of the shareholders, the Company appropriated 10% of profit attributable to equity holders of the Company for the year ended 31 December 2009 determined under the PRC GAAP to the statutory surplus reserve amounting to RMB508 million. Such appropriation was recorded in 2010 upon approval.

Appropriation of discretionary surplus reserve is proposed by the Board of Directors, and approved by the general meeting of shareholders. This reserve can be used to make up any losses incurred in prior years or to increase the share capital after obtaining relevant approvals. For the years ended 31 December 2010 and 2011, no provision was made to the discretionary surplus reserve.

According to the articles of association, distributable profit of the Company is derived based on the lower of amounts determined in accordance with (a) PRC GAAP and (b) IFRS. The amount of distributable profit resulting from the current year operation for the year ended 31 December 2011 was approximately RMB1.13 billion (2010: RMB2.99 billion). The cumulative balance of distributable profit as at 31 December 2011 was approximately RMB12.372 billion (2010: RMB13.979 billion).

21. **DIVIDENDS**

On 20 March 2012, the Board of Directors proposed a cash dividend of RMB0.05 per share, totaling approximately RMB703 million. This proposal is subject to the approval of the shareholders at the annual general meeting. These financial statements do not reflect this dividends payable, which will be accounted for in shareholders' equity as an appropriation of retained earnings for the year ending 31 December 2012.

On 17 May 2011, upon the approval from the annual general meeting of the shareholders, the Company declared 2010 final dividend of RMB0.20 (2009 final: RMB0.21) per ordinary share, totaled approximately RMB2,807 million (2009 final: RMB2,528 million).





22.

## LONG-TERM LOANS

Long-term loans comprised the following:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Loans from Huaneng Group (a)	800,000	800,000	—	—
Bank loans (b)	86,952,527	70,884,020	32,215,534	31,505,381
Other loans (c)	6,232,615	7,283,433	5,800,000	7,000,000
	93,985,142	78,967,453	38,015,534	38,505,381
Less: Current portion of long-term loans	(14,140,270)	(13,782,550)	(9,685,608)	(8,766,245)
Total	79,844,872	65,184,903	28,329,926	29,739,136

## (a) Loans from Huaneng Group

Details of loans from Huaneng Group of the Company and its subsidiaries are as follows:

	The Company and its subsidiaries As at 31 December 2011				
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Loans from Huaneng Group Unsecured RMB					
– Fixed rate	800,000	800,000	—	800,000	4.05%-4.60%

	The Company and its subsidiaries As at 31 December 2010				
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Loans from Huaneng Group Unsecured RMB					
– Fixed rate	800,000	800,000	—	800,000	4.05%-4.60%

(b)

## Bank loans

Details of bank loans of the Company and its subsidiaries are as follows:

The Company and its subsidiaries As at 31 December 2011					
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Bank loans					
Secured					
US\$					
– Variable rate	746	4,700	—	4,700	2.74%
RMB					
– Fixed rate	13,603,650	13,603,650	(826,000)	12,777,650	5.35%-8.65%
Unsecured					
RMB					
– Fixed rate	53,130,490	53,130,490	(6,918,810)	46,211,680	3.51%-7.40%
US\$					
– Fixed rate	36,176	227,941	(145,865)	82,076	5.95%-6.60%
– Variable rate	741,893	4,674,593	(437,077)	4,237,516	0.51%-1.79%
S\$					
– Variable rate	3,001,286	14,609,962	(369,585)	14,240,377	1.94%-2.15%
€					
– Fixed rate	85,904	701,191	(76,267)	624,924	2.00%-2.15%
<b>Total</b>		<b>86,952,527</b>	<b>(8,773,604)</b>	<b>78,178,923</b>	

The Company and its subsidiaries As at 31 December 2011					
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Bank loans					
Secured					
RMB					
– Fixed rate	30,000	30,000	—	30,000	5.45%
Unsecured					
RMB					
– Fixed rate	48,127,488	48,127,488	(10,178,375)	37,949,113	3.51%-5.94%
US\$					
– Fixed rate	130,863	866,665	(627,083)	239,582	5.95%-6.97%
– Variable rate	810,614	5,368,452	(459,399)	4,909,053	0.51%-2.94%
S\$					
– Variable rate	3,057,689	15,652,617	(286,275)	15,366,342	2.15%-2.46%
€					
– Fixed rate	95,247	838,798	(82,283)	756,515	2.00%-2.15%

Total	70,884,020 (11,633,415)	59,250,605
-------	-------------------------	------------

155

---

As at 31 December 2010, a long-term loan of RMB30 million was secured by land use rights of the Company and its subsidiaries with net book value amounting to RMB28 million. This loan was renegotiated and renewed as an unsecured loan in April 2011 (Note 11).

As at 31 December 2011, a long-term loan of RMB78 million was secured by territorial waters use rights with net book value amounting to RMB86.37 million (2010: nil) (Note 15).

As at 31 December 2011, a long-term loan of RMB169 million was secured by certain property, plant and equipment (2010: nil) (Note 7).

As at 31 December 2011, long-term loans of RMB13,094 million were secured by tariff collection rights (2010: nil).

As at 31 December 2011, long-term loans of a subsidiary of the Company of RMB234.65 million were secured by property, plant and equipment with net book value amounting to RMB332.43 million (Note 7) and tariff collection right of the subsidiary of the Company. These loans are also guaranteed by former shareholders of the subsidiary of the Company (2010: nil).

As at 31 December 2011, a long-term loan of a subsidiary of the Company of RMB27.50 million was secured by listed shares held by a former shareholder of the subsidiary of the Company (2010: nil).

As at 31 December 2011, a long-term loan of a subsidiary of the Company of RMB4.70 million was secured by current and future assets of the subsidiary (2010: nil).

Details of bank loans of the Company are as follows:

	The Company and its subsidiaries As at 31 December 2011				
	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Bank loans					
Unsecured					
RMB					
– Fixed rate	27,313,000	27,313,000	(3,836,000)	23,477,000	3.51%-7.05%
US\$					
– Fixed rate	36,176	227,941	(145,865)	82,076	5.95%-6.60%
– Variable rate	741,893	4,674,593	(437,077)	4,237,516	0.51%-1.79%
Total		32,215,534	(4,418,942)	27,796,592	

The Company and its subsidiaries  
As at 31 December 2010

	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Bank loans					
Unsecured					
RMB					
– Fixed rate	25,430,000	25,430,000	(5,839,500)	19,590,500	3.51%-5.53%
US\$					
– Fixed rate	106,743	706,929	(467,346)	239,583	5.95%-6.60%
– Variable rate	810,614	5,368,452	(459,399)	4,909,053	0.51%-2.94%
Total		31,505,381	(6,766,245)	24,739,136	

(c)

## Other loans

Details of other loans of the Company and its subsidiaries are as follows:

The Company and its subsidiaries  
As at 31 December 2011

	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Other loans					
Secured					
RMB					
– Fixed rate	800,000	800,000	(266,666)	533,334	6.65%
Unsecured					
RMB					
– Fixed rate	5,400,000	5,400,000	(5,100,000)	300,000	4.20%-6.65%
S\$					
– Variable rate	6,700	32,615	—	32,615	4.25%
Total		6,232,615	(5,366,666)	865,949	

The Company and its subsidiaries  
As at 31 December 2011

	Original currency '000	RMB equivalent	Less: Current portion	Non-current portion	Annual interest rate
Other loans					
Unsecured					
RMB					
– Fixed rate	7,230,000	7,230,000	(2,130,000)	5,100,000	4.05%-4.86%
US\$					

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

– Variable rate	1,429	9,461	(9,461)	—	0.93%-1.18%
S\$					
– Variable rate	6,700	34,298	—	34,298	4.25%
JPY					
– Variable rate	119,048	9,674	(9,674)	—	0.66%-0.85%
Total		7,283,433	(2,149,135)	5,134,298	

157

---

As at 31 December 2011, the balances of other long-term loans that drawn from Huaneng Finance amounted to approximately RMB100 million (2010: RMB230 million) with annual interest rate of 4.86%-6.10% (2010: 4.86%).

As at 31 December 2011, other long-term loans amounted to RMB800 million (2010: nil) were secured by right of income derived from certain generation units of the Company.

Details of other loans of the Company are as follows:

	Original currency '000	The Company As at 31 December 2011			Annual interest rate
		RMB equivalent	Less: Current portion	Non-current portion	
Other loans Unsecured RMB					
- Fixed rate	5,800,000	5,800,000	(5,266,666)	533,334	4.20%-6.65%

	Original currency '000	The Company As at 31 December 2011			Annual interest rate
		RMB equivalent	Less: Current portion	Non-current portion	
Other loans Unsecured RMB					
- Fixed rate	7,000,000	7,000,000	(2,000,000)	5,000,000	4.05%-4.39%

The maturity of long-term loans is as follows:

	The Company and its subsidiaries					
	Loans from Huaneng Group		Bank loans		Other loans	
	As at 31 December		As at 31 December		As at 31 December	
	2011	2010	2011	2010	2011	2010
1 year or less	—	—	8,773,604	11,633,415	5,366,666	2,149,135
More than 1 year but not more than 2 years	800,000	—	9,334,161	9,430,148	566,667	5,100,000
More than 2 years but no more than 3 years	—	800,000	15,290,895	6,416,367	266,667	—
More than 3 years but no more than 4 years	—	—	4,388,884	4,693,465	—	—
More than 4 years but not more than 5 years	—	—	5,452,849	2,724,282	—	—
More than 5 years	—	—	43,712,134	35,986,343	32,615	34,298
	800,000	800,000	86,952,527	70,884,020	6,232,615	7,283,433
Less: amount due within 1 year included under current liabilities	—	—	(8,773,604)	(11,633,415)	(5,366,666)	(2,149,135)
Total	800,000	800,000	78,178,923	59,250,605	865,949	5,134,298

	The Company			
	Bank loans		Other loans	
	As at 31 December		As at 31 December	
	2011	2010	2011	2010
1 year or less	4,418,942	6,766,245	5,266,666	2,000,000
More than 1 year but not more than 2 years	3,857,714	6,283,214	266,667	5,000,000
More than 2 years but not more than 3 years	10,882,714	2,566,203	266,667	—
More than 3 years but not more than 4 years	1,234,943	3,251,203	—	—
More than 4 years but not more than 5 years	1,898,209	1,013,606	—	—
More than 5 years	9,923,012	11,624,910	—	—
	32,215,534	31,505,381	5,800,000	7,000,000
Less: amount due within 1 year included under current liabilities	(4,418,942)	(6,766,245)	(5,266,666)	(2,000,000)
Total	27,796,592	24,739,136	533,334	5,000,000



The analysis of the above is as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Loans from Huaneng Group				
– Wholly repayable within five years	800,000	800,000	—	—
Bank loans				
– Wholly repayable within five years	27,610,488	25,869,171	17,501,478	16,095,496
– Not wholly repayable within five years	59,342,039	45,014,849	14,714,056	15,409,885
	86,952,527	70,884,020	32,215,534	31,505,381
Other loans				
– Wholly repayable within five years	6,200,000	7,249,135	5,800,000	7,000,000
– Not wholly repayable within five years	32,615	34,298	—	—
Total	6,232,615	7,283,433	5,800,000	7,000,000

The interest payment schedule of long-term loans in the future years are summarized as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
1 year or less	4,538,592	3,209,859	1,857,772	1,638,525
More than 1 year but not more than 2 years	3,902,337	2,394,177	1,507,408	1,034,968
More than 2 years but not more than 5 years	7,849,009	5,104,702	2,260,078	1,916,285
More than 5 years	9,147,103	7,603,726	1,586,887	2,173,483
Total	25,437,041	18,312,464	7,212,145	6,763,261

23.

#### LONG-TERM BONDS

The Company issued bonds with maturity of 5 years, 7 years and 10 years in December 2007 with face values of RMB1 billion, RMB1.7 billion and RMB3.3 billion bearing annual interest rates of 5.67%, 5.75% and 5.90%, respectively. The total actual proceeds received by the Company were approximately RMB5.885 billion. These bonds are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rates of those bonds are 6.13%, 6.10% and 6.17%, respectively. Interest paid per annum during the tenure of the bonds are RMB57 million, RMB98 million and RMB195 million, respectively. As at 31 December 2011, the bond with original maturity of 5 years will be due within 12 months, as a result of which such bonds are recorded as current portion of long term bonds. As at 31 December 2011, interest payables for these bonds amounted to approximately RMB6.79 million (2010: RMB6.79 million).



The Company also issued bonds with maturity of 10 years in May 2008 with face value of RMB4 billion bearing annual interest rate of 5.20%. The actual proceeds received by the Company were approximately RMB3.933 billion. These bonds are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of bond is 5.42%. Interest paid per annum during the tenure of the bonds is RMB208 million. As at 31 December 2011, interest payable for these bonds above amounted to approximately RMB134.19 million (2010: RMB134.19 million).

Please refer to Note 34(c) for details of long-term bonds of the Company guaranteed by HIPDC and government-related banks.

The Company issued medium-term notes with maturity of 5 years in May 2009 with face value of RMB4 billion bearing annual interest rate of 3.72%. The actual proceeds received by the Company were approximately RMB3.940 billion. These notes are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the notes fall due. The annual effective interest rate of these notes is 4.06%. Interest paid per annum during the tenure of the notes is RMB149 million. As at 31 December 2011, interest payable for these notes above amounted to approximately RMB94.17 million (2010: RMB94.17 million).

In November 2011, the Company issued non-public debt financing instrument with maturity of 5 years with face value of RMB5 billion bearing an annual interest rate of 5.74%. The actual proceeds received by the Company were approximately RMB4.985 billion. These bonds are denominated in RMB and issued at par. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of bond is 6.04%. Interest paid per annum during the tenure of the bonds is RMB302 million. As at 31 December 2011, interest payable for these bonds above amounted to approximately RMB42.34 million (2010: Nil).

#### 24. OTHER NON-CURRENT LIABILITIES

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Environmental subsidies (a)	691,253	608,369	500,880	463,823
Security deposits	111,117	80,172	—	—
Others	186,987	109,017	104,714	90,629
<b>Total</b>	<b>989,357</b>	<b>797,558</b>	<b>605,594</b>	<b>554,452</b>

- (a) Such grants represented primarily subsidies for the construction of desulphurization equipment and other environmental protection projects.

In 2011, the government grants which were credited to the statement of comprehensive income amounted to RMB81.91 million (2010: RMB61.53 million).

## 25. ACCOUNTS PAYABLE AND OTHER LIABILITIES

Accounts payable and other liabilities comprised:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
	Accounts and notes payable	9,122,537	5,415,145	3,718,398
Amounts received in advance	950,321	957,204	896,358	900,297
Payables to contractors for construction	10,669,533	8,895,842	2,951,509	2,174,415
Other payables to contractors	1,615,101	1,504,311	658,207	732,907
Consideration payables for acquisitions	155,903	309,111	155,903	309,111
Accrued interests	687,427	577,023	466,054	393,939
Accrued pollutants discharge fees	94,705	89,590	42,031	37,983
Accrued water-resources fees	18,950	19,778	3,655	4,675
Accrued service fee of intermediaries	49,014	45,235	48,812	45,235
Capacity quota payables	361,440	—	—	—
Security deposits	72,020	97,197	—	—
Others	1,971,048	1,644,885	763,604	701,635
<b>Total</b>	<b>25,767,999</b>	<b>19,555,321</b>	<b>9,704,531</b>	<b>7,775,175</b>

Please refer to Note 34 for details of accounts payable and other liabilities due to the related parties.

As at 31 December 2011, notes payable of RMB10.84 million (2010: RMB7 million) were secured by notes receivable of the Company and its subsidiaries with net book value amounting to RMB15 million (2010: RMB10 million) (Note 18).

The carrying amounts of financial liabilities included in accounts payable and other liabilities of the Company and its subsidiaries are denominated in the following currencies:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
	RMB	22,716,685	17,665,058	8,808,173
S\$ (RMB equivalent)	886,056	383,582	—	—
US\$ (RMB equivalent)	1,137,516	512,432	—	—
JPY (RMB equivalent)	77,412	36,254	—	—
EUR (RMB equivalent)	9	503	—	—
GBP (RMB equivalent)	—	87	—	—
AUD (RMB equivalent)	—	201	—	—
<b>Total</b>	<b>24,817,678</b>	<b>18,598,117</b>	<b>8,808,173</b>	<b>6,874,878</b>



The ageing analysis of accounts and notes payable was as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Accounts and notes payable				
Within 1 year	9,018,743	5,357,560	3,703,216	2,460,391
Between 1 to 2 years	83,275	26,703	13,478	14,035
Over 2 years	20,519	30,882	1,704	552
Total	9,122,537	5,415,145	3,718,398	2,474,978

## 26. TAXES PAYABLE

Taxes payable comprises:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
VAT payable	304,600	333,623	223,392	186,907
Income tax payable	503,252	280,917	—	—
Others	210,689	129,683	92,787	68,000
Total	1,018,541	744,223	316,179	254,907

## 27. SHORT-TERM BONDS

The Company issued unsecured short-term bonds with face values of RMB5 billion and RMB5 billion bearing annual interest rates of 3.95% and 6.04% in January 2011 and September 2011, respectively. Such bonds are denominated in RMB, issued at face value and mature in 365 days and 366 days from the issuance dates, respectively. The annual effective interest rates of these bonds are 4.37% and 6.47%, respectively. As at 31 December 2011, interest payables for these bonds above amounted to approximately RMB191.55 million and RMB85.81 million, respectively.

The Company issued unsecured short-term bonds amounting to RMB5 billion and RMB5 billion bearing annual interest rate of 2.55% and 3.20% in March 2010 and July 2010. Such bonds are denominated in RMB and issued at face value and will mature in 270 days and 365 days from respective issuance dates. The annual effective interest rates of these bonds are 3.11% and 3.61%. These short-term bonds were fully repaid in December 2010 and June 2011, respectively.

## 28. SHORT-TERM LOANS

Short-term loans are as follows:

	The Company and its subsidiaries					
	As at 31 December 2011			As at 31 December 2010		
	Original currency '000	RMB equivalent	Annual interest rate	Original currency '000	RMB equivalent	Annual interest rate
<b>Secured</b>						
<b>RMB</b>						
– Fixed rate	2,490,401	2,490,401	4.13%-7.13 %	1,389,450	1,389,450	3.89%-4.13 %
– Fixed rate-discounted notes receivable	59,757	59,757	4.32%-8.52 %	10,000	10,000	2.40%-5.04 %
		2,550,158			1,399,450	
<b>Unsecured</b>						
<b>RMB</b>						
– Fixed rate	41,429,042	41,429,042	4.00%-7.22 %	42,647,734	42,647,734	3.79%-5.72 %
<b>Total</b>		43,979,200			44,047,184	

As at 31 December 2011, short-term loans of RMB2,490 million (2010: RMB1,389 million) were secured by accounts receivable of the Company and its subsidiaries with net book value amounting to RMB2,771 million (2010: RMB1,513 million).

As at 31 December 2011, short-term loans of RMB59.76 million (2010: RMB10 million) represented the discounted notes receivable with recourse. As these notes receivable were yet to mature, the proceeds received were recorded as short-term loans.

As at 31 December 2011, short-term loans from Huaneng Finance amounted to RMB1,465 million (2010: RMB605 million). For the year ended 31 December 2011, the annual interest rates for these loans ranged from 4.78% to 6.56% (2010: 4.78%).

As at 31 December 2011, short-term loans from Xi'an Thermal Power Research Institute Co., Ltd. ("Xi'an Thermal") amounted to RMB70 million with an annual interest of 6.89% (2010: Nil).

As at 31 December 2011, short-term loans from China Huaneng Group Clean Energy Technology Research Institute Co. Ltd. ("Huaneng Clean Energy") amounted to RMB100 million with annual interest of 6.56% (2010: Nil).

As at 31 December 2011, short-term loans from Huaneng Guicheng Trust Co., Ltd. ("Huaneng Guicheng Trust") amounted to RMB4,500 million (2010: RMB3,180 million). For the year ended 31 December 2011, the annual interest rates for these loans ranged from 4.56% to 7.22% (2010: from 4.35% to 4.94%).





	The Company					
	As at 31 December 2011			As at 31 December 2010		
	Original currency '000	RMB equivalent	Annual interest rate	Original currency '000	RMB equivalent	Annual interest rate
<b>Secured</b>						
<b>RMB</b>						
– Fixed rate	1,840,611	1,840,611	4.13%-6.10%	1,389,450	1,389,450	3.89%-4.13%
<b>Unsecured</b>						
<b>RMB</b>						
– Fixed rate	30,650,000	30,650,000	4.00%-7.22%	31,603,734	31,603,734	3.79%-5.00%
<b>Total</b>		32,490,611			32,993,184	

As at 31 December 2011, secured short-term loans of RMB1,841 million (2010: RMB1,389 million) is secured by accounts receivable of the Company with net book value amounting to RMB2,009 million (2010: RMB1,513 million).

At Company level, as at 31 December 2011, short-term loans from Huaneng Guicheng Trust amounted to RMB4,500 million (2010: RMB3,000 million). For the year ended 31 December 2011, the annual interest rates for these loans ranged from 4.56% to 7.22% (2010: 4.35% to 4.76%).

As at 31 December 2011, a short-term loan of RMB500 million (2010: nil) is guaranteed by a subsidiary of the Company.

## 29. DEFERRED INCOME TAX

Periods which deferred income tax assets and liabilities are expected to recover and realize are as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
<b>Deferred income tax assets:</b>				
– Deferred income tax assets to be recovered after more than 12 months	899,439	881,265	497,338	616,137
– Deferred income tax assets to be recovered within 12 months	309,893	321,232	261,112	240,239
	1,209,332	1,202,497	758,450	856,376
<b>Deferred income tax liabilities:</b>				
– Deferred income tax liabilities to be realized after more than 12 months	(2,563,755)	(2,413,676)	(294,535)	(356,057)
– Deferred income tax liabilities to be realized within 12 months	(112,333)	(82,733)	(7,593)	(6,201)
	(2,676,088)	(2,496,409)	(302,128)	(362,258)
	(1,466,756)	(1,293,912)	456,322	494,118



The offset amounts of deferred income tax assets and liabilities are as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Deferred income tax assets	526,399	672,475	456,322	494,118
Deferred income tax liabilities	(1,993,155)	(1,966,387)	—	—
	(1,466,756)	(1,293,912)	456,322	494,118

The gross movement on the deferred income tax accounts is as follows:

	The Company and its subsidiaries		The Company	
	2011	2010	2011	2010
Beginning of the year	(1,293,912)	(1,464,629)	494,118	212,522
Acquisitions (Note 39)	(379,084 )	(92,655 )	—	—
(Charged)/Credited to profit or loss (Note 31)	(39,469 )	217,687	(145,750 )	165,092
Credited to other comprehensive income/(loss)	173,343	120,819	107,954	116,504
Currency translation differences	69,197	(75,134 )	—	—
Disposal of a subsidiary	3,169	—	—	—
End of the year	(1,466,756)	(1,293,912)	456,322	494,118

The movements in deferred income tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdictions, are as follows:

Deferred income tax assets:

	The Company and its subsidiaries								Total
	Hedging reserve	Amortization of land use rights	Provision for impairment losses	Depreciation	Accrued expenses	Manufactured equipment	VAT refunds on purchases of domestically Deductible tax losses	Others	
As at 1 January 2010	—	16,122	210,142	68,041	85,912	346,370	154,348	175,798	1,056,733
(Charged)/Credited to profit or loss	—	(324 )	392	6,297	72,678	6,105	12,956	26,112	124,216
Credited to other comprehensive income/(loss)	20,540	—	—	—	—	—	—	—	20,540
Currency translation differences	—	—	460	168	—	—	—	380	1,008
As at 31 December 2010	20,540	15,798	210,994	74,506	158,590	352,475	167,304	202,290	1,202,497
Acquisitions	—	—	538	68,453	—	—	9,525	1,787	80,303
(Charged)/Credited to profit or loss	(229 )	(351 )	10,427	14,076	(110,648)	(21,550)	(37,043 )	106	(145,212 )
Credited to other comprehensive income/(loss)	74,859	—	—	—	—	—	—	—	74,859
Currency translation differences	(2,512 )	—	(3 )	(145 )	—	—	—	(455 )	(3,115 )
As at 31 December 2011	92,658	15,447	221,956	156,890	47,942	330,925	139,786	203,728	1,209,332

The movements in deferred income tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdictions, are as follows: (Cont'd)

Deferred income tax assets: (Cont'd)

	The Company						Total
	Hedging reserve	Amortization of land use rights	Provision for impairment	Depreciation	Accrued expenses	VAT refunds on purchases	Others

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

			losses			of domestically manufactured equipment		
As at 1 January 2010	—	16,122	134,410	28,456	81,234	344,476	125,144	729,842
(Charged)/Credited to the profit or loss	—	(324 )	11,778	(1,055 )	62,264	6,112	27,219	105,994
Credited to other comprehensive income/(loss)	20,540	—	—	—	—	—	—	20,540
As at 31 December 2010	20,540	15,798	146,188	27,401	143,498	350,588	152,363	856,376
(Charged)/Credited to profit or loss	—	(353 )	14,927	(1,151 )	(124,732)	(21,441 )	4,779	(127,971)
Credited to other comprehensive income/(loss)	30,045	—	—	—	—	—	—	30,045
As at 31 December 2011	50,585	15,445	161,115	26,250	18,766	329,147	157,142	758,450

## Deferred income tax liabilities:

	The Company and its subsidiaries									
	Hedging reserve	Fair value gains	Amortization of negative goodwill	Amortization of land use rights	Depreciation	Power generation licence	Mining rights	Territorial waters use right	Others	
As at 1 January 2010	(28,291)	(345,610)	(62,496)	(401,402)	(996,604 )	(658,651)	—	—	(28,308)	(2,308)
Acquisitions	—	—	—	(32,593 )	(60,062 )	—	—	—	—	(9,062)
(Charged)/Credited to profit or loss	(5,483 )	—	53,238	4,883	39,347	—	—	—	1,486	9,062
Credited to other comprehensive income/(loss)	14,212	86,067	—	—	—	—	—	—	—	10,000
Currency translation differences	(1,013 )	—	—	(214 )	(39,876 )	(35,043 )	—	—	4	(7,143)
As at 31 December 2010	(20,575)	(259,543)	(9,258 )	(429,326)	(1,057,195)	(693,694)	—	—	(26,818)	(2,308)
Acquisitions	—	—	—	(39,102 )	(171,880 )	—	(162,400)	(86,005)	—	(4,000)
Credited/(Charged) to profit or loss	—	—	1,341	27,511	124,668	—	—	519	(48,296)	10,000
Credited to other comprehensive income/(loss)	20,575	77,909	—	—	—	—	—	—	—	9,000
Currency translation differences	—	—	—	3,067	35,207	34,038	—	—	—	7,143
Disposal of a subsidiary	—	—	—	2,619	550	—	—	—	—	3,000
As at 31 December 2011	—	(181,634)	(7,917 )	(435,231)	(1,068,650)	(659,656)	(162,400)	(85,486)	(75,114)	(2,308)

	The Company						
	Hedging reserve	Fair value gains	Amortization of goodwill and negative goodwill	Depreciation	Others	Total	
As at 1 January 2010	(9,897 )	(345,610 )	(62,496 )	(72,043 )	(27,274 )	(517,320 )	(2,308)
Credited to profit or loss	—	—	53,238	4,308	1,552	59,098	10,000
Credited to other comprehensive income/(loss)	9,897	86,067	—	—	—	95,964	9,000

As at 31 December 2010	—	(259,543 )	(9,258 )	(67,735 )	(25,722 )	(362,258 )
Credited/(Charged) to profit or loss	—	—	1,341	4,699	(23,819 )	(17,779 )
Credited to other comprehensive income/(loss)	—	77,909	—	—	—	77,909
As at 31 December 2011	—	(181,634 )	(7,917 )	(63,036 )	(49,541 )	(302,128 )

Deferred income tax assets are recognized for tax loss carried-forwards to the extent that the realization of the related tax benefits through the future taxable profits is probable. The Company and its subsidiaries did not recognize deferred income tax assets in respect of certain losses that can be carried forward against future taxable income. The expiry dates of such tax losses which no deferred income tax assets recognized are summarized as follows:

Year of expiry	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
2012	2,432	2,432	—	—
2013	1,185,791	823,245	—	—
2014	581,380	513,994	—	—
2015	938,601	954,813	—	—
2016	1,578,516	N/A	—	—
	4,286,720	2,294,484	—	—

### 30. ADDITIONAL FINANCIAL INFORMATION ON BALANCE SHEETS

As at 31 December 2011, the net current liabilities of the Company and its subsidiaries amounted to approximately RMB60,180 million (2010: RMB52,081 million). On the same date, total assets less current liabilities were approximately RMB160,818 million (2010: RMB144,301 million).

As at 31 December 2011, the net current liabilities of the Company amounted to approximately RMB27,672 million (2010: RMB27,990 million). On the same date, total assets less current liabilities were approximately RMB95,433 million (2010: RMB95,042 million).

### 31. INCOME TAX EXPENSE

Income tax expense comprised:

	For the year ended 31 December	
	2011	2010
Current income tax expense	829,458	1,060,362
Deferred income tax (Note 29)	39,469	(217,687)
	868,927	842,675



No Hong Kong profits tax has been provided as there were no estimated assessable profits in Hong Kong for the year (2010: nil). The reconciliation of the effective income tax rate from the statutory income tax rate is as follows:

	For the year ended 31 December			
	2011		2010	
Average statutory tax rate	18.43	%	22.05	%
Tax credit relating to purchases of domestically manufactured equipment*	—		(5.07	%)
Deductible tax loss not recognized as deferred income tax assets	22.67	%	4.55	%
Impact of the tax rate differential on existing deferred income tax balance	0.41	%	(0.73	%)
Income not subject to tax	(9.78	%)	(4.01	%)
Expenses not deductible for income tax purposes	10.70	%	3.51	%
Others	(0.05	%)	(0.06	%)
<b>Effective tax rate</b>	<b>42.38</b>	<b>%</b>	<b>20.24</b>	<b>%</b>

\* This represented tax credit granted to certain power plants on their purchases of certain domestically manufactured equipment upon the approvals of respective tax bureaus.

The average statutory tax rate for the years ended 31 December 2011 and 2010 represented the weighted average tax rate of the Company and its subsidiaries calculated on the basis of the relative amounts of profit before income tax expense and the applicable statutory tax rates. The decrease of the average statutory tax rate was mainly caused by the increase the portion of the profit before income tax expense of Singapore operation, which has a lower income tax rate of 17%.

32.

#### EARNINGS PER SHARE

The basic earnings per share is calculated by dividing the consolidated net profit attributable to the equity holders of the Company by the weighted average number of the Company's outstanding ordinary shares during the year:

	2011	2010
Consolidated net profit attributable to equityholders of the Company	1,180,512	3,347,985
Weighted average number of the Company's outstanding ordinary shares	14,055,383	12,107,438
Basic and diluted earnings per share (RMB)	0.08	0.28

There was no dilutive effect on earnings per share since the Company had no dilutive potential ordinary shares for the years ended 31 December 2011 and 2010.

## 33. NOTES TO CONSOLIDATED STATEMENT OF CASH FLOWS

Bank balances and cash comprised the following:

	The Company and its subsidiaries		The Company	
	As at 31 December		As at 31 December	
	2011	2010	2011	2010
Restricted cash	117,233	121,471	70,182	76,175
Cash and cash equivalents	8,552,782	9,426,437	2,503,183	4,943,417
Total	8,670,015	9,547,908	2,573,365	5,019,592

The bank balances and cash of the Company and its subsidiaries are denominated in the following currencies:

	The Company and its subsidiaries		The Company	
	As at 31 December		As at 31 December	
	2011	2010	2011	2010
RMB	5,040,151	4,432,568	2,521,750	2,852,399
S\$ (RMB equivalent)	2,935,792	1,887,958	—	—
US\$ (RMB equivalent)	693,823	1,208,447	51,615	154,815
JPY (RMB equivalent)	248	6,557	—	—
HK\$ (RMB equivalent)	1	2,012,378	—	2,012,378
Total	8,670,015	9,547,908	2,573,365	5,019,592

There is no material non-cash transaction for the year ended 31 December 2011. For the year ended 31 December 2010, the material non-cash transaction included the transfer property, plant and equipment under a finance lease arrangement.

#### Undrawn borrowing facilities

As at 31 December 2011, the Company and its subsidiaries had undrawn borrowing facilities amounting to approximately RMB90.96 billion (2010: RMB105.48 billion). Management expects to drawdown the available facilities in accordance with the level of working capital and/or planned capital expenditures of the Company and its subsidiaries.

## 34. RELATED PARTY BALANCES AND TRANSACTIONS

The related parties of the Company and its subsidiaries that had transactions with the Company and its subsidiaries are as follows:

Names of related parties	Nature of relationship
Huaneng Group	Ultimate parent company
HIPDC	Parent company
Xi'an Thermal and its subsidiaries	Subsidiaries of Huaneng Group
Huaneng Energy & Communications Holdings Co., Ltd. and its subsidiaries ("HEC" and its subsidiaries)	Subsidiaries of Huaneng Group
Huaneng New Energy Industrial Holding Limited Company ("Huaneng New Energy")	A subsidiary of Huaneng Group
Huaneng Guicheng Trust	A subsidiary of Huaneng Group
Huaneng Hulunbeier Energy Development Company Ltd. ("Hulunbeier Energy")	A subsidiary of Huaneng Group

The related parties of the Company and its subsidiaries that had transactions with the Company and its subsidiaries are as follows: (Cont'd)

Names of related parties	Nature of relationship
Hebei Huaneng Industrial Development Limited Liability Company	A subsidiary of Huaneng Group
Gansu Huating Coal and Power Co., Ltd.	A subsidiary of Huaneng Group
Inner Mongolia Power Fuel Co. Ltd.	A subsidiary of Huaneng Group
Huaneng Hainan Power Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Suzhou Thermoelectric Power Company Ltd.	A subsidiary of Huaneng Group
Huaneng Property Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Heilongjiang Power Generation Co., Ltd.	A subsidiary of Huaneng Group
Alltrust Insurance Company of China Limited	A subsidiary of Huaneng Group
Shandong Huaneng Power Generation Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Tibet Power Generation Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Wuhan Power Co., Ltd.	A subsidiary of Huaneng Group
North United Power Coal Transportation and Marketing Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Group Technology Innovation Center	A subsidiary of Huaneng Group
Huaneng Jinan Huangtai Power Generation Co., Ltd.	A subsidiary of Huaneng Group
Huaneng Chaohu Power Generation Co., Ltd	A subsidiary of Huaneng Group
Huaneng Yantai Wind Power Co. Ltd.	A subsidiary of Huaneng Group
Huaneng Dongying New Energy Co., Ltd. ("Dongying New Energy")	A subsidiary of Huaneng Group
Huaneng Shaanxi Qinling Power Co., Ltd	A subsidiary of Huaneng Group
Huaneng Clean Energy	A subsidiary of Huaneng Group
Huaneng Jilin Power Generation Co., Ltd.	A subsidiary of Huaneng Group

("Huaneng Jilin Company")

172

---

China Huaneng Group Fuel Co., Ltd	A subsidiary of Huaneng Group
Huaneng Ruijin Power Generation Co., Ltd.	A subsidiary of HIPDC
Rizhao Power Company	An associate of the Company
Huaneng Finance	An associate of the Company
Jinling CCGT	An associate of the Company
IGCC	An associate of the Company
Huaneng Sichuan Hydropower Co., Ltd.	An associate of the Company
Lime Company	An associate of a subsidiary
Shanghai Time Shipping	A jointly controlled entity of the Company
Government-related enterprises*	Related parties of the Company

- \* Huaneng Group is a state-owned enterprise. In accordance with the revised IAS 24, 'Related Party Disclosures', government-related enterprises, other than entities under Huaneng Group, which the PRC government has control, joint control or significant influence over are also considered as related parties of the Company and its subsidiaries ("other government enterprises").

The majority of the business activities of the Company and its subsidiaries are conducted with other government-related enterprises. For the purpose of the related party balances and transactions disclosure, the Company and its subsidiaries have established procedures to determine, to the extent possible, the identification of the ownership structure of its customers and suppliers as to whether they are government-related enterprises. However, many government-related enterprises have a multi-layered corporate structure and the ownership structures change over time as a result of transfers and privatization programs. Nevertheless, management believes that all material related party balances and transactions have been adequately disclosed.

In addition to the related party information shown elsewhere in these financial statements, the following is a summary of significant related party transactions entered into in the ordinary course of business between the Company and its subsidiaries and their related parties during the year and significant balances arising from related party transactions as at year end.

(a)	Related party balances			
	(i) Cash deposits in a related party			
	The Company and its subsidiaries		The Company	
	As at 31 December		As at 31 December	
	2011	2010	2011	2010
Deposits in Huaneng Finance				
– Savings deposit	2,272,799	1,774,738	723,227	416,736

For the year ended 31 December 2011, the annual interest rates for these savings deposits placed with Huaneng Finance ranged from 0.36% to 1.49% (2010: from 0.36% to 1.35%).

- (ii) As described in Notes 22 and 28, certain loans of the Company and its subsidiaries were borrowed from Huaneng Group, Huaneng Finance, Xi'an Thermal, Huaneng Clean Energy and Huaneng Guicheng Trust.



(iii) Except for a RMB100 million unsecured short-term loan to one of the associates with annual interest rate of 6.56% as at 31 December 2011, all other balances with Huaneng Group, HIPDC, subsidiaries, associates, jointly controlled entities and other related parties are unsecured, non-interest bearing and receivable/repayable within one year. As at and for the years ended 31 December 2011 and 2010, no provision is made on receivable balances from these parties.

Other receivables and assets comprised the following balances due from related parties:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Prepayments to associates	321,678	92,487	156,037	74,360
Prepayments to other related parties	3,266	6,802	—	2,248
Other receivables from subsidiaries	—	—	931,247	636,869
Other receivables from other related parties	143,402	211,904	900	—
Other receivables from Huaneng Group	37	—	37	—
<b>Total</b>	<b>468,383</b>	<b>311,193</b>	<b>1,088,221</b>	<b>713,477</b>

(iv) Accounts payable and other liabilities comprised the following balances due to related parties:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Due to Huaneng Group	1,445	1,894	—	—
Due to HIPDC	27,425	33,844	24,568	33,335
Due to subsidiaries	—	—	1,716,737	1,152,772
Due to associates	43,271	13,160	2,567	700
Due to a joint controlled entity	209,983	110,012	89,253	65,242
Due to other related parties	658,477	619,498	145,589	97,133
<b>Total</b>	<b>940,601</b>	<b>778,408</b>	<b>1,978,714</b>	<b>1,349,182</b>

(v) As at 31 December 2011, included in long-term loans (including current portion) and short-term loans are loans payable to other government-related enterprises amounting to RMB129,229 million (2010: RMB115,202 million).

The balances with government-related enterprises also included substantially all the accounts receivable of domestic power plants from government-related power grid companies, most of the bank deposits which placed in government-related financial institutions as well as accounts payables and other payables arising from the purchases of coal and property, plant and equipment construction and related labor employed with other government-related enterprises. Except for bank deposits, these

balances are unsecured, non-interest bearing and receivable/repayable within one year.

	(b) Related party transactions	
	For the year ended 31 December	
	2011	2010
<b>Huaneng Group</b>		
Interest expense on long-term loans	(36,220 )	(34,674 )
Acquisition of 30% equity interest in Hainan Nuclear Power	—	(174,000 )
Training fees	(37 )	—
<b>HIPDC</b>		
Service fees expenses on transmission and transformer facilities	(140,771 )	(140,771 )
Rental charge on land use rights of Huaneng Nanjing Power Plant	(1,334 )	(1,334 )
Rental charge on office building	(450 )	(9,267 )
<b>Huaneng Finance</b>		
Drawdown of short-term loans	4,115,000	605,000
Interest expense on short-term loans	(51,668 )	(17,714 )
Interest expense on long-term loans	(11,235 )	(11,355 )
<b>Huaneng New Energy</b>		
Interest expense on long-term loans	—	(3,922 )
Agency fee on CDM projects	(200 )	(700 )
<b>HEC and its subsidiaries</b>		
Purchase of coal and service fee occurred for transportation	(404,257 )	(1,995,787 )
Purchase of equipment	(204,207 )	(596,234 )
Acquisition of 50% equity interest in Shanghai Time Shipping	—	(1,058,000)
<b>Lime Company</b>		
Purchase of lime	(112,157 )	(104,636 )
<b>Xi'an Thermal and its subsidiaries</b>		
Technical services and industry-specific technological project contracting services obtained	(156,997 )	(207,779 )
Purchase of equipment	(47,499 )	(101,483 )
Drawdown of short-term loans	70,000	—
Interest expense on short-term loans	(2,197 )	—
<b>Hulunbeier Energy</b>		
Purchase of coal	(676,184 )	(839,462 )
<b>Rizhao Power Company</b>		
Purchase of coal	(2,119,430)	(2,079,342)
Sales of electricity	2,743	—
Purchase of materials	(44,084 )	(49,513 )
Purchase of electricity	(4,822 )	(4,443 )
Sales of coal	524,979	119,757
Rental charge on lease of certain property, plant and equipment	(13,337 )	—



	For the year ended 31 December	
	2011	2010
Huaneng Hainan Power Co., Ltd.		
Sales of coal	—	71,526
Huaneng Suzhou Thermoelectric Power Company Ltd.		
Sale of coal	70,338	90,593
Huaneng Wuhan Power Co., Ltd.		
Sales of coal	144,844	34,049
Huaneng Ruijin Power Generation Co., Ltd.		
Sale of coal	238,297	681,372
Huaneng Property Co., Ltd.		
Rental charge on office building	(96,485 )	(65,295 )
Hebei Huaneng Industrial Development Limited Liability Company		
Purchase of coal	—	(8,185 )
Inner Mongolia Power Fuel Co., Ltd.		
Purchase of coal	—	(68,666 )
North United Power Coal Transportation and Marketing Co., Ltd.		
Purchase of coal	(196,430 )	(21,755 )
Gansu Huating Coal and Power Co., Ltd.		
Purchase of coal	(2,364,518)	(1,463,619)
Huaneng Heilongjiang Power Generation Co., Ltd.		
Service fee relating to the purchase of equipment	—	(520 )
Huaneng Guicheng Trust		
Drawdown of short-term loans	4,500,000	3,180,000
Interest expense on short-term loans	(246,747 )	(55,150 )
Huaneng Jinan Huangtai Power Generation Co., Ltd.		
Purchase of power generation quota	—	(7,685 )
Alltrust Insurance Company of China Limited		
Premiums for property insurance	(158,937 )	(138,208 )
Huaneng Tibet Power Generation Co., Ltd.		
Purchase of vehicles	—	(2,118 )
Labor service	190	877
Huaneng Group Technology Innovation Center		
Technical services and industry-specific technological project contracting services obtained	(27,750 )	(47,210 )

	For the year ended 31 December	
	2011	2010
Shanghai Time Shipping Company*		
Purchase of coal	(93,290 )	—
Service fee paid for transportation	(1,618,548)	—
Huaneng Chaohu Power Generation Co., Ltd.		
Sale of coal	24,675	—
Huaneng Yantai Wind Power Co., Ltd.		
Sale of coal	29,892	—
China Huaneng Group Fuel Co., Ltd.		
Purchase of coal	(497,806 )	—
Dongying New Energy		
Sale of fuel	127	—
Advance from Dongying New Energy	2,942	—
Huaneng Shaanxi Qinling Power Co., Ltd.		
Purchase of capacity quota	(244,000 )	—
Huaneng Clean Energy.		
Drawdown of short-term loans	100,000	—
Interest expense on short-term loans	(1,257 )	—
Huaneng Jilin Company		
Transfer of 100% equity interest in Huaneng Jilin Biological Power Generation Limited company (“Jilin Biological Power”) **	106,303	—
Jinling CCGT		
Lending of short-term loans	(100,000 )	—
IGCC		
Advance from IGCC	1,310	—

\* In December 2010, the Company acquired 50% equity interest of Shanghai Time Shipping from HEC. As a result, transactions between the Company and Shanghai Time Shipping for the year ended 31 December 2011 were disclosed separately instead of included in transactions between the Company and HEC for the year ended 31 December 2010.

\*\* On 29 June 2011, the Company entered into the Jilin Biological Power Interest Transfer Agreement with Huaneng Jilin Company and Huaneng Group, pursuant to which the Company agreed to transfer its 100% interest in Jilin Biological Power to Huaneng Jilin Company for a consideration of RMB106.3 million. The disposal of Jilin Biological Power resulted a loss of RMB33.58 million.

In addition, during the year, the Company provides management service to certain power plants owned by Huaneng Group and HIPDC. The Company did not receive any management fee. At the same time, Shandong Huaneng Power Generation Co., Ltd. provided management services to certain branches and subsidiaries of the Company which located in Shandong Province. The Company did not pay any management fee for such arrangements.

#### Transactions with government-related enterprises

For the years ended 31 December 2011 and 2010, the Company and its domestic power subsidiaries sold substantially all their products to local government-related power grid companies. Please refer to Note 5 for details of sales information to major power grid companies. The Company and its domestic subsidiaries maintained most of its bank

deposits in government-related financial institutions while lenders of most of the Company and its subsidiaries' loans are also government-related financial institutions, associated with the respective interest income or interest expense incurred.

For the years ended 31 December 2011 and 2010, other collectively-significant transactions with government-related enterprises also included a large portion of fuel purchases, property, plant and equipment construction and related labor employed.

	(c)	Guarantees	
		2011	2010
(i) Long-term loans guaranteed by			
– Huaneng Group		631,733	964,995
– HIPDC		2,113,228	2,552,052
– Government-related enterprises		—	310,000
– Government-related bank		—	1,998,734
(ii) Long-term bonds guaranteed by			
– HIPDC		4,000,000	4,000,000
– Government-related banks		6,000,000	6,000,000

	(d)	Pre-tax benefits and social insurance of key management personnel	
		31st December	2010
		2011	2010
Salaries		7,272	7,579
Pension		1,033	1,039
Total		8,305	8,618

(e) Related party commitments

Related party commitments which were contracted but not recognized in balance sheet as at balance sheet dates are as follows:

	(i)	Capital commitments	
		2011	2010
Xi'an Thermal and its subsidiaries		91,906	77,895
HEC and its subsidiaries		159,168	207,571
		251,074	285,466

## (ii) Fuel purchase and transportation commitments

	As at 31 December	
	2011	2010
Time Shipping	15,040	480,698
Huaneng Group Fuel Company	5,777	—
HEC and its subsidiaries	50,519	891,749
Huating Coal and Power	618,572	—
North United Power	5,959	62,406
Inner Mongolia Power	—	65,320
Hulunbeier Energy	1,545,872	17,974
	2,241,739	1,518,147

## (iii) Operating lease commitments

	As at 31 December	
	2011	2010
HIPDC	49,365	114,392
Huaneng Property Co., Ltd.	61,251	21,765
	110,616	136,157

## 35. LABOR COST

Other than the salaries and staff welfare, the labor cost of the Company and its subsidiaries mainly comprises the following:

All PRC employees of the Company and its subsidiaries are entitled to a monthly pension upon their retirements. The PRC government is responsible for the pension liability to these employees on retirement. The Company and its subsidiaries are required to make contributions to the publicly administered retirement plan for their PRC employees at a specified rate, currently set at 14% to 22% (2010: 14% to 22%) of the basic salary of the PRC employees. The retirement plan contributions paid by the Company and its subsidiaries for the year ended 31 December 2011 were approximately RMB466 million (2010: RMB394 million), including approximately RMB448 million (2010: RMB382 million) charged to profit or loss.

In addition, the Company and its subsidiaries have also implemented a supplementary defined contribution retirement scheme for PRC employees. Under this scheme, the employees are required to make a specified contribution based on the number of years of service with the Company and its subsidiaries, and the Company and its subsidiaries are required to make a contribution equal to two to four times the employees' contributions. The employees will receive the total contributions upon their retirement. For the year ended 31 December 2011, the contributions to supplementary defined contribution retirement scheme paid by the Company and its subsidiaries amounted to approximately RMB135 million (2010: RMB114 million), including approximately RMB130 million (2010: RMB110 million) charged to profit or loss.

SinoSing Power and its subsidiaries in Singapore appropriate a specified rate, currently set at 5% to 16% (2010: 5% to 15%) of the basic salary to central provident funds in accordance with the local government regulations. The contributions paid by SinoSing Power and its subsidiaries for the year ended 31 December 2011 are approximately RMB18.91 million (2010: RMB11.98 million), which all charged to profit or loss.

The Company and its subsidiaries have no further obligation for post-retirement benefits beyond the annual contributions made above.

In addition, the Company and its subsidiaries also make contributions of housing funds and social insurance to the social security institutions at specified rates of the basic salary and no more than the upper limit. The housing funds and social insurance contributions paid by the Company and its subsidiaries were charged to the costs or expenses, the amounts of which for the year ended 31 December 2011 were approximately RMB332 million (2010: RMB276 million) and RMB355 million (2010: RMB301 million), respectively.

## 36. DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT' EMOLUMENTS

## (a) Pre-tax benefits and social insurance of directors and supervisors

The remuneration of every director and supervisor of the Company for the year ended 31 December 2011 is set out below:

Name of director	Fees	Basic Performance		Pension	Total
		salaries	salaries		
Mr. Cao Peixi	—	—	—	—	—
Mr. Huang Long	—	—	—	—	—
Mr. Wu Dawei 1	—	—	—	—	—
Mr. Li Shiqi 2	—	—	—	—	—
Mr. Huang Jian	—	—	—	—	—
Mr. Liu Guoyue	—	331	463	101	895
Mr. Fan Xi Xia	—	331	463	101	895
Mr. Shan Qunying	48	—	—	—	48
Mr. Xu Zujian	48	—	—	—	48
Ms. Huang Mingyuan	48	—	—	—	48
Mr. Liu Shuyuan	48	—	—	—	48
Mr. Liu Jipeng 1	40	—	—	—	40
Mr. Yu Ning 1	40	—	—	—	40
Mr. Shao Shiwei	74	—	—	—	74
Mr. Zheng Jianchao 1	40	—	—	—	40
Mr. Wu Liansheng	74	—	—	—	74
Mr. Li Zhensheng 2	40	—	—	—	40
Mr. Qi Yudong 2	40	—	—	—	40
Mr. Zhang Shouwen 2	40	—	—	—	40
Sub-total	580	662	926	202	2,370
Name of supervisor					
Mr. Guo Junming	—	—	—	—	—
Mr. Hao Tingwei 2	24	—	—	—	24
Ms. Zhang Mengjiao 2	—	—	—	—	—
Ms. Yu Ying 1	24	—	—	—	24
Ms. Wu Lihua 1	—	—	—	—	—
Mr. Gu Jianguo	48	—	—	—	48
Mr. Wang Zhaobin	—	109	330	84	523
Ms. Zhang Ling 4	—	45	136	35	216
Mr. Dai Xinmin 3	—	54	166	58	278
Sub-total	96	208	632	177	1,113
Total	676	870	1,558	379	3,483





The remuneration of every director and supervisor of the Company for the year ended 31 December 2010 is set out below:

Name of director	Fees	Basic Performance		Pension	Total
		salaries	salaries		
Mr. Cao Peixi	—	—	—	—	—
Mr. Huang Long	—	—	—	—	—
Mr. Wu Dawei	—	—	—	—	—
Mr. Huang Jian	—	—	—	—	—
Mr. Liu Guoyue	—	284	512	99	895
Mr. Fan Xi Xia	—	284	512	99	895
Mr. Shan Qunying	48	—	—	—	48
Mr. Xu Zujian	48	—	—	—	48
Ms. Huang Mingyuan	48	—	—	—	48
Mr. Liu Shuyuan	48	—	—	—	48
Mr. Liu Jipeng	74	—	—	—	74
Mr. Yu Ning	74	—	—	—	74
Mr. Shao Shiwei	74	—	—	—	74
Mr. Zheng Jianchao	74	—	—	—	74
Mr. Wu Liansheng	74	—	—	—	74
Sub-total	562	568	1,024	198	2,352
Name of supervisor					
Mr. Guo Junming	—	—	—	—	—
Ms. Yu Ying	48	—	—	—	48
Ms. Wu Lihua	—	—	—	—	—
Mr. Gu Jianguo	48	—	—	—	48
Mr. Wang Zhaobin	—	126	393	80	599
Mr. Dai Xinmin	—	124	393	80	597
Sub-total	96	250	786	160	1,292
Total	658	818	1,810	358	3,644

1 Retired on 17 May 2011.

2 Appointed on 17 May 2011.

3 Mr. Dai Xinmin resigned from the capacity of supervisor on 3 August 2011.

4 Appointed on 3 August 2011.

During the year, no option was granted to the directors or the supervisors (2010: nil).



During the year, no emolument was paid to the directors or the supervisors (including the five highest paid employees) as an inducement to join or upon joining the Company or as compensation for loss of office (2010: nil).

No director or supervisor had waived or agreed to waive any emoluments during the years 2011 and 2010.

(b) Five highest paid individuals

The five individuals whose emoluments were the highest in the Company and its subsidiaries for the year include two (2010: two) directors whose emoluments are reflected in the analysis presented above. The emoluments payable to the remaining three (2010: three) individuals during the year (fell within the range of nil to RMB1 million) are as follows:

	For the year ended 31 December	
	2011	2010
Basic salaries	844	880
Performance salaries	1,181	1,089
Pension	279	267
	2,304	2,236

37. COMMITMENTS

(a) Capital and operational commitments

(i) Commitments mainly relate to the construction of new power projects, certain ancillary facilities and renovation projects for existing power plants and the purchases of coal. Details of such commitments are as follows:

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Contracted but not provided for				
– purchase of inventories	16,105,660	13,107,284	7,090,991	3,123,529
– construction	18,355,294	23,893,570	2,160,554	3,263,249
Sub-total	34,460,954	37,000,854	9,251,545	6,386,778
Authorized but not contracted for				
– construction	196,394	124,784	168,310	10,752
Total	34,657,348	37,125,638	9,419,855	6,397,530

(ii) The Company and its subsidiaries have entered into various long-term fuel supply agreements with various suppliers in securing fuel supply for various periods up to 2028. All the agreements require minimum volume purchases and subject to certain termination provisions. Related purchase commitments are as follows:

	Estimated Periods	The Company and its subsidiaries					
		2011			2010		
		Purchase quantities	Estimated unit costs (RMB)		Purchase quantities	Estimated unit costs (RMB)	
A government-related enterprise	2011 – 2023	486.9 million M3/year	1.63/m	3	486.9 million M3/year	1.63/m	3
Other suppliers	2011 – 2013	175.1 Billion	100,000/BBtu		175.1 BBtu/day	100,000/BBtu	
		British Thermal Unit (“BBtu”)/day					
	2014	90.0 BBtu/day	100,000/BBtu*		82.5 BBtu/day	100,000/BBtu*	
	2015 – 2023	72.4 BBtu/day	*		64.9 BBtu/day	*	
	2024 – 2028	49.9 BBtu/day	*		42.4 BBtu/day	*	
		*	BBtu 10				

\* As the Company and its subsidiaries are not required to commit purchases of one of the contracts until 2014, no unit cost information available for daily purchase quantities of 72.4 BBtu and 72.4 BBtu and 49.9 BBtu during respective period categories of 2014, 2015 – 2023 and 2024 – 2028.

For the year ended 31 December 2011, annual purchases from the government- related enterprise and other suppliers above amounted to RMB1,150 million (2010: RMB738 million) and RMB7,600 million (2010: RMB5,692 million), respectively.

As at 31 December 2011 and 2010, there is no long-term commitment at Company level.

(b) Operating lease commitments

The Company has various operating lease arrangements for land and buildings. Some of the leases contain renewal options and most of the leases contain escalation clauses. Lease terms do not contain restrictions on the Company’s activities concerning dividends, additional debts or further leasing.

Total future minimum lease payments under non-cancelable operating leases are as follows:

	As at 31 December	
	2011	2010
Land and buildings		
– not later than 1 year	72,874	14,566
– later than 1 year and not later than 2 years	32,099	15,013
– later than 2 years and not later than 5 years	78,555	56,548
– later than 5 years	1,091,400	790,899
	1,274,928	877,026

In addition, in accordance with a 30-year operating lease agreement signed by Huaneng Dezhou Power Plant (“Dezhou Power Plant”) and Shandong Land Bureau for the land occupied by Dezhou Power Plant Phases I and II in June 1994, annual rental amounted to approximately RMB30 million effective from June 1994 and is subject to revision at the end of the fifth year from the contract date. Thereafter, the annual rental is subject to revision once every three years. The increment for each rental revision is restricted to no more than 30% of the previous annual rental amount. For the years ended 31 December 2011 and 2010, the annual rentals both were approximately RMB34 million.

### 38. FINANCIAL GUARANTEES

	The Company and its subsidiaries As at 31 December		The Company As at 31 December	
	2011	2010	2011	2010
Financial guarantees				
– granted to a subsidiary	—	—	14,609,962	15,652,617

Based on historical experience, no claims have been made against the Company since the dates of granting the financial guarantees described above.

### 39. MATERIAL BUSINESS COMBINATIONS

#### 2011 Business Combinations

In January 2011, the Company acquired 100% equity interest of Diandong Energy, 100% equity interest of Diandong Yuwang, 58.30% equity interest of Luoyuanwan Pier, 60.25% equity interest of Luoyuanwan Harbour and 73.46% equity interest of Ludao Pier from Shandong Power, and 39.75% equity interest of Luoyuanwan Harbour from Shandong Luneng Development Group Company Limited (“Luneng Development”). Both Shandong Power and Luneng Development are government-related enterprises.

The aggregate cash considerations of the above acquisitions amounted to RMB7,465.13 million.

In addition, the Company also acquired the remaining 26.54% equity interest of Ludao Pier from the non-controlling shareholders at a consideration of RMB65 million in January 2011.



The acquisition reflects the Company's implementation of its development strategy which focuses on both green-field development and acquisition. Upon completion of the acquisitions above, the Company also further strengthened its coastal port operations and expanded the geographical coverage to Yunnan Province.

Fair value of total consideration transferred is as follows:

Purchase consideration:

– Cash consideration	7,530,127
----------------------	-----------

Acquisition-related costs of RMB5.71 million have been charged to the profit or loss for the year ended 31 December 2010.

In December 2011, the Company acquired 100% equity interest of Enshi Hydropower from Beijing Ance Hengxing Investment Limited Company, Zhuhai Jingyang Investment Limited Company, Wu Songling and Fang Xiaogui.

Fair value of total consideration transferred is as follows:

Purchase consideration:

– Cash consideration	227,000
----------------------	---------

Acquisition-related cost of RMB0.32 million have been charged to the profit or loss for the year ended 31 December 2011.

Upon completion of the acquisition, the Company further expanded the geographical coverage of hydropower to Hubei Province.

The fair values of assets and liabilities arising from the acquisitions of Diandong Yuwang, Diandong Energy, Luoyuanwan Pier, Luoyuanwan Harbour, Ludao Pier and Enshi Hydropower and proportionate share of acquiree's net assets by non-controlling interests on respective acquisition dates are as follows:

	Diandong Yuwang	Diandong Energy	Luoyuanwan Pier	Luoyuanwan Harbour	Ludao Pier	Enshi Hydropower	Total
Cash and cash equivalents	69,313	186,480	1,724	38,021	880	52,113	348,531
Property, plant and equipment	5,523,233	10,649,705	193,513	1,462,089	161,932	332,433	18,322,905
Land use rights	—	246,333	54,341	68,007	28,501	—	397,182
Mining rights*	278,318	1,644,337	—	—	—	—	1,922,655
Other non-current assets	312	141	332	690,081	12,007	—	702,873
Inventories	168,729	401,523	321	10,570	78	—	581,221
Receivables and other assets	329,426	587,284	35,639	137,402	54,595	14,608	1,158,954
Payables and other liabilities	(604,743 )	(1,020,057 )	(18,397 )	(815,517 )	(7,095 )	(42,763 )	(2,508,572 )
Salary and welfare payables	(2,761 )	(5,516 )	(24 )	(547 )	(738 )	—	(9,586 )
Borrowings	(4,546,000)	(9,225,000)	(100,798 )	(713,721 )	(2,200 )	(262,150 )	(14,849,869)

Deferred income tax liabilities	(29,571 )	(260,728 )	(12,961 )	(61,175 )	(12,655 )	(1,994 )	(379,084 )
Total identifiable net assets	1,186,256	3,204,502	153,690	815,210	235,305	92,247	5,687,210
Non-controlling interests	—	—	(64,089 )	—	—	—	(64,089 )
Goodwill	414,407	1,197,574	28,693	309,270	49,309	134,753	2,134,006
Consideration	1,600,663	4,402,076	118,294	1,124,480	284,614	227,000	7,757,127

\*The mining rights are related to coal mining operations of Diandong Yuwang and Diandong Energy. As the coal mines are still under construction, no amortization was provided for the year ended 31 December 2011.



Goodwill arising from the acquisitions is attributable to the economies of scale and significant synergies expected to arise after the acquisitions of the Company on the equity interests in the subsidiaries stated above. None of the goodwill recognised is expected to be deductible for income tax purposes.

The fair value of receivables and other assets includes accounts receivables and other receivables of RMB669 million and RMB459 million, respectively. The gross contractual amounts of accounts receivables and other receivables are RMB672 million and RMB461 million, respectively. Management estimated accounts receivables of RMB669 million and other receivables of RMB459 million to be collectible.

The revenue included in the consolidated statement of comprehensive income since acquisition dates contributed by acquisitions above was RMB5,006.86 million. These acquisitions above also contributed a net loss of RMB681.75 million over the same periods.

Had the acquisitions above been consolidated from 1 January 2011, the consolidated statement of comprehensive income would show unaudited revenue of RMB133,432.97 million and unaudited net profit of RMB1,177.85 million.

#### 2010 Business Combinations

In December 2010, the Company acquired 100% equity interest of Zhanhua Cogeneration, 100% equity interest of Jilin Biological Power, 100% equity interest of Qingdao Port and 53% equity interest of Hualu Sea Transportation from Shandong Power, a government-related enterprise, at a consideration of RMB1,159.874 million.

The acquisition reflects the Company's implementation of its development strategy which focuses on both green-field development and acquisition. Upon completion of the acquisition, the operation scale and geographical coverage of the Company were expanded, and the acquisition achieved the combined synergy effect from the facilities of power and harbour.

Fair value of total consideration transferred is as follows:

Purchase consideration:

– Cash paid	1,159,874
-------------	-----------

Acquisition-related costs of RMB0.89 million have been charged to the profit or loss for the year ended 31 December 2010.

The fair values of assets and liabilities arising from the acquisitions of Zhanhua Cogeneration, Hualu Sea Transportation, Qingdao Port and Jilin Biological Power and proportionate share of acquiree's net assets by non-controlling interests on respective acquisition dates are as follows:

	Zhanhua Cogeneration	Hualu Sea Transportation	Qingdao Port	Jilin Biological Power	Total
Cash and cash equivalents	8,439	25,778	31,754	24,553	90,524
Property, plant and equipment	1,152,894	283,322	584,021	293,287	2,313,524
Land use rights	203,249	3,735	35,455	31,152	273,591
Other non-current assets	—	—	214	136	350
Inventories	28,110	3,969	—	7	32,086
Receivables	97,085	8,846	3,526	5,705	115,162
Payables	(354,737 )	(66,596 )	(179,132 )	(46,115 )	(646,580 )
Salary and welfare payables	(2,022 )	(4,242 )	(556 )	(1 )	(6,821 )
Borrowings	(950,000 )	(20,000 )	(110,000 )	(200,000 )	(1,280,000)
Deferred income tax liabilities	(66,624 )	(6,542 )	(16,320 )	(3,169 )	(92,655 )
Total identifiable net assets	116,394	228,270	348,962	105,555	799,181
Non-controlling interests	—	(107,287 )	—	—	(107,287 )
Goodwill (Note 14)	291,734	34,913	107,002	34,331	467,980
Consideration	408,128	155,896	455,964	139,886	1,159,874

Goodwill arising from the acquisitions is attributable to the economies of scale and significant synergies expected to arise after the acquisitions of the Company on the equity interests in the subsidiaries stated above. None of the goodwill recognised is expected to be deductible for income tax purposes.

The fair value of receivables amounting to RMB115 million includes accounts receivables and other receivables which equal to their respective gross contractual amounts.

The revenue included in the consolidated statement of comprehensive income since acquisition dates contributed by above acquisitions was RMB77.92 million. The acquisitions above also contributed a net loss of RMB18.45 million over the same periods.

Should the acquisitions above had occurred on 1 January 2010, the consolidated statement of comprehensive income would show unaudited revenue of RMB105,009.91 million and unaudited profit of RMB3,219.29 million.

40.

CONTINGENT LIABILITY

As at 31 December 2011, Luoyuanwan Harbour, a subsidiary of the Company was involved in a pending lawsuit. Luoyuanwan Harbour entered into an assets transfer agreement with a consideration of RMB96 million in prior year, pursuant to which Luoyuanwan Harbour has paid RMB76.20 million. Due to disputes on the fulfilment of the agreement by the counterparty, the remaining consideration was not paid by 31 December 2011. The counterparty filed a lawsuit in October 2011 claiming the default by Luoyuanwan Harbour and a compensation approximated to RMB37.33 million. Luoyuanwan Harbour filed a counterclaim in December 2011 claiming a compensation of RMB57.82 million for the default of counterparty, which was accepted by the court. There had been no further progress on this pending lawsuit as at the date of these financial statements being approved for publication. As at 31 December 2011, the remaining consideration of RMB19.80 million was accrued according to the original contract, management considered no additional liability be required as at 31 December 2011. Meanwhile, the compensation claimed on the counterparty was not recognised in these financial statements as there in no final decision made by the court.

41.

SUBSEQUENT EVENT

The Company issued unsecured non-public debt financing instrument amounting to RMB5 billion bearing annual interest rate of 5.24% on 5 January 2012. Such a debt financing instrument is denominated in RMB and issued at face value with maturity period of 3 years.

189

---

Auditor's Report

PwC ZT Shen Zi (2012) No. 10060  
(Page 1 of 2)

To the Shareholders of Huaneng Power International, Inc.

We have audited the accompanying financial statements of Huaneng Power International, Inc. (hereinafter referred to as "Huaneng Power"), which comprise the consolidated and company balance sheets as at 31 December 2011, and the consolidated and company income statements, the consolidated and company cash flow statements and the consolidated and company statements of changes in shareholders' equity for the year then ended, and the notes to the financial statements.

Management's Responsibility for the Financial Statements

Management of Huaneng Power is responsible for the preparation and fair presentation of these financial statements. This responsibility includes:

- (1) preparing and fairly presenting these financial statements in accordance with the requirements of Accounting Standards for Business Enterprises;
- (2) designing, implementing and maintaining internal control relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with China Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

PricewaterhouseCoopers Zhong Tian CPAs Limited Company  
11th Floor PricewaterhouseCoopers Center, 2 Corporate Avenue, 202 Hubin Road, Huangpu District, Shanghai  
200021, PRC  
Telephone: +86 (21) 2323 8888, Fax: +86 (21) 2323 8800, www.pwccn.com



An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated and company's financial position of Huaneng Power as at 31 December 2011, and the consolidated and company's financial performance and cash flows of Huaneng Power then ended in accordance with the requirements of Accounting Standards for Business Enterprises.

PricewaterhouseCoopers  
Zhong Tian CPAs Limited Company

Certified Public Accountant  
Wang Binhong

Certified Public Accountant  
Bi Weiduo

Shanghai, the People's Republic of China  
20 March 2012

Balance Sheets  
AS AT 31 DECEMBER 2011  
(Prepared in accordance with PRC Accounting Standards)  
(All amounts are stated in RMB Yuan unless otherwise stated)

ASSETS	Note	31 December 2011 Consolidated	31 December 2010 Consolidated	31 December 2011 The Company	31 December 2010 The Company
<b>CURRENT ASSETS</b>					
Cash	5(1)	8,670,015,351	9,547,908,196	2,573,365,328	5,019,591,960
Held for trading financial assets	5(2)	96,153,714	—	—	—
Derivative financial assets	5(3)	147,454,606	132,632,360	—	—
Notes receivable	5(4)	563,362,128	636,542,203	225,741,000	139,100,000
Accounts receivable	5(5), 16(1)	14,814,481,187	10,272,593,414	6,542,467,342	5,186,802,524
Advances to suppliers	5(6)	1,032,244,694	1,228,515,418	437,028,637	733,871,421
Interest receivable		17,055	730,355	59,076,153	15,717,765
Dividends receivable		120,118,393	—	270,469,817	78,749,891
Other receivables	5(7), 16(2)	1,124,369,060	1,602,901,561	1,074,031,200	1,224,281,138
Inventories	5(8)	7,525,620,585	5,190,435,156	2,698,250,835	2,370,069,662
Current portion of non-current assets		22,060,607	101,332,688	—	—
Other current assets		288,152,533	80,988,696	21,496,449,607	11,443,740,480
<b>Total current assets</b>		<b>34,404,049,913</b>	<b>28,794,580,047</b>	<b>35,376,879,919</b>	<b>26,211,924,841</b>
<b>NON-CURRENT ASSETS</b>					
Available-for-sale financial assets	5(9)	1,638,080,010	1,949,727,308	1,638,080,010	1,949,727,308
Derivative financial assets	5(3)	16,388,824	91,478,179	—	—
Long-term receivables	5(10)	741,661,065	709,559,946	—	—
Long-term equity investments	5(11), 16(3)	14,007,554,075	11,982,633,334	51,190,478,585	37,980,576,504
Fixed assets	5(12)	154,808,020,444	123,653,446,684	62,437,021,340	59,984,014,231
Fixed assets pending for disposal		152,812,410	86,995,876	147,569	134,382
Construction-in-progress	5(13)	22,165,329,147	26,243,063,527	4,181,881,103	7,400,043,092
Construction materials	5(14)	1,766,051,584	6,014,979,607	534,119,398	877,057,893
Intangible assets	5(15)	10,207,157,254	7,507,217,342	1,732,220,055	1,734,780,533
Goodwill	5(16)	13,204,814,510	11,955,539,690	1,528,308	1,528,308
Long-term deferred expenses		181,682,253	154,269,928	15,753,076	17,409,507
Deferred income tax assets	5(17)	710,570,973	867,182,843	508,171,670	551,491,094
Other non-current assets		361,220,844	3,942,073,515	1,600,000,000	13,194,773,515
<b>Total non-current assets</b>		<b>219,961,343,393</b>	<b>195,158,167,779</b>	<b>123,839,401,114</b>	<b>123,691,536,367</b>
<b>TOTAL ASSETS</b>		<b>254,365,393,306</b>	<b>223,952,747,826</b>	<b>159,216,281,033</b>	<b>149,903,461,208</b>





LIABILITIES AND SHAREHOLDERS' EQUITY	Note	31 December 2011 Consolidated	31 December 2010 Consolidated	31 December 2011 The Company	31 December 2010 The Company
<b>CURRENT LIABILITIES</b>					
Short-term loans	5(19)	43,979,199,571	44,047,183,998	32,490,610,961	32,993,183,998
Derivative financial liabilities	5(3)	35,549,369	86,611,751	—	—
Notes payable	5(20)	13,448,478	75,351,966	—	—
Accounts payable	5(21)	9,109,088,804	5,339,792,472	3,718,397,512	2,474,977,708
Advance from customers		130,843,059	137,725,313	76,879,309	80,818,682
Salary and welfare payables	5(22)	230,282,614	271,061,620	74,683,254	107,683,839
Taxes payable	5(23)	(994,750,037 )	(2,017,347,239 )	(164,381,080 )	(511,030,143 )
Interest payable		687,427,070	577,022,852	466,054,266	393,938,533
Dividends payable	5(24)	167,642,811	79,680,686	—	—
Other payables	5(25)	14,662,402,253	12,237,135,183	4,400,801,216	3,756,247,664
Current portion of non-current liabilities	5(26)	15,136,362,344	13,782,550,038	10,681,701,010	8,766,245,204
Other current liabilities	5(27)	10,607,357,125	5,439,065,424	10,484,963,250	5,319,960,363
<b>Total current liabilities</b>		<b>93,764,853,461</b>	<b>80,055,834,064</b>	<b>62,229,709,698</b>	<b>53,382,025,848</b>
<b>NON-CURRENT LIABILITIES</b>					
Long-term loans	5(28)	79,844,871,588	65,184,902,502	28,329,925,513	29,739,135,701
Derivative financial liabilities	5(3)	578,198,363	95,862,772	202,333,367	82,158,243
Bonds payable	5(29)	17,854,919,373	13,831,150,101	17,854,919,373	13,831,150,101
Long-term payables		143,622,017	83,223,484	—	—
Specific accounts payable		41,202,995	2,702,264	18,689,013	2,702,264
Deferred income tax liabilities	5(17)	1,736,906,829	1,605,716,163	—	—
Other non-current liabilities	5(30)	2,240,956,555	2,234,140,427	2,051,653,173	2,106,288,138
<b>Total non-current liabilities</b>		<b>102,440,677,720</b>	<b>83,037,697,713</b>	<b>48,457,520,439</b>	<b>45,761,434,447</b>
<b>TOTAL LIABILITIES</b>		<b>196,205,531,181</b>	<b>163,093,531,777</b>	<b>110,687,230,137</b>	<b>99,143,460,295</b>
<b>SHAREHOLDERS' EQUITY</b>					
Share capital	5(31)	14,055,383,440	14,055,383,440	14,055,383,440	14,055,383,440
Capital surplus	5(32)	17,131,948,418	17,746,199,069	15,513,437,604	15,803,068,930
Special reserves		27,021,275	12,797,793	27,021,275	12,797,793
Surplus reserves	5(33)	7,060,094,409	7,004,875,161	7,060,094,409	7,004,875,161
Undistributed profits	5(34)	12,371,789,519	13,978,608,875	11,873,114,168	13,883,875,589
Currency translation differences		(570,973,401 )	93,404,864	—	—

Shareholder's equity attributable to shareholders of the Company		50,075,263,660	52,891,269,202	48,529,050,896	50,760,000,913
Minority interests	5(35)	8,084,598,465	7,967,946,847	————	————
<b>TOTAL SHAREHOLDERS' EQUITY</b>		<b>58,159,862,125</b>	<b>60,859,216,049</b>	<b>48,529,050,896</b>	<b>50,760,000,913</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>		<b>254,365,393,306</b>	<b>223,952,747,826</b>	<b>159,216,281,033</b>	<b>149,903,461,208</b>

The accompanying notes form an integral part of these financial statements.

Legal representative:  
Cao Peixi

Person in charge of  
accounting function:  
Zhou Hui

Person in charge of  
accounting department:  
Huang Lixin

Income Statements  
FOR THE YEAR ENDED 31 DECEMBER 2011  
(Prepared in accordance with PRC Accounting Standards)  
(All amounts are stated in RMB Yuan unless otherwise stated)

	Note	For the year ended 31 December			
		2011 Consolidated	2010 Consolidated	2011 The Company	2010 The Company
1. Operating revenue	5(36), 16(4)	133,420,768,944	104,307,701,910	59,366,760,975	52,878,515,494
Less: Operating cost	5(36), 16(4)	(121,816,767,862)	(92,818,451,828 )	(53,790,541,061 )	(46,962,094,588 )
Tax and levies on operations	5(37)	(484,018,981 )	(147,641,203 )	(313,176,945 )	(50,731,857 )
Selling expenses		(9,095,133 )	(4,007,471 )	—	—
General and administrative expenses	5(38)	(2,916,160,374 )	(2,724,475,373 )	(1,799,322,317 )	
Financial expenses, net	5(39)	(7,493,529,355 )	(5,105,559,276 )	(3,517,657,335 )	
Assets impairment loss	5(40)	(365,124,935 )	(29,271,676 )	(408,127,300 )	
(Loss)/Gain from changes in fair value		(727,268 )	11,850,976	—	—
Add: Investment income	5(41), 16(5)	803,921,549	632,062,946	1,077,067,819	1,010,241,118
Including: investment income from associates and jointly controlled entities		660,462,038	572,049,715	658,911,688	570,036,402
2. Operating profit		1,139,266,585	4,122,209,005	615,003,836	2,416,824,801
Add: Non-operating income	5(42)	1,377,797,055	564,992,494	476,839,648	236,363,378
Less: Non-operating expenses	5(43)	(168,920,821 )	(93,777,590 )	(81,454,929 )	(75,267,919 )
Including: loss on disposal of non-current assets		(47,041,581 )	(50,498,367 )	(6,654,940 )	(47,715,543 )
3. Profit before taxation		2,348,142,819	4,593,423,909	1,010,388,555	2,577,920,260
Less:	5(44)	(983,883,560 )	(913,095,748 )	(158,846,868 )	(198,223,963 )

Income tax expense					
4. Net profit		1,364,259,259	3,680,328,161	851,541,687	2,379,696,297
Attributable to:					
Shareholders of the Company		1,268,245,238	3,544,304,422	851,541,687	2,379,696,297
Minority interests		96,014,021	136,023,739	—	—
Earnings per share (based on the net profit attributable to shareholders of the					
5. Company)					
Basic earnings per share	5(45)	0.09	0.29	N/A	N/A
Diluted earnings per share	5(45)	0.09	0.29	N/A	N/A
Other comprehensive					
6. (loss)/income	5(46), 16(6)	(1,353,787,617 )	51,261,727	(368,793,964 )	(385,339,472 )
Total comprehensive					
7. (loss)/income		10,471,642	3,731,589,888	482,747,723	1,994,356,825
Attributable to					
— Shareholders of the Company		(84,175,500 )	3,593,368,034	482,747,723	1,994,356,825
— Minority interests		94,647,142	138,221,854	—	—

The accompanying notes form an integral part of these financial statements.

Legal representative:  
Cao Peixi

Person in charge of  
accounting function:  
Zhou Hui

Person in charge of  
accounting department:  
Huang Lixin

## Cash Flow Statements

FOR THE YEAR ENDED 31 DECEMBER 2011

(Prepared in accordance with PRC Accounting Standards)

(All amounts are stated in RMB Yuan unless otherwise stated)

Items	Note	For the year ended 31 December			
		2011 Consolidated	2010 Consolidated	2011 The Company	2010 The Company
Cash flows generated from operating activities					
1. Cash received from sales of goods and services rendered		145,161,067,835	117,893,857,118	67,533,264,559	61,787,741,597
Cash received from return of taxes and fees		95,709,637	29,782,911	—	—
Other cash received relating to operating activities	5(47)	1,759,582,274	691,974,821	592,176,861	325,436,140
Sub-total of cash inflows of operating activities		147,016,359,746	118,615,614,850	68,125,441,420	62,113,177,737
Cash paid for goods and services received		(115,106,590,675)	(90,289,496,886)	(53,438,017,867)	(47,010,149,906)
Cash paid to and on behalf of employees including salary, social welfare, education funds and others in such manner		(4,868,706,814)	(4,196,858,027)	(2,740,274,704)	(2,545,445,056)
Payments of all types of taxes		(5,052,460,973)	(5,137,943,604)	(2,643,353,693)	(2,934,324,528)
Other cash paid relating to operating activities	5(47)	(1,039,446,294)	(924,591,549)	(450,837,352)	(493,789,276)

Sub-total of cash outflows of operating activities		(126,067,204,756)	(100,548,890,066)	(59,272,483,616)	(52,983,708,766)
Net cash flows generated from operating activities	5(48), 16(7)	20,949,154,990	18,066,724,784	8,852,957,804	9,129,468,971
Cash flows generated from investing activities					
2. Cash received from disposal of a subsidiary		104,258,357	—	106,303,200	—
Cash received on investment income		447,654,442	315,205,230	1,878,335,845	1,536,036,378
Net cash received from disposals of fixed assets, intangible assets and other long-term assets		85,600,618	105,816,046	47,608,114	35,764,073
Other cash received relating to investing activities	5(47)	68,110,507	38,145,817	—	—
Sub-total of cash inflows of investing activities		705,623,924	459,167,093	2,032,247,159	1,571,800,451
Cash paid to acquire fixed assets, intangible assets and other long-term assets	5(48)	(16,788,659,327 )	(20,731,717,336 )	(3,319,932,057 )	(7,080,125,322 )
Cash paid for investments		(1,809,760,622 )	(880,985,089 )	(11,746,264,310)	(13,444,893,096)
Net cash paid to acquire subsidiaries and other operating units		(3,772,034,546 )	(5,827,002,912 )	—	—
Sub-total of cash outflows of		(22,370,454,495 )	(27,439,705,337 )	(15,066,196,367)	(20,525,018,418)

investing  
activities

Net cash flows  
used in investing  
activities

(21,664,830,571 ) (26,980,538,244 ) (13,033,949,208) (18,953,217,967)

Items	Note	For the year ended 31 December			
		2011 Consolidated	2010 Consolidated	2011 The Company	2010 The Company
Cash flows generated from					
3. financing activities					
Cash received from investments		219,214,600	10,563,689,768	—	10,280,169,168
Including: cash received from minority shareholders of subsidiaries		219,214,600	283,520,600	—	—
Cash received from borrowings		86,395,238,695	72,405,806,430	64,229,183,998	57,648,426,200
Cash received from issuing long-term bonds and short-term bonds		14,944,600,000	9,959,850,000	14,944,600,000	9,959,850,000
Other cash received relating to financing activities	5(47)	229,429,000	291,869,671	170,189,000	282,819,670
Sub-total of cash inflows of financing activities		101,788,482,295	93,221,215,869	79,343,972,998	78,171,265,038
Repayments of borrowings		(90,494,384,648 )	(71,293,460,782 )	(69,967,354,093 )	(58,182,743,791 )
Repayment for dividends, profit appropriation or interest expense payments		(11,072,171,475 )	(8,774,395,586 )	(7,479,012,641 )	(6,416,758,893 )
Including: dividends paid to Minority shareholders of subsidiaries		(120,129,376 )	(249,043,480 )	—	—
Other cash paid relating to financing activities	5(47)	(152,278,298 )	(90,035,783 )	(143,531,370 )	(65,700,840 )
Sub-total of cash outflows of		(101,718,834,421 )	(80,157,892,151 )	(77,589,898,104 )	(64,665,203,524 )



## financing activities

Net cash flows generated from financing activities				
	69,647,874	13,063,323,718	1,754,074,894	13,506,061,514
Effect of foreign exchange rate				
4. changes on cash	(227,627,571 )	49,945,605	(13,317,179 )	(15,178,007 )
Net (decrease)/increase				
5. in cash	5(48), 16(7) (873,655,278 )	4,199,455,863	(2,440,233,689 )	3,667,134,511
Add: Cash at beginning of the year				
	9,426,437,511	5,226,981,648	4,943,416,847	1,276,282,336
Cash at end of the				
6. year	8,552,782,233	9,426,437,511	2,503,183,158	4,943,416,847

The accompanying notes form an integral part of these financial statements.

Legal representative:  
Cao Peixi

Person in charge of  
accounting function:  
Zhou Hui

Person in charge of  
accounting department:  
Huang Lixin

## Consolidated Statement of Changes in Equity

FOR THE YEAR ENDED 31 DECEMBER 2011

(Prepared in accordance with PRC Accounting Standards)

(All amounts are stated in RMB Yuan unless otherwise stated)

Items	Note	Attributable to shareholders of the Company					
		Share capital	Capital surplus	Special reserves	Surplus reserves	Undistributed profits	Currency translation differences
Balance as at 1 January 2010		12,055,383,440	9,349,129,414	—	6,142,345,063	13,830,728,702	(362,067,301)
Changes for the year ended 31 December 2010							
Net profit		—	—	—	—	3,544,304,422	—
Other comprehensive income	5(46)	—	(406,408,553)	—	—	—	455,472,165
Capital injection by shareholders		2,000,000,000	8,795,280,497	—	—	—	—
Acquisition of subsidiaries		—	—	—	—	—	—
Profit appropriation							
Transfer to surplus reserves	5(33)	—	—	—	862,530,098	(862,530,098)	—
Dividends payable to shareholders		—	—	—	—	(2,528,049,674)	—
Others		—	—	—	—	(5,844,477)	—
Special reserves		—	—	12,797,793	—	—	—
Others		—	8,197,711	—	—	—	—
Balance as at 31 December 2010		14,055,383,440	17,746,199,069	12,797,793	7,004,875,161	13,978,608,875	93,404,864
Balance as at 1 January 2011		14,055,383,440	17,746,199,069	12,797,793	7,004,875,161	13,978,608,875	93,404,864

Changes for the  
year ended 31  
December 2011

Net profit	—	—	—	—	1,268,245,238	—	
Other comprehensive loss	5(46)	—	(688,042,473 )	—	—	(664,378,265)	
Capital injection by shareholders	5(31)	—	79,162,638	—	—	—	
Acquisition of subsidiaries	—	—	—	—	—	—	
Acquisition of minority interests	—	—	(5,370,816 )	—	—	(1,002,896 )	
Profit appropriation	—	—	—	—	—	—	
Transfer to surplus reserves	5(33)	—	—	—	55,219,248	(55,219,248 )	
Dividends payable to shareholders	5(34)	—	—	—	—	(2,807,083,860 )	
Others	—	—	—	—	—	(7,755,616 )	
Special reserves	—	—	—	14,223,482	—	—	
Others	—	—	—	—	—	(4,002,974 )	
Balance as at 31 December 2011		14,055,383,440	17,131,948,418	27,021,275	7,060,094,409	12,371,789,519	(570,973,401)

The accompanying notes form an integral part of these financial statements.

Legal representative:  
Cao Peixi

Person in charge of  
accounting function:  
Zhou Hui

Person in charge of  
accounting department:  
Huang Lixin

Statement of Changes in Equity  
FOR THE YEAR ENDED 31 DECEMBER 2011  
(Prepared in accordance with PRC Accounting Standards)  
(All amounts are stated in RMB Yuan unless otherwise stated)

Items	Note	Share capital	Capital surplus	Special reserves	Surplus reserves	Undistributed profits	Total shareholder equity
Balance as at 1 January 2010		12,055,383,440	7,376,680,693	—	6,142,345,063	14,894,759,064	40,469,168,260
Changes for the year ended 31 December 2010							
Net profit		—	—	—	—	2,379,696,297	2,379,696,297
Other comprehensive income	16(6)	—	(385,339,472 )	—	—	—	(385,339,472 )
Capital injection by shareholders		2,000,000,000	8,803,529,998	—	—	—	10,803,529,998
Profit appropriation							
Transfer to surplus reserves	5(33)	—	—	—	862,530,098	(862,530,098 )	—
Dividends payables to shareholders	5(34)	—	—	—	—	(2,528,049,674 )	(2,528,049,674 )
Special reserves		—	—	12,797,793	—	—	12,797,793
Others		—	8,197,711	—	—	—	8,197,711
Balance as at 31 December 2010		14,055,383,440	15,803,068,930	12,797,793	7,004,875,161	13,883,875,589	50,760,000,914
Balance as at 1 January 2011							
Balance as at 1 January 2011		14,055,383,440	15,803,068,930	12,797,793	7,004,875,161	13,883,875,589	50,760,000,914
Changes for the year ended 31 December 2011							
Net profit		—	—	—	—	851,541,687	851,541,687
Other comprehensive income	16(6)	—	(368,793,964 )	—	—	—	(368,793,964 )

income							
Capital injection by shareholders		—	79,162,638	—	—	—	79,162,638
Profit appropriation		—	—	—	—	—	—
Transfer to surplus reserves	5(33)	—	—	—	55,219,248	(55,219,248 )	—
Dividends payables to shareholders	5(34)	—	—	—	—	(2,807,083,860 )	(2,807,083,860 )
Special reserves		—	—	14,223,482	—	—	14,223,482
Balance as at 31 December 2011		14,055,383,440	15,513,437,604	27,021,275	7,060,094,409	11,873,114,168	48,529,050,89

The accompanying notes form an integral part of these financial statements.

Legal representative:  
Cao Peixi

Person in charge of  
accounting function:  
Zhou Hui

Person in charge of  
accounting department:  
Huang Lixin

Notes to the Financial Statements

FOR THE YEAR ENDED 31 DECEMBER 2011

(Prepared in accordance with PRC Accounting Standards)

(All amounts are stated in RMB Yuan unless otherwise stated)

1. COMPANY PROFILE

Huaneng Power International, Inc. (hereinafter referred to as the “Company”) was incorporated in the People’s Republic of China (the “PRC”) as a Sino-foreign joint stock company on 30 June 1994. The place of registration of the Company is West Wing, Building C, Tianyin Mansion, 2C Fuxingmennan Street, Xicheng District, Beijing, PRC.

The Company and its subsidiaries are principally engaged in the generation and sale of electric power to the respective regional or provincial grid companies.

The Company’s Overseas Listed Foreign Shares were listed on the New York Stock Exchange and the Stock Exchange of Hong Kong Limited on 6 October 1994 and 4 March 1998, respectively. The Company has listed its A share on the Shanghai Stock Exchange on 6 December 2001.

The Company’s ultimate parent company is China Huaneng Group (“Huaneng Group”). Huaneng Group is a state-owned enterprise registered in the PRC, please refer to Note 7(1) for details.

These financial statements were approved by the board of directors of the Company on 20 March 2012.

2. PRINCIPAL ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

(1) Basis of preparation

The Company and its subsidiaries prepare financial statements in accordance with the “Accounting Standards for Business Enterprises – Basic Standard” and the 38 specific accounting standards promulgated by Ministry of Finance on 15 February 2006, Application Guidance for the Accounting Standards for Business Enterprises, Interpretation of the Accounting Standards for Business Enterprises and other related regulations issued thereafter (hereinafter collectively referred to as the “Accounting Standards for Business Enterprises”), and “Information Disclosure Rule 15 of Public Offerings Company – Financial Reporting General Provisions” (2010 Amendments) issued by China Securities Regulatory Commission (“CSRC”).

(2) Statement of compliance with the Accounting Standards for Business Enterprises

The consolidated and Company’s financial statements for the year ended 31 December 2011 are prepared in accordance with the Accounting Standards for Business Enterprises, and present truly and completely the financial position as at 31 December 2011 and financial performance and cash flows and other related information for the year then ended of the Company and its subsidiaries as well as the Company alone.

(3) Accounting year

The accounting year of the Company and its subsidiaries starts on 1 January and ends on 31 December.

(4) Reporting currency

The reporting currency of the Company and its domestic subsidiaries is Renminbi (“RMB”), and the reporting currency for the oversea subsidiaries is the currency of the country in which they operate.

(5) Foreign currency translation

(a) Foreign currency transaction

Foreign currency transactions are translated into the reporting currency using the spot exchange rate of the transaction dates. On balance sheet date, foreign currency monetary items are translated into reporting currency at the spot exchange rate of balance sheet date. Exchange differences are directly expensed in the profit and loss of current period unless it arises from foreign currency loans borrowed for the purchase or construction of qualifying assets which is eligible for capitalization and qualifying cash flow hedges which is deferred in equity.

(b) Foreign currency translation of financial statements

Asset and liability items in each balance sheet of foreign operations are translated at the spot exchange rates of balance sheet date; equity items excluding retained earnings are translated at the spot exchange rates of the date of the transactions. Income and expense items in the income statements of the foreign operations are translated at average exchange rates approximating the rate of the transaction dates. All resulting translation differences above are recognized as a separate component of equity.

The cash flows of overseas business are translated at average exchange rates approximating the rates of the dates when cash flows incurred. The impact of the foreign currency translation on the cash and cash equivalents is presented in the cash flow statement separately.

When a foreign operation is partially disposed of or sold, translation differences that were recorded in equity are recognized in the income statements as part of the disposal gain or loss.

(6) Cash and cash equivalents

Cash and cash equivalents represents cash on hand, deposits held at call with banks, short-term (3 months or less), highly-liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

(7) Financial assets

Financial assets are classified as the following categories at initial recognition: at fair value through profit or loss, loans and receivables, available-for-sale financial assets and held-to-maturity investments. The classification depends on the intention and ability of the Company and its subsidiaries to hold the financial assets. In the current reporting period, the financial assets held by the Company and its subsidiaries are classified as the following categories: at fair value through profit or loss, loans and receivables and available-for-sale assets.

(a) Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are financial assets held for trading including held-for-trading financial assets and financial assets designated upon initial recognition as at fair value through profit or loss. Except for designated hedging instruments, derivative financial instruments are classified as held-for-trading.

(b) Loans and receivables

Loans and receivables refer to the non-derivative financial assets with fixed or determinable amount for which there is no quotation in the active market. Except for maturities greater than 12 months after the balance sheet dates which are categorized as non-current assets, they are included in current assets. Loans and receivables include notes receivable, accounts receivable, interest receivable, dividends receivable, other receivables, other current assets, long-term receivables and other non-current assets etc.

(c) Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are designated in this category.

(d) Recognition and measurement

Financial assets are recognized initially at fair value when the Company and its subsidiaries become a party to the contractual provisions of a financial instrument. Transaction costs relating to financial assets at fair value through profit or loss are directly recorded in income statements as incurred. Transaction costs for other financial assets are included in the carrying amount of assets at initial recognition.

Financial assets at fair value through profit or loss and available-for-sale are subsequently measured at fair value.

Changes in the fair value of financial assets at fair value through profit or loss are recorded in the income statements in the current period as gain or loss from changes in fair value. Interest or cash dividends received during the period in which such financial assets are held and gain or loss on disposal of such assets are recorded in the income statements for the current period. The subsequent changes in the fair value of derivative financial instruments are recorded in gain or loss from changes in fair value, except for the gain or loss arising from the effective portion of qualified hedging instruments of cash flow hedges being deferred in equity (refer to Note 2(7)(e)).



Except for impairment loss and translation differences on monetary financial assets, changes in the fair value of available-for-sale financial assets are recognized in equity. When these financial assets are derecognized, the accumulated fair value adjustments recognized in equity are included in the income statements for the current period. Dividends on available-for-sale equity instruments are recorded in investment income when the right of the Company and its subsidiaries to receive payments is established.

Loans and receivables are measured at amortized cost using the effective interest method.

(e) Cash flow hedge

Cash flow hedge represents a hedge against the exposure to variability in cash flows where such cash flow is originated from a particular risk associated with a highly probable forecast transaction and could affect the income statements.

The hedged items of cash flow hedge are the designated items with respect to the risks associated with future cash flow changes in the Company and its subsidiaries. Hedging instruments are designated financial instruments with cash flows are expected to offset changes in the cash flows of a hedged item.

The fair value of a hedged item is classified as a non-current asset or liability when the remaining maturity of the hedge item is more than 12 months.

The Company and its subsidiaries document their assessments, both at the inception of hedging and on an ongoing basis, of whether the derivatives used in hedging transactions are highly effective in offsetting the changes in cash flows of the hedged items. The Company and its subsidiaries apply ratio analysis method to evaluate the prospective effectiveness of cash flow hedge.

Changes in the fair value of the effective portion of derivatives that are designated and qualified as cash flow hedges are recognized as a separate component in equity. The gain or loss relating to the ineffective portion is recognized immediately in the income statements.

Amounts accumulated in equity are recycled to the income statements in the periods when the hedged item affects profit or loss. When the hedged forecast transaction results in the recognition of a non-financial asset, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset. When the Company and its subsidiaries expect all or a portion of net loss previously recognized in equity will not be recovered in future accounting periods, the irrecoverable portion will be charged to the income statements.

When a hedging instrument expires or is sold, terminated, exercised, or when a hedge no longer meets the criteria for hedge accounting, the Company and its subsidiaries will stop hedge accounting. Any cumulative gain or loss previously recorded in equity remains in equity and is recycled to the income statements and initial recognition cost of non-financial assets when the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was previously recorded in equity is transferred to the income statements immediately.

(f) Impairment of financial assets

Except for financial assets at fair value through profit or loss, the Company and its subsidiaries assess the carrying amount of financial assets at balance sheet date. Provision for impairment is made when there is objective evidence indicating that a financial asset is impaired.

When there is a significant or prolonged decline in the fair value of available-for-sale financial assets, accumulated loss in fair value that is previously recorded in shareholder's equity should be recorded as impairment loss. Impairment loss on available-for-sale equity investments is reversed through equity when the fair value subsequently increases.

When financial assets carried at amortized cost are impaired, the carrying amount of the financial assets is reduced to present value of estimated future cash flows (excluding future credit losses that have not been incurred). The impairment amount is recognized as assets impairment loss for the current period. If there is objective evidence that the value of the financial assets is recovered as a result of changes in circumstances occurring after the impairment loss was originally recognized, the originally recognized impairment loss is reversed through the income statements.

(g) Derecognition of financial assets

Financial assets are derecognized when: (a) the rights to receive cash flows from the financial assets have expired; or (b) all risks and rewards relating to the ownership of the financial assets have been transferred; or (c) the Company and its subsidiaries have neither transferred nor retained all risks and rewards relating to the ownership but gave up control on the financial assets.

The difference between book value and consideration received and accumulated changes in fair value recorded in equity are recognized in the income statements for the current period.

(8) Receivables

Receivables including accounts receivable, notes receivable and other receivables, etc. are recognized initially at fair value.

When there is objective evidence that the Company and its subsidiaries will not be able to collect all amounts due according to the original terms of the receivables, impairment test is performed on individual account and related provision for doubtful accounts is made based on the shortfall between carrying amounts and respective present value of estimated future cash flow. The carrying amounts of the receivables are reduced through the use of allowance accounts, and the amount of the provision is recognized in the income statements as assets impairment loss. When a receivable is uncollectible, it is written off against the allowance account for receivable. Subsequent recoveries of amounts previously written off are recognized in the income statements as credit against assets impairment loss.

(9)

### Inventories

Inventories include fuel, materials for repairs and maintenance and spare parts, etc. and are stated at lower of cost and net realizable values.

Inventories are initially recorded at cost and are charged to fuel costs or repairs and maintenance according to the actual situation respectively when used, or capitalized to fixed assets when installed, as appropriate, using weighted average cost basis. Cost of inventories mainly includes costs of purchase and transportation costs.

When the forecast transaction that is hedged results in the recognition of the inventory, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the inventory.

Provision for inventory obsolescence is determined by the excess of cost over its net realizable value on an item-by-item basis. For inventories that are voluminous and at relatively low unit price, provision is determined based on individual categories. Net realizable values are determined based on the estimated selling price less estimated conversion costs during power generation, estimated selling expenses and related taxes in the ordinary course of business.

The Company and its subsidiaries apply perpetual inventory system.

(10)

### Long-term equity investments

Long-term equity investments include equity investments in subsidiaries, jointly controlled entities, associates and long-term equity investments in entities where i) the Company and its subsidiaries have no control, joint control or significant influence, ii) there is no quoted price in an active market, and iii) the fair value of such investments cannot be reliably measured.

(a)

### Subsidiaries

Subsidiaries are investees over which the Company have the power to exercises control, i.e. the power to govern the financial and operating policies to obtain benefits from the operating activities of the investees. When determining whether the Company and its subsidiaries exercise control over an investee, the impact from potential voting rights of the investee, such as currently convertible bonds and exercisable warrants, etc. is taken into account. The investments in subsidiaries are accounted for using cost method in the financial statements. They are adjusted in accordance with equity method when preparing the consolidated financial statements.

If the Company purchases further interests of its subsidiaries from the minority shareholders, the consideration paid is compared with the newly-acquired proportionate share of net assets of the subsidiary carried based on the fair value exercise on the acquisition date. Any excess or shortfall is recorded in shareholders' equity. The gain or loss on disposals or deemed disposals of a portion of equity interests in subsidiaries to minority shareholders is recorded in shareholders' equity.

(b) Jointly controlled entities and associates

Jointly controlled entities are investees over which the Company is able to exercise joint control together with other parties. Joint control is the contractually agreed sharing of control over an economic activity whereby no party to the agreement is able to act unilaterally to control the activity of the entity. It applies equity method to investment to jointly controlled entities.

Associates are investees over which the Company and its subsidiaries, in substance, have significant influence on the financial and operation decisions. Significant influence refers to the right of participation in investee's financial and operating policies without necessarily having full control or joint control over these policies with other parties. It applies equity method to investment to associates.

(c) Other long-term equity investments

Other long-term equity investments are accounted for using cost method where i) the Company and its subsidiaries have no control, joint control, or significant influence, ii) there is no quoted price in an active market, and iii) the fair value of the investments cannot be reliably measured.

(d) Investment cost recognition and subsequent measurement

Long-term equity investment via business combination:

For long-term investments via business combination under common control, costs are measured at carrying value of acquired portion of identifiable shareholder's equity of the acquiree on acquisition date. For long-term investments via business combination not under common control, costs are measured at the costs of combinations.

Long-term investments via approach other than business combination:

For long-term investments obtained with cash considerations, initial costs are measured at the consideration paid. For long-term investments obtained with issuance of equity securities, initial costs are measured at fair value of the securities issued.

Long-term equity investments accounted for using cost method are measured at initial investment cost. Cash dividends or income appropriation declared by the investees are recognized as investment income in the current period.

The excess of initial investment cost of long-term equity investments measured using equity method of accounting over the proportionate share of fair value of net identifiable assets of the investee acquired is recognized as long-term equity investment cost at initial investment cost. Any shortfall of the initial investment cost to the proportionate share of the fair value of identifiable net assets of investee acquired is recognized in current period profit and loss and long-term investment cost is adjusted accordingly.

When applying equity method, the Company and its subsidiaries adjust net profit or loss of the investees, including the fair value adjustments on the net identifiable assets of the investees and the adjustments to align with the accounting policies of the Company and different periods. Current period investment income is then recognized based on the proportionate share of the Company and its subsidiaries in the investees'



net profit or loss. Net losses of investees are recognized to the extent of book value of long-term equity investments and any other constituting long-term equity investments in investees in substance. The Company and its subsidiaries will continue to recognize investment losses and measure them as provision if they bear additional obligations which meet the recognition criteria under the accounting standard of provisions. The Company and its subsidiaries adjust the carrying amount of the investment and directly recognize into capital surplus based on their proportionate share on movements of shareholders' equity of the investees other than net profit or loss, given there is no change in shareholding percentage. When the investees appropriate profit or declare dividends, the book value of long-term equity investments are reduced correspondingly by the proportionate share of the distribution. Unrealized profit or loss from transactions between the Company and its subsidiaries and the investees is eliminated to the extent of interest of the Company and its subsidiaries in the investees. Loss from transactions between the Company and its subsidiaries and the investees is not eliminated when there is evidence for asset impairment.

(e) Impairment of long-term equity investments

When the recoverable amounts of investments in subsidiaries, jointly controlled entities or associates are less than its book value, the carrying amounts are reduced to recoverable amounts. Please refer to Note 2(15) for details.

For other long-term equity investments, impairment loss is recognized in the income statements based on the shortfall between carrying amounts and the present value of such investments (deriving from discounting of future cash flow of similar investments at current market return rate).

(11) Fixed assets and depreciation

Fixed assets consist of ports facilities, dam, buildings, electric utility plant in service, transportation facilities and others. Fixed assets acquired or constructed are initially recognized at cost. Fixed assets obtained during reorganization were initially recorded at their appraisal value approved by relevant stated-owned assets administration authorities.

Subsequent costs about fixed assets are included in the asset's carrying amount only when it is probable that future economic benefits associated with the item will flow to the Company and its subsidiaries and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. Other subsequent expenditures are all charged in the current period profit or loss when they are incurred.

Depreciation of fixed assets is provided based on book value less estimated residual value over estimated useful life using straight-line method. For those impaired fixed assets, depreciation is provided based on book value after deducting impairment provision over estimated useful life.

The estimated useful lives, residual value rates and annual depreciation rates of the fixed assets are as follows:

	Estimated useful lives	Estimated residual value rate	Annual depreciation rate
Ports Facilities	20-40 years	5%	2.38%-4.75%
Dam	8-40 years	3%	2.43%-12.13%
Buildings	6-45 years	0%-11%	2.11%-16.67%
Electric utility plant in service	5-35 years	0%-11%	2.71%-20.00%
Transportation facilities	6-20 years	0%-11%	4.75%-16.67%
Others	3-18 years	0%-11%	5.56%-33.33%

At the end of each year, the Company and its subsidiaries review the estimated useful life, estimated residual value and the depreciation method of the fixed assets for adjustment when necessary.

Fixed assets is derecognized when they are disposed of, or expected that cannot bring economic benefit through use or disposal. The amount of disposal income arising from sale, transfer, disposal or write-off of fixed assets less book value and related tax expenses is recorded in the income statements.

The carrying amount of fixed assets is written down immediately to its recoverable amount when its carrying amount is greater than its recoverable amount. Please refer to Note 2(15).

(12)

#### Construction-in-progress

Construction-in-progress is recorded at cost. Cost comprises construction expenditures, installation expenditures, and other expenditures necessary for the purpose of preparing the assets for their intended use and those borrowing costs eligible for capitalization. Construction-in-progress is transferred to fixed assets when the assets are ready for their intended use and depreciation begins from the following month.

When the recoverable amount of construction-in-progress becomes lower than its carrying amount, construction-in-progress is impaired to its recoverable amount (Note 2(15)).

(13)

#### Intangible assets and amortization

Intangible assets, which include land use right, power generation licence and mining rights etc., are initially recognized at cost. The Company's intangible assets obtained during reorganization were initially recorded at their appraisal value approved by relevant stated-owned assets administration authorities.

Intangible assets with definite useful lives are amortized using the straight-line method over their useful lives, with the exception of mining rights. The expected useful lives and amortization method applied to intangible assets with definite useful lives are reviewed at each financial year-end and adjusted when necessary. The mining rights will be amortized based on the units of production method from the commencement of production of coal mine.

Intangible assets with indefinite useful lives are not amortized. The useful lives of intangible assets with indefinite useful lives are reviewed by the Company and its subsidiaries in each accounting period.

When the recoverable amount of intangible assets becomes lower than their carrying amount, the intangible assets are impaired to their recoverable amount (Note 2(15)).

(14) Goodwill

Goodwill is the cost of business combination not under common control over the proportionate share of the fair value of the net identifiable assets on the acquisition date. Goodwill arising from business combinations is presented separately on the consolidated financial statements.

Separately presented goodwill in the consolidated financial statements is tested for impairment at least annually. When performing impairment test, the carrying amount of goodwill is allocated to assets group or group of assets groups that are expected to benefit from the synergies arising from the business combination. The Company and its subsidiaries allocate goodwill to assets group or group of assets groups primarily based on region where they operate. Please refer to Note 2(15) for the accounting policy of impairment of assets group or group of assets groups. Goodwill is presented at cost less accumulated impairment loss.

(15) Impairment of long-term assets

Separately presented goodwill in the consolidated financial statements and intangible assets with indefinite useful lives are tested for impairment at least annually regardless of whether there are indications of impairment. Fixed assets, construction-in-progress, intangible assets with definite useful lives and long-term equity investments are tested for impairment when there are any indicators of impairment as of the balance sheet date. If the result of impairment test shows that the recoverable amount of asset is less than its book value, that difference is recognized as impairment provision. Recoverable amount is the higher of fair value less cost to sell of the asset and present value of its expected future cash flows. Asset impairment is calculated and recognized on individual asset basis. If it is difficult to estimate recoverable amount for the individual assets, the recoverable amount is determined based on the recoverable amount of the assets group or group of assets groups to which the asset belongs. An assets group is the smallest group of assets that independently generates cash flows.

The long-term assets impairment referred above cannot be reversed after recognition even if the amount is recovered subsequently.

(16) Financial liabilities

Financial liabilities are classified as financial liabilities at fair value through profit or loss and other financial liabilities at initial recognition. The Company and its subsidiaries financial liabilities are mainly held-for trading financial liabilities, payables, loans and bonds payables.

Payables, including accounts payable, notes payable, other payables and long-term payables, are initially recognized at fair value and subsequently measured at amortized cost using the effective interest method.



Loans and bonds payables are initially recognized at fair value less transaction costs and subsequently measured at amortized cost using the effective interest method.

Financial liabilities due within one year (including one year) are classified as current liabilities; long-term financial liabilities to be mature within one year (including one year) from balance sheet date are classified as current portion of non-current liabilities, and the remaining are classified as non-current liabilities.

(17)

Borrowing costs

Borrowing costs incurred which are directly attributable to the acquisition or construction of assets that needs a substantially long period of time to get ready for its intended use, are capitalized and recorded in the costs of the assets when the capital expenditure and borrowing costs have been incurred and the activities relating to the acquisition and construction that are necessary to prepare the asset for its intended use have commenced. The capitalization of the borrowing costs is ceased when the asset under acquisition or construction is ready for its intended use, and the borrowing costs incurred thereafter are expensed off. If the acquisition or construction of an asset is interrupted abnormally and the interruption lasts for more than 3 months, the capitalization of the borrowing costs is suspended until the acquisition or construction is resumed. For specific borrowings for the acquisition or construction of an asset eligible for capitalization, the capitalized amount of interests is determined based on the interest expense incurred after deducting any interest income earned from the deposits or investment income from the temporary investment funded by the unused borrowing balance. For general borrowings used for acquisition or construction of an asset eligible for capitalization, the capitalized interest is determined by multiplying the weighted average excess of accumulated capital expenditure over specific borrowings by the capitalization rate of such general borrowings. The capitalization rate is determined according to the weighted average interest rate of the general borrowings.

Other borrowing costs are expensed in the current period.

(18)

Employee benefits

Employee benefits include all expenditures relating to the employees for their services.

The Company and its subsidiaries recognize employee benefits as liabilities during the accounting period when employees render services and allocate to related cost of assets and expenses based on beneficiaries.

(19)

Deferred income tax assets and liabilities

Deferred income tax assets and liabilities are recognized based on the differences arising between tax bases of assets and liabilities and book value (temporary differences). For deductible tax losses or tax credit that can be brought forward in accordance with tax laws for deduction of taxable income in subsequent years, it is considered as temporary differences and related deferred income tax assets are recognized accordingly. No deferred income tax liability is recognized for temporary difference arising from initial recognition of goodwill. For those temporary differences arising from initial recognition of an asset or liability in a non-business combination transaction that affects neither accounting profit nor taxable profit (or deductible loss) at the time of the transaction, no deferred income tax asset and liability is recognized.

The Company and its subsidiaries recognize deferred income tax assets to the extent that it is probable that taxable profit will be available to offset the deductible temporary difference, deductible tax loss and tax credit.

As of the balance sheet date, deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or liability is settled.

Deferred income tax assets and deferred income tax liabilities are offset when all the conditions below are met:

- (a) The Company and its subsidiaries have the legal enforceable right to settle current income tax assets and current income tax liabilities;
- (b) Deferred income tax assets and deferred income tax liabilities are related to the income tax levied by the same tax authority of the Company and its subsidiaries.

(20) Revenue recognition

Revenue is recognized based on the following methods:

The amount of revenue is determined by the fair value of the amount received or receivable according to contract or agreement, when sales of goods and rendering of services occur during the operating activities of the Company and its subsidiaries. Revenue and income are recognized when it is probable that the economic benefits associated with the transaction will flow to the Company and its subsidiaries, the amount of the revenue and income can be measured reliably and meet particular conditions of revenue recognition of following business activities.

(a) Product sales revenue

Product sales revenue mainly refers to amounts earned from sales of electricity and heat. The Company and its subsidiaries recognize revenue when electricity and heat is sold to consumers.

(b) Service revenue

Service revenue refers to amounts received from service of port loading, conveying and transportation. The Company and its subsidiaries recognize revenue when the relevant service is provided.

(c) Interest income

Interest income from deposits is recognized on a time proportion basis using effective yield method.

(21) Leases

Leases where all the risks and rewards incidental to ownership of the assets are in substance transferred to the lessees are classified as finance leases. All other leases are operating leases.

(a) Operating lease (Lessee)

Operating lease expenses are capitalized or expensed on a straight-line basis over the lease term.

(b) Operating lease (Lessor)

Income from operating leases are recognized on a straight line method over the lease term.

(c) Finance lease (Lessor)

The Company and its subsidiaries recognize the aggregate of the minimum lease receipts and the initial direct costs on the lease inception date as the receivable. The difference between the aggregate of the minimum lease receipts and the initial direct costs and their respective present values shall be recognized as unrealized finance income. The Company and its subsidiaries adopt the effective interest method to allocate such unrealized finance income over the lease term. On balance sheet date, the Company and its subsidiaries present the net amount of finance lease receivable after deducting any unrealized finance income in long-term receivables and current portion of non-current assets respectively.

Please refer to Note 2(7)(f) for impairment test of the finance lease receivable.

(22) Government grants

Government grants are recognized when the Company and its subsidiaries fulfill the conditions attaching to them and the grants can be received. When government grants are in form of monetary assets, they are measured at the amount received or receivable.

Asset-related government grant is recognized as deferred income and is amortized evenly in income statements over the useful lives of related assets.

Income-related government grant that is used to compensate related expenses or losses in subsequent periods of the Company and its subsidiaries are recognized as deferred income and recorded in the income statements when related expenses or losses incurred. When the grant is used to compensate expenses or losses that were already incurred, they are directly recognized in profit and loss of current period.

(23) Dividends appropriation

Cash dividend is recognized as a liability in the period when the proposed dividend is approved by the general meeting of shareholders.

(24) Business combinations

Business combinations under common control refers to combinations where the combining



entities are controlled by the same party or parties before and after the combination and that control is not transitory; business combinations not under common control refers to combinations where the combining entities are not controlled by the same party or parties before and after the combination.

(a) Business combinations under common control

The acquirer measures both the consideration paid and net assets obtained at their carrying amounts. The difference between the carrying amounts of the net assets obtained and the carrying amount of the consideration paid is recorded in capital surplus (share premium), with any excess over capital surplus (share premium) being adjusted against undistributed profits. Any direct transaction cost attributable to the business combination is recorded in the income statements in the current period. However, the handling fees, commissions and other expenses incurred for the issuance of equity instruments or bonds for the business combination are recorded in the initial measurement of the equity instruments and bonds respectively.

(b) Business combinations not under common control

The cost of a combination is measured as the fair value of the assets given and liabilities incurred or assumed at the date of acquisition. Any direct transaction cost attributable to the combination is recorded in the income statement for the current period. However, the handling fees, commissions and other expenses incurred for the issuance of equity instruments or bonds for the business combination are recorded in the initial measurement of the equity instruments and bonds respectively. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the combination date. The excess of the combination cost over the fair value of the Company and its subsidiaries' share in the identifiable net assets acquired is recorded as goodwill. If the combination cost is less than the fair value of the net assets of the subsidiary acquired, it is recognized in the income statements.

(25) Preparation of consolidated financial statements

The scope of consolidated financial statements includes the Company and its subsidiaries.

Subsidiaries are consolidated from the date when control is transferred to the Company. They are deconsolidated from the date when control ceases. All the significant intra-group balances, transactions and unrealized profit or loss are eliminated in the preparation of the consolidated financial statements. The portion of the shareholders' equity and net profit or loss of the subsidiaries, which is not attributable to the parent company, is separately presented as minority interests in the shareholders' equity and net profit in the consolidated financial statements.

When there is any inconsistency on the accounting policies or financial period adopted between subsidiaries and the Company, the financial statements of subsidiaries are adjusted according to the accounting policies and financial period adopted by the Company.

For subsidiaries acquired under business combinations involving entities not under common control, when preparing consolidated financial statements, adjustments are made on the financial statements of subsidiaries based on the fair value of the net identifiable assets acquired at the acquisition date. For subsidiaries acquired under business combinations of

common control, when preparing consolidated financial statements, the consolidated financial statements include the assets, liabilities, operating results and cash flows of such subsidiaries from the earliest period presented as if the business combinations had occurred at the beginning of the earliest comparative period presented and the net profit of the acquire realized before combination date is separately disclosed in the consolidated income statements.

In case a subsidiary is acquired and disposed of within two consecutive accounting years, when the Company enters into interest transfer agreement and meet the requirement to recognise held-for sale assets and liabilities, non-current assets and liabilities of the subsidiary are recognised as held-for-sale assets and liabilities, which are recorded in other current assets and other current liabilities. Such assets and liabilities will no longer be recognised, and investment gain or loss will be recorded when the interest transfer settle.

(26)

#### Segment Information

The Company and its subsidiaries determine the operation segment based on the internal organization structure, management requirement and internal reporting system and thereafter determine the reporting segment and present the segment information.

The operation segment is a component in the Company and its subsidiaries that meets all the conditions below: (a) the component earns revenue and incurs expense during the daily operation activities; (b) the management of the Company and its subsidiaries can regularly review the component's operation results in order to make decision on allocating resources and assessing performance; (c) the component's financial performance, operating results, cash flow and other related information are available. When the two or more operation segments have similar economical characteristics and meet certain conditions, the Company and its subsidiaries will combine them as one operation segment.

(27)

#### Determination of the fair value of financial instruments

When an active market exists for a financial instruments, fair value is determined based on quoted prices in the active market. When no such an active market exists, fair value is determined by using valuation techniques. Valuation techniques include making reference to the prices used by knowledgeable and willing parties in a recent transaction, the current fair value of other financial assets that are same in substance, discounted cash flow method and option pricing model, etc. When applying valuation techniques, the Company and its subsidiaries use market parameters, rather than specific parameters of the Company and its subsidiaries, as much as possible.

(28)

#### Critical accounting estimates and judgments

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Company and its subsidiaries make estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

(a) Accounting estimates on impairment of goodwill and power generation licence

The Company and its subsidiaries perform test annually whether goodwill and power generation licence have suffered any impairment, in accordance with the accounting policy stated in Note 2(13) and 2(14). The recoverable amounts of assets group or group of assets groups are the present value of future cash flow. These calculations require the use of estimates. It is reasonably possible, based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a material adjustment to the carrying amount of goodwill and power generation licence.

(b) Useful life of power generation licence

As at year end, management of the Company and its subsidiaries considered the estimated useful lives for its power generation licence as indefinite. This estimate is based on the expected renewal of power generation licence without significant restriction and cost, together with the consideration on related future cash flows and the expectation of management in continuous operations. Based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a change on carrying amount of power generation licence.

(c) Useful lives of fixed assets

Management of the Company decided the estimated useful lives of fixed assets and respective depreciation. This accounting estimate is based on the expected wears and tears incurred during power generation. Wears and tears can be significantly different after renovation each time. When the useful lives differ from the original estimated useful lives, management will adjust the estimated useful lives accordingly. It is possible that the estimates made based on existing experience are different to the actual outcomes within the next financial period and could cause a material adjustment to the carrying amount of fixed assets.

(d) Estimated impairment of fixed assets

The Company and its subsidiaries perform impairment test on fixed assets to determine whether certain fixed assets have suffered any impairment whenever indicators of impairment exist. In accordance with Note 2(15), an impairment loss is recognized for the amount by which the carrying amount of the asset exceeds its recoverable amount. It is reasonably possible, based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a material adjustment to the carrying amount of fixed assets.

(e) Restraint in construction of new power plants

Receiving the final approval from National Development and Reform Commission (“NDRC”) on certain power plant construction projects of the Company and its subsidiaries is a critical estimate and judgment of the management of the Company. Such an estimate and judgment is based on initial approval documents received as well as the understanding of the projects. Based on historical experience, the management believes that the Company and its subsidiaries will receive final approval from NDRC on the related power plant projects. Deviation from the estimate and judgment could result in significant adjustment to the carrying amount of property, plant and equipment, construction-in-progress and construction materials.

3.

### TAXATION

(1) Value Added Tax (“VAT”)

Domestic power and heat sales of the Company and its subsidiaries are subject to VAT. VAT payable is determined by applying 17% or 13% on the taxable revenue after offsetting deductible input VAT of the period.

(2) Business Tax (“BT”)

Port and transportation service of the Company and its subsidiaries are subject to BT, with applicable tax rate of 3%.

(3) Goods and Service Tax (“GST”)

Overseas power sales of the Company and its subsidiaries are subject to GST of the country where they operate, with applicable tax rate of 7%.

(4) Income tax

In accordance with relevant provisions of the Income tax law, since 1 January 2008, branches and subsidiaries of the Company which used to enjoy preferential tax rates or holidays will transit to 25% gradually in the next five years from 1 January 2008 onwards. The subsidiaries with applicable tax rate of 33% apply tax rate of 25% from 1 January 2008 onwards. In accordance with Guo Fa [2007]39, since 1 January 2008, the enterprises which used to enjoy tax holidays such as two-year tax exemption and three-year 50% tax rate deduction are grandfathered by the old tax laws, administrative regulations and relevant circulars until the expiration of their tax holidays. However, for those whose tax holiday has not commenced due to loss making, the tax holiday is deemed to begin from 2008 onwards.

The overseas subsidiaries of the Company applies income tax rate of 17%.

In accordance with Guo Shui Han [2009]33, effective from 1 January 2008, the Company calculate and file income tax centrally at company level according to relevant tax laws and regulations. The relevant regulations about the taxation places of the plants and branches of the Company are no longer in force. Other than the following entities, the applicable income tax rate of all domestic branches and subsidiaries of the Company in the reporting period is 25%.



	Approved File No.	Year 2011	Tax holiday period
Huaneng Dandong Power Plant (“Dandong Power Plant”) (Note 1)	Dan Guo Shui She Wai [1999]7	12%	Till 31 December 2012
Huaneng Yuhuan Power Plant (“Yuhuan Power Plant”) Phase I (Note 2)	Guo Shui Han [2007]201 & Zhe Guo Shui Wai [2007]14	12%	Till 31 December 2011
Huaneng Rizhao Power Plant (“Rizhao Power Plant”) (Note 3)	Guo Shui Han [2007] 1348	12%	Till 31 December 2012
Head Office and other branches	Guo Shui Han [1997]368	24%	Till 31 December 2011
Huaneng Hunan Yueyang Power Generation Limited Liability Company (“Yueyang Power Company”)	Guo Fa [2007]39	24%	Till 31 December 2011
Huaneng Chongqing Luohuang Power Generation Limited Liability Company (“Luohuang Power Company”) (Note 4)	Xi Bu Da Kai Fa Cai Shui [2011]58	15%	Till 31 December 2020
Luohuang Power Company Phase III (Note 5)	Xi Bu Da Kai Fa Cai Shui [2011]58 & Yu Guo Shui Zhi Jian [2007]120	7.5%	Till 31 December 2020
Huaneng Jiuquan Wind Power Limited Liability Company (“Jiuquan Wind Power”) (Note 6)	Cai Shui [2008]46		–Till 31 December 2016
Yunnan Diandong Energy Limited Liability Company (“Diandong Energy”) (Notes 4)	Xi Bu Da Kai Fa Cai Shui [2011]58	15%	Till 31 December 2020
Yunnan Diandong Yuwang Energy Limited Liability Company (“Diandong Yuwang”) (Notes 4)	Xi Bu Da Kai Fa Cai Shui [2011]58	15%	Till 31 December 2020
Fujian Luoyuanwan Harbour Limited Liability Company (“Luoyuanwan Harbour”) (Note 7)	Luo Jian Mian Bei [004]		–Till 31 December 2014
Huaneng Qidong Wind Power Generation Co., Ltd. (“Qidong Wind Power”) Phase II (Note 8)	Guo Shui Fa [2009]80		–Till 31 December 2015
Huade County Daditaihong Wind Power Utilization Limited Liability Company (“Daditaihong”) Phase I (Note 9)	Cai Shui [2001]202		–Till 31 December 2014
Huaneng Beijing Co-generation Limited Liability Company (“Beijing Cogeneration”)	Guo Fa [2007]39	24%	Till 31 December 2011

Note The Company’s branch Dandong Power Plant started to enjoy a two-year tax exemption and a three-year 50% tax rate deduction from 1 January 2008 to 31 December 2012 in accordance with Dan Guo Shui She Wai [1999]7. In 2011, the applicable tax rate was 12%.

Note In accordance with the approval from State Tax Bureau of Yuhuan County in 2007, the Company’s branch 2. Yuhuan Power Plant Phase I was entitled to a tax holiday with two-year tax exemption and three-year 50% tax rate deduction from 1 January 2007 to 31 December 2011. Its applicable tax rate is 12% in 2011.

Note The Company’s branch Rizhao Power Plant enjoyed a tax holiday with two-year tax exemption and three-year 3. 50% tax rate deduction from 2008. 2011 was the second year of Rizhao Power Plant enjoying 50% tax rate

deduction, thus, its applicable tax rate is 12% in 2011.

Note In accordance with Xi Bu Da Kai Fa Cai Shui [2011] 58, the subsidiaries of the company, Luohuang Power  
4. Company, Diandong Energy, Diandong Yuwang were and will be entitled to a deducted corporate income tax rate of 15% starting from 1 January 2011 to 31 December 2020.

Note In accordance with the approval from Tax Bureau Branch directly under Chongqing State Tax Bureau,  
5. Luohuang Power Company Phase III was entitled to a tax holiday with two-year tax exemption and three-year 50% tax rate deduction since the first profit-making year. 2007 was its first profit-making year and the beginning of its tax holiday. 2011 was the third year of Luohuang Power Company Phase III enjoying 50% tax rate deduction, and the applicable tax rate was 7.5%.

Note According to Cai Shui [2008]46, the company's subsidiary, Jiuquan Wind Power, was enjoyed a three-year tax  
6. exemption and a three-year 50% tax rate deduction started from 2011.

Note In accordance with the approval of Luoyuan Country State Tax Bureau, Luoyuanwan Harbour was entitled a  
7. three-year tax exemption and a three-year 50% tax rate deduction from 1 January 2009.

Note In accordance with Guo Shui Fa [2009]80, Qidong Wind Power Phase II was entitled to a tax three-year tax  
8. exemption and a three-year 50% tax rate deduction from 1 January 2010.

Note In accordance with Cai Shui Fa [2001]202, Daditaihong Phase I project was entitled to a tax two-year tax  
9. exemption and a three-year 50% tax rate deduction from 1 January 2010. Thus 2011 was the second year applied tax exemption.

## 4. BUSINESS COMBINATION AND CONSOLIDATED FINANCIAL STATEMENTS

## (1) Subsidiaries

## (a) Subsidiaries acquired through establishment, investment or other ways

	Type of subsidiaries	Place of registration	Registered capital	Business nature and scope of operations	Type of legal entity	Legal representative	Organization Code
Huaneng Power International Fuel Limited Liability Company (“Fuel Company”)	Direct holding	Beijing	RMB200,000,000	Wholesale of coal company	Limited liability	Liu Guoyue	66990379-7
Huaneng Shanghai Shidongkou Power Generation Limited Liability Company (“Shidongkou Power Company”)	Direct holding	Shanghai	RMB990,000,000	Power generation company	Limited liability	Li Shuqing	67786175-0
Huaneng Nantong Power Generation Limited Liability Company (“Nantong Power Company”)	Direct holding	Nantong, Jiangsu Province	RMB1,560,000,000	Power generation company	Limited liability	Lin Weijie	68297013-4
Huaneng Yingkou Port Limited Liability Company (“Yingkou Port”)	Direct holding	Yingkou, Liaoning Province	RMB720,235,000	Loading and conveying service	Limited liability	Jiang Peng	68008878-9
						Zhai Shutao	68371657-6

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Huaneng Yingkou Power Generation Limited Liability Company (“Yingkou Cogeneration”)	Direct holding	Yingkou, Liaoning Province	RMB830,000,000 company	Production and sale of electricity and heat	Limited liability		
Huaneng Hunan Xiangqi Hydropower Co., Ltd. (“Xiangqi Hydropower”)	Direct holding	Xiangqi County, Hunan Province	RMB180,000,000 company	Construction, operation and management of hydropower and relevant projects	Limited liability	Zhang Jianlin	68504616-6
Zhuozhou Liyuan Cogeneration Co., Ltd. (“Zhuozhou Liyuan”)	Direct holding	Zhuozhou, Hebei Province	RMB5,000,000 company	Construction, operation and management of cogeneration power plants and related projects	Limited liability	Ge Changqin	69921346-3
Huaneng Zuoquan Coal-fired Power Generation Limited Liability Company (“Zuoquan Coal-fired Power Company”)	Direct holding	Jinzhong, Shanxi Province	RMB960,000,000 company	Preparation of power plant construction and related operation service	Limited liability	Lin Gang	69668075-2
Huaneng Kangbao Wind Power Utilization Limited Liability Company (“Kangbao Wind Power”)	Direct holding	Kangbao County, Hebei Province	RMB5,000,000 company	Construction, operation and management of wind power generation and related projects	Limited liability	Li Jianmin	69924468-1



	Type of subsidiaries	Place of registration	Registered capital	Business nature and scope of operations	Type of legal entity	Legal representative	Organization Code
Jiuquan Wind Power	Direct holding	Jiuquan, Gansu Province	RMB1,667,000,000	Construction, operation and management of wind power generation and related projects	Limited liability company	Gao Shulin	55625278-0
Huaneng Wafangdian Wind Power Generation Co., Ltd. (“Wafandian Wind Power”)	Direct holding	Wafangdian, Liaoning Province	RMB50,000,000	Construction, operation and management of wind power generation and related projects	Limited liability company	Gao Bing	55980023-6
Huaneng Changtu Wind Power Generation Co., Ltd. (“Changtu Wind Power”)	Direct holding	Changtu County, Liaoning Province	RMB50,000,000	Construction, operation and management of wind power generation and related projects	Limited liability company	Gao Bing	55819524-9
Huaneng Rudong Wind Power Generation Co., Ltd. (“Rudong Wind Power”)	Direct holding	Rudong County, Jiangsu Province	RMB127,500,000	Construction and management of wind power generation plant	Limited liability company	Pang Yuantong	56531295-X
Huaneng Haimen Port Limited Liability Company (“Haimen Port”)	Direct holding	Shantou, Guangdong Province	RMB10,000,000	Preparation, shall not engage in operation and business activities	Limited liability company	Li Wenxue	56256643-6
Huaneng Taichang Port Limited Liability Company	Direct holding	Taichang County, Jiangsu Province	RMB20,000,000	Port development and construction, machinery	Limited liability company	Pang Yuantong	56784710-6

leasing and repair							
(“Taichang Port”)							
Tuas Power Generation Pte Ltd. (“TPG”)	Indirect holding	Singapore	SGD1,183,000,001	Power generation and related by products, derivatives; developing power supply resources, operating electricity and power sales	Limited liability company	N/A	200909292D
TP Utilities Pte Ltd. (“TP Utilities”)	Indirect holding	Singapore	SGD160,000,001	Provide utilities & services – electricity, steam, industrial water, waste management	Limited liability company	N/A	200920924G

	Actual amount of investment cost at end of the year	Other deem investment items	Percentage of equity interest (%)	Percentage of voting right (%)	Included in consolidated financial statements	Minority interests	Loss recorded in minority interests balance
Fuel Company	200,000,000	—	100%	100%	Yes	—	—
Shidongkou Power Company	495,000,000	—	50%	50%	Yes *	506,178,580	—
Nantong Power Company	546,000,000	—	70%	70%	Yes	234,000,000	—
Yingkou Port	360,117,500	—	50%	50%	Yes *	364,914,586	—
Yingkou Cogeneration	844,030,000	—	100%	100%	Yes	—	—
Xiangqi Hydropower	258,000,000	—	100%	100%	Yes	—	—
Zhuozhou Liyuan	5,000,000	—	100%	100%	Yes	—	—
Zuoquan Coal-fired Power Company	767,996,200	—	80%	80%	Yes	96,000,000	—
Kangbao Wind Power	370,000,000	—	100%	100%	Yes	—	—
Jiuquan Wind Power	2,750,035,286	—	100%	100%	Yes	—	—
Wafandian Wind Power	92,630,000	—	100%	100%	Yes	—	—
Changtu Wind Power	58,605,000	—	100%	100%	Yes	—	—
Rudong Wind Power	22,950,000	—	90%	90%	Yes	2,550,000	—
Haimen Port	38,000,000	—	100%	100%	Yes	—	—



Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Taichang Port	83,000,000	—	100%	100%	Yes	—	—
TPG	5,758,725,705	—	100%	100%	Yes	—	—
TP Utilities	778,864,005	—	100%	100%	Yes	—	—
	13,428,953,696	—		1,203,643,166	—		

\* Pursuant to agreements with other shareholders, the Company has controls over these entities.

## (b) Subsidiaries acquired from business combinations under common control

	Type of subsidiaries	Place of registration	Registered capital	B u s i n e s s nature and scope of operations	Type of legal entity	Legal representative	Organization Code
Huaneng (Suzhou Industrial Park) Power Generation Co., Ltd. (“Taicang Power Company”)	Direct holding	Suzhou, Jiangsu Province	RMB632,840,000	Power generation	Limited liability company	Li Shuqing	13484976-3
Huaneng Qinbei Power Generation Limited Liability Company (“Qinbei Power Company”)	Direct holding	Jiyuan, Henan Province	RMB810,000,000	Power generation	Limited liability company	Gao Shulin	73551491-8
Huaneng Yushe Power Generation Co., Ltd. (“Yushe Power Company”)	Direct holding	Yushe County, Shanxi Province	RMB615,760,000	Power generation	Limited liability company	Lin Gang	60273002-7
Yueyang Power Company	Direct holding	Yueyang, Hunan Province	RMB1,055,000,000	Power generation	Limited liability company	Zhao Ping	61665023-9
Luohuang Power Company	Direct holding	Chongqing	RMB1,748,310,000	Power generation	Limited liability company	Zhao Ping	X2190009-1
Huaneng Pingliang Power Generation Co., Ltd (Pingliang Power Company)	Direct holding	Pingliang, Gansu Province	RMB924,050,000	Power generation	Limited liability company	Lin Gang	22436987-8
Huaneng Nanjing Jinling Power Company	Direct holding	Nanjing, Jiangsu Province	RMB1,902,000,000	Power generation	Limited liability company	Li Shuqing	77125600-4

("Jinling Power")							
Qidong Wind Power	Direct holding	Qidong, Jiangsu Province	RMB200,000,000	Development of wind power project, production and sale of electricity	Limited liability company	Pang Yuantong	66638519-7
Tianjin Huaneng Yangliuqing Co-generation Limited Liability Company ("Yangliuqing Power Company")							
Tianjin Huaneng Yangliuqing Co-generation Limited Liability Company ("Yangliuqing Power Company")	Direct holding	Tianjin	RMB1,537,130,909	Power generation, heat supply	Limited liability company	Lin Gang	10306946-5
Beijing Cogeneration							
Beijing Cogeneration	Direct holding	Beijing	RMB1,600,000,000	Construction and operation of power plants and related construction projects	Limited liability company	Gu Biquan	X2600055-1

	Actual amount of investment cost at end of the year	Other deem investment items	Percentage of equity interest (%)	Percentage of voting right (%)	Included in consolidated financial statements	Minority interests	Loss recorded in minority interests balance
Taicang Power Company	771,527,000	—	75%	75%	Yes	217,960,962	—
Qinbei Power Company	1,266,187,072	—	60%	60%	Yes	733,476,440	—
Yushe Power Company	380,385,896	—	60%	60%	Yes	(202,269,960)	467,583,812
Yueyang Power Company	1,156,201,197	—	55%	55%	Yes	454,100,182	27,419,808
Luohuang Power Company	1,930,501,221	—	60%	60%	Yes	926,513,553	—
Pingliang Power Company	1,151,641,517	—	65%	65%	Yes	151,054,493	305,978,115
Jinling Power Company	1,302,680,000	—	60%	60%	Yes	1,038,575,304	—

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Qidong Wind Power	241,680,000	—	65%	65%	Yes	124,427,988	—
Yangliuqing Power Company	1,064,900,000	—	55%	55%	Yes	657,531,300	56,277,871
Beijing Cogeneration*	1,258,347,000	—	41%	66%*	Yes	1,367,334,613	—
	10,524,050,903	—		5,468,704,875	857,259,606		

\* According to the agreement between the Company and the rest of the shareholders, a shareholder who owns 25% voting interest in Beijing Cogeneration have entrusted the Company for the right to vote for free.

## (c) Subsidiaries acquired from business combinations not under common control

	Type of subsidiaries	Place of registration	Registered capital	Business nature and scope of operations	Type of legal entity	Legal representative	Organization Code
Huaneng Weihai power Limited Liability Company (“Weihai Power Company”)	Direct holding	Weihai, Shandong Province	RMB761,838,300	Power generation	Limited liability company	Zhang Qi	26420668-6
Huaneng Taicang Power Co., Ltd. (“Taicang II Power Company”)	Direct holding	Taicang, Jiangsu Province	RMB804,146,700	Power generation	Limited liability company	Li Shuqing	76280945-5
Huaneng Huaiyin Power Generation Co. Ltd. (“Huaiyin Power Company”)	Direct holding	Huai’an, Jiangsu Province	RMB265,000,000	Power generation	Limited liability company	Li Shuqing	13478263-4
Huaneng Huaiyin II Power Limited Company (“Huaiyin II Power Company”)	Direct holding	Huai’an, Jiangsu Province	RMB930,870,000	Power generation	Limited liability company	Li Shuqing	76357769-2
Huaneng Xindian Power Co., Ltd. (“Xindian II Power Company”)	Direct holding	Zibo, Shandong Province	RMB100,000,000	Power generation	Limited liability company	Zhang Qi	76095380-8
Huaneng Shanghai Combined Cycle Power Limited Liability Company (“Shanghai Combined Cycle Power Company”)	Direct holding	Shanghai	RMB699,700,000	Power generation	Limited liability company	Wu Dawei	77092642-4
Daditaihong	Direct holding	Huade County, Inner Mongolia	RMB5,000,000	Wind Power exploitation and utilization	Limited liability company	Li Jianmin	79364854-3
			RMB190,000,000			Qin Zhenlin	74896037-8

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Huaneng Zhanhua Co-generation Limited Liability Company (“Zhanhua Cogeneration”)	Direct holding	Zhanhua Country, Shandong Province		Production and sales of electricity and steam	Limited liability company		
Shandong Hualu Sea Transportation Limited Company (“Hualu Sea Transportation”)*	Direct holding	Longkou, Shandong Province	RMB45,000,000	Domestic cargo transportation	Limited liability company	Li Shuqing	16306513-2
Huaneng Qingdao Port Limited Company (“Qingdao Port”)	Direct holding	Jiaonan, Qingdao, Shandong Province	RMB300,000,000	Port cargo loading and conveying, warehousing (excluding dangerous goods), supply water carriage materials	Limited liability company	Chen Jingchuan	78374701-1
Diandong Energy	Direct holding	Fuyuan Country, Yunnan Province	RMB1,800,000,000	Power generation	Limited liability company	Li Shuqing	74828137-5
Diandong YuWang	Direct holding	Fuyuan Country, Yunnan Province	RMB1,236,320,000	Power generation	Limited liability company	Li Shuqing	77046107-3

\*In December 2011, Shandong Luneng Sea Transportation Limited Company changed its name to Shandong Hualu Sea Transportation Limited Company.

## (c) Subsidiaries acquired from business combinations not under common control (Cont'd)

	Type of subsidiaries	Place of registration	Registered capital	Business nature and scope of operations	Type of legal entity	Legal representative	Organization Code
Huaneng (Fuzhou) Luoyuanwan Pier Limited Company ("Luoyuanwan Pier")	Direct holding	Luoyuan Coutry, Fujian Province	RMB85,000,000	Port management, cargo loading, information advisory; transporting and warehousing in the port, cargo transport and transfer centre operation; port investment and development	Limited liability company	Li Jianguo	74636503-7
Huaneng Luoyuan Ludao Pier Limited Company ("Ludao Pier")	Direct holding	Luoyuan Coutry, Fujian Province	RMB70,000,000	Port water supply, cargo loading, and warehousing	Limited liability company	Li Jianguo	15477556-2
Luoyuanwan Harbour	Direct holding	Luoyuan Coutry, Fujian Province	RMB652,200,000	Port management, cargo loading, water transport material supply	Limited liability company	Gao Shulin	77065020-2
Huaneng Suzihe Hydropower Development Limited Company ("Suzihe")	Direct holding	Xibin County, Liaoning Province	RMB50,000,000	Hydropower, aquaculture, agriculture irrigation	Limited liability company	Gao Bing	75912645-0
Fujian Yingda Property Development	Indirect holding	Luoyuan Coutry, Fujian	RMB50,000,000	Real estate development, leasing	Limited liability company	Guo Guoming	78691080-6

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Limited Company (“Yingda Property Development”)		Province					
Fujian Xinhuan Industrial Limited Company (“Xinhuan”)	Indirect holding	Luoyuan Coutry, Fujian Province	RMB93,200,000	Mineral water production and sale	Limited liability company	Liu Xinhuan	66508627-X
Enshi Maweigou Hydropower Development Co., Ltd. (“Enshi Hydropower”)	Direct holding	Enshi City, Hubei Province	RMB101,080,000	Hydro resource development, hydropower, aquaculture	Limited liability company	Yu Xiangquan	74767243-8
Kaifeng Xinli Power Generation Co., Ltd. (“Kaifeng Xinli”)	Indirect holding	Kaifeng, Henan Province	RMB146,920,000	Power generation	Limited liability company	Zhao He	61475670-X
SinoSing Power Pte. Ltd (“SinoSing Power”)	Direct holding	Singapore	USD1,400,020,585	Investment holding	Limited liability company	NA	200804742G
Tuas Power Ltd. (“Tuas Power”)	Indirect holding	Singapore	SGD1,338,050,000	Supply gas and electricity, investment holding	Limited liability company	NA	199502116G
Tuas Power Supply Pte Ltd. (“TPS”)	Indirect holding	Singapore	SGD500,000	Power sales	Limited liability company	NA	200004985K
TP Asset Management Pte Ltd. (“TPAM”)	Indirect holding	Singapore	SGD2	Render of environment engineering services	Limited liability company	NA	200505009R
TPGS Green Energy Pte Ltd. (“TPGS”)	Indirect holding	Singapore	SGD1,000,000	Render of utility services	Limited liability company	NA	200612583W
New Earth Pte Ltd. (“NewEarth”)	Indirect holding	Singapore	SGD10,111,841	Waste recycling advisory	Limited liability company	NA	200306521R
New Earth Singapore Pte Ltd. (“NewEarth Singapore”)	Indirect holding	Singapore	SGD17,816,050	Industrial waste management and recycling	Limited liability company	NA	200510273E





	Actual amount of investment cost at end of the year	Other deem investment items	Percentage of equity interest (%)	Percentage of voting right (%)	Included in consolidated financial s tatements	Minority interests	Loss recorded in minority interests balance
Weihai Power Company	828,241,793	—	60%	60%	Yes	538,300,309	—
Taicang II Power Company	603,110,000	—	75%	75%	Yes	292,780,519	—
Huaiyin Power Company	760,884,637	—	100%	100%	Yes	—	—
Huaiyin II Power Company	592,403,600	—	63.64%	63.64%	Yes	130,753,294	218,886,617
Xindian II Power Company	442,320,000	—	95%	95%	Yes	(27,043,488)	50,375,670
Shanghai Combined Cycle	489,790,000	—	70%	70%	Yes	276,789,931	—
Daditaihong	206,142,000	—	100%	100%	Yes	—	—
Zhanhua Cogeneration	408,127,900	—	100%	100%	Yes	—	—
Hualu Sea Transportation	155,895,400	—	53%	53%	Yes	100,712,957	—
Qingdao Port	455,963,800	—	100%	100%	Yes	—	—
Diandong Energy	4,654,146,000	—	100%	100%	Yes	—	—
Diandong YuWang	1,705,203,200	—	100%	100%	Yes	—	—
Luoyuanwan Pier	118,293,800	—	58.3%	58.3%	Yes	72,457,752	—
Ludao Pier	284,614,000	—	100%	100%	Yes	—	—
Luoyuanwan Harbour	1,145,479,500	—	100%	100%	Yes	—	—
Suzihe	50,000,000	—	100%	100%	Yes	—	—
Yingda Property Development	50,000,000	—	100%	100%	Yes	—	—
Xinhuanyuan	67,600,000	—	100%	100%	Yes	—	—
Enshi Hydropower	227,000,000	—	100%	100%	Yes	—	—
Kaifeng Xinli*	124,800,000	—	60%	100%*	Yes	—	—
SinoSing Power	9,809,294,179	—	100%	100%	Yes	—	—

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Tuas Power	21,261,590,113	—	100%	100%	Yes	—	—
TPS	96,384,420	—	100%	100%	Yes	—	—
TPAM	10	—	100%	100%	Yes	—	—
TPGS	3,650,925	—	75%	75%	Yes	6,382,449	—
NewEarth	49,223,432	—	60%	60%	Yes	10,470,967	9,154,145
NewEarth Singapore	69,673,474	—	63.47%	82.08%	Yes	10,645,734	10,939,235
	44,659,832,183	—				1,412,250,424	289,355,667

\* Kaifeng Xinli is a subsidiary held by Qinbei Power Company, a subsidiary of the Company.

## (2) New entities included in consolidation scope during this year

	Net assets as at 31 December 2011	Net (loss)/ profit for the current period
Luoyuanwan Harbour	802,520,590	(33,689,404 )
Luoyuanwan Pier	173,759,598	20,069,996
Ludao Pier	246,259,436	10,954,494
Diandong Energy	3,076,506,958	(380,064,736)
Diandong Yuwang	991,778,997	(299,016,708)
Enshi Hydropower	92,246,882	—
Taicang Port	83,000,000	—
Suzihe	49,731,431	—

\*With the exception of Taicang Port, all other subsidiaries mentioned above were acquired from business combinations not under common control. The net profits/(losses) of the current period are calculated from the dates of acquisition to 31 December 2011.

## (3) Business combination not involving entities under common control

	Goodwill	Calculation of goodwill
Luoyuanwan Harbour (a)	309,269,507	The excess of acquisition cost over the proportionate share of fair value of net identifiable assets acquired was recorded as goodwill. Detailed calculations are presented below.
Luoyuanwan Pier (b)	28,692,762	
Ludao Pier (c)	49,309,058	
Diandong Energy (d)	1,197,574,306	
Diandong Yuwang (e)	414,407,495	
Enshi Hydropower (f)	134,753,118	

## (a) Luoyuanwan Harbour

The Company acquired 100% equity interest of Luoyuanwan Harbour from Shandong Electric Power Corporation (“Shandong Power”) in January 2011. The acquisition date is the date when the Company obtained effective control over the acquiree.

## (i) Acquisition cost and goodwill:

Acquisition costs –	
Consideration in cash	1,124,479,500
Fair value of non-cash assets transferred	—
Fair value of liabilities incurred or assumed	—
<b>Total</b>	<b>1,124,479,500</b>
Less: proportionate share of fair value of net identifiable assets	(815,209,993 )

Goodwill

309,269,507

224

---

(ii) The assets and liabilities of Luoyuanwan Harbour as at the acquisition date and related cash flow of the acquisition are as follows:

	Acquisition date Fair value	Acquisition date Carrying amount	31 December 2010 Carrying amount
Cash and cash equivalents	38,020,797	38,020,797	38,020,797
Receivables	137,401,819	137,401,819	137,401,819
Inventories	10,570,231	10,570,231	10,570,231
Fixed assets	1,462,088,982	1,570,461,059	1,570,461,059
Intangible assets	758,087,741	401,463,631	401,463,631
Deferred income tax assets	—	887,570	887,570
less: Borrowings	(713,720,799 )	(713,720,799 )	(713,720,799 )
Payables	(811,833,537 )	(811,833,537 )	(811,833,537 )
Salary and welfare payables	(546,613 )	(546,613 )	(546,613 )
Deferred income tax liabilities	(61,175,439 )	—	—
Other liabilities	(3,683,189 )	(3,683,189 )	(3,683,189 )
Net assets	815,209,993	629,020,969	629,020,969
Less: minority interests	—	—	—
Net assets acquired	815,209,993	629,020,969	629,020,969
Consideration in cash	1,124,479,500		
Prepayment from last year in cash	(573,484,545 )		
Less: cash and cash equivalents from the subsidiary acquired	(38,020,797 )		
Net cash paid in current year for acquiring the subsidiary	512,974,158		

(iii) The operating revenue, net loss and cash flows of Luoyuanwan Harbour for the period from the acquisition date to 31 December 2011 are as follows:

Operating revenue	124,079,513
Net loss	(33,689,404 )
Cash flows from operating activities	23,962,926
Net cash flows	4,076,502

(b)

Luoyuanwan Pier

The Company acquired 58.3% equity interest of Luoyuanwan Pier from Shandong Power in January 2011. The acquisition date is the date when the Company obtained effective control over the acquiree.

(i)

Acquisition cost and goodwill:

Acquisition costs –	
Consideration in cash	118,293,800
Fair value of non-cash assets transferred	—
Fair value of liabilities incurred or assumed	—
<b>Total</b>	<b>118,293,800</b>
Less: proportionate share of fair value of net identifiable assets	(89,601,038 )
<b>Goodwill</b>	<b>28,692,762</b>

(ii) The assets and liabilities of Luoyuanwan Pier as at the acquisition date and related cash flow of the acquisition are as follows:

	Acquisition date Fair value	Acquisition date Carrying amount	31 December 2010 Carrying amount
Cash and cash equivalents	1,724,291	1,724,291	1,724,291
Receivables	35,638,716	35,638,716	35,638,716
Inventories	320,874	320,874	320,874
Fixed assets and construction materials	193,512,821	184,439,693	184,439,693
Intangible assets	54,671,411	10,524,521	10,524,521
Deferred income tax assets	—	344,378	344,378
less:			
Borrowings	(100,797,513)	(100,797,513)	(100,797,513)
Payables	(14,000,924 )	(14,000,924 )	(14,000,924 )
Salary and welfare payables	(23,564 )	(23,564 )	(23,564 )
Deferred income tax liabilities	(12,960,626 )	—	—
<b>Other liabilities</b>	<b>(4,395,883 )</b>	<b>(4,395,883 )</b>	<b>(4,395,883 )</b>
<b>Net assets</b>	<b>153,689,603</b>	<b>113,774,589</b>	<b>113,774,589</b>
Less: minority interests	(64,088,565 )	—	—
<b>Net assets acquired</b>	<b>89,601,038</b>	<b>113,774,589</b>	<b>113,774,589</b>
Consideration in cash	118,293,800		
Prepayment from last year in cash	(60,329,838 )		
Less: Cash and cash equivalents from the subsidiary acquired	(1,724,291 )		
<b>Net cash paid in current year for acquiring the subsidiary</b>	<b>56,239,671</b>		





(iii) The operating revenue, net profit and cash flows of Luoyuanwan Pier for the period from the acquisition date to 31 December 2011 are as follows:

Operating revenue	72,758,181
Net profit	20,069,996
Cash flows from operating activities	47,945,595
Net cash flows	(517,780 )

(c) Ludao Pier

The Company acquired 100% equity interest of Ludao Pier from Shandong Power and Wu Zhuyu in January 2011. The acquisition date is the date when the Company obtained effective control over the acquiree.

(i) Acquisition cost and goodwill:

Acquisition costs –	
Consideration in cash	284,614,000
Fair value of non-cash assets transferred	—
Fair value of liabilities incurred or assumed	—
Total	284,614,000
Less: proportionate share of fair value of net identifiable assets	(235,304,942)
Goodwill	49,309,058

(ii) The assets and liabilities of Ludao Pier as at the acquisition date and related cash flow of the acquisition are as follows:

	Acquisition date Fair value	Acquisition date Carrying amount	31 December 2010 Carrying amount
Cash and cash equivalents	879,601	879,601	879,601
Receivables	54,594,625	54,594,625	54,594,625
Inventories	78,137	78,137	78,137
Fixed assets and construction-in-progress	161,931,569	147,588,945	147,588,945
Intangible assets	40,509,330	3,454,254	3,454,254
Deferred income tax assets	—	193,894	193,894
less: Borrowings	(2,200,000 )	(2,200,000 )	(2,200,000 )
Payables	(7,094,704 )	(7,094,704 )	(7,094,704 )
Salary and welfare payables	(738,085 )	(738,085 )	(738,085 )
Deferred income tax liabilities	(12,655,531 )	—	—
Net assets	235,304,942	196,756,667	196,756,667
Less: minority interests	—	—	—
Net assets acquired	235,304,942	196,756,667	196,756,667
Consideration in cash	284,614,000		
Prepayment from last year in cash	(139,562,140)		
Less: cash and cash equivalents from the subsidiary acquired	(879,601 )		
Net cash paid in current year for acquiring the subsidiary	144,172,259		

(iii) The operating revenue, net profit and cash flows of Ludao Pier for the period from the acquisition date to 31 December 2011 are as follows:

Operating revenue	51,977,900
Net profit	10,954,494
Cash flows from operating activities	53,486,910
Net cash flows	3,985,836

## (d) Diandong Energy

The Company acquired 100% equity interest of Diandong Energy from Shandong Power in January 2011. The acquisition date is the date when the Company obtained effective control over the acquiree.

## (i) Acquisition cost and goodwill:

Acquisition costs –	
Consideration in cash	4,402,076,000
Fair value of non-cash assets transferred	—
Fair value of liabilities incurred or assumed	—
<b>Total</b>	<b>4,402,076,000</b>
Less: proportionate share of fair value of net identifiable assets	(3,204,501,694)
<b>Goodwill</b>	<b>1,197,574,306</b>

(ii) The assets and liabilities of Diandong Energy as at the acquisition date and related cash flow of the acquisition are as follows:

	Acquisition date Fair value	Acquisition date Carrying amount	31 December 2010 Carrying amount
Cash and cash equivalents	186,479,928	186,479,928	186,479,928
Receivables	587,284,173	587,284,173	587,284,173
Inventories	401,522,949	401,522,949	401,522,949
Fixed assets and construction-in-progress	10,649,705,670	9,795,313,248	9,795,313,248
Intangible assets	1,890,809,266	982,123,547	982,123,547
Deferred income tax assets	—	3,734,450	3,734,450
less: Borrowings	(9,225,000,000 )	(9,225,000,000)	(9,225,000,000)
Payables	(1,014,057,474 )	(1,014,057,474)	(1,014,057,474)
Salary and welfare payables	(5,515,547 )	(5,515,547 )	(5,515,547 )
Deferred income tax liabilities	(260,727,271 )	—	—
Other Liabilities	(6,000,000 )	(6,000,000 )	(6,000,000 )
<b>Net assets</b>	<b>3,204,501,694</b>	<b>1,705,885,274</b>	<b>1,705,885,274</b>
Less: minority interests	—	—	—
<b>Net assets acquired</b>	<b>3,204,501,694</b>	<b>1,705,885,274</b>	<b>1,705,885,274</b>
Consideration in cash	4,402,076,000		
Prepayment from last year in cash	(2,245,058,760 )		
Less: cash and cash equivalents from the subsidiary acquired	(186,479,928 )		
<b>Net cash paid in current year for acquiring the subsidiary</b>	<b>1,970,537,312</b>		



(iii) The operating revenue, net profit and cash flows of Diandong Energy for the period from the acquisition date to 31 December 2011 are as follows:

Operating revenue	3,180,746,345
Net profit	(380,064,736 )
Cash flows from operating activities	798,506,561
Net cash flows	(138,644,549 )

(e) Diandong Yuwang

The Company acquired 100% equity interest of Yuwang Energy from Shandong Power in January 2011. The acquisition date is the date when the Company obtained effective control over the acquiree.

(i) Acquisition cost and goodwill:

Acquisition costs –	
Consideration in cash	1,600,663,200
Fair value of non-cash assets transferred	—
Fair value of liabilities incurred or assumed	—
Total	1,600,663,200
Less: proportionate share of fair value of net identifiable assets	(1,186,255,705)
Goodwill	414,407,495

(ii) The assets and liabilities of Diandong Yuwang as at the acquisition date and related cash flow of the acquisition are as follows:

	Acquisition date Fair value	Acquisition date Carrying amount	31 December 2010 Carrying amount
Cash and cash equivalents	69,313,291	69,313,291	69,313,291
Receivables	329,424,672	329,424,672	329,424,672
Inventories	168,728,670	168,728,670	168,728,670
Fixed assets and construction-in-progress	5,523,233,034	5,597,927,014	5,597,927,014
Intangible assets	278,630,224	311,924	311,924
Deferred income tax assets	—	973,256	973,256
Goodwill	—	10,761,885	10,761,885
less: Borrowings	(4,546,000,000)	(4,546,000,000)	(4,546,000,000)
Payables	(604,742,663 )	(604,742,663 )	(604,742,663 )
Salary and welfare payables	(2,761,130 )	(2,761,130 )	(2,761,130 )
Deferred income tax liabilities	(29,570,393 )	—	—
Net assets	1,186,255,705	1,023,936,919	1,023,936,919
Less: minority interests	—	—	—
Net assets acquired	1,186,255,705	1,023,936,919	1,023,936,919

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Consideration in cash	1,600,663,200
Prepayment from last year in cash	(816,338,232 )
Less: cash and cash equivalents from the subsidiary acquired	(69,313,291 )
Net cash paid in current year for acquiring the subsidiary	715,011,677

230

---

(iii) The operating revenue, net profit and cash flows of Diandong Yuwang for the period from the acquisition date to 31 December 2011 are as follows:

Operating revenue	1,577,293,201
Net profit	(299,016,708 )
Cash flows from operating activities	291,015,290
Net cash flows	94,447,563

(f) Enshi Hydropower

In December 2011, the Company acquired 100% equity interest of Enshi Hydropower from Beijing Ance Hengxing Investment Limited Company, Zhuhai Jingyang Investment Limited Company, Wu Songling and Fang Xiaogui. This transaction was effective after the Company obtained effective control over the acquiree (the acquisition date) in December 2011.

(i) Acquisition cost and goodwill:

Acquisition costs –	
Consideration in cash	227,000,000
Fair value of non-cash assets transferred	—
Fair value of liabilities incurred or assumed	—
Total	227,000,000
Less: proportionate share of fair value of net identifiable assets	(92,246,882 )
Goodwill	134,753,118

(ii) The assets and liabilities of Enshi Hydropower as at the acquisition date and related cash flow of the acquisition are as follows:

	Acquisition date Fair value	Acquisition date Carrying amount	31 December 2010 Carrying amount
Cash and cash equivalents	52,112,697	52,112,697	60,403,579
Receivables	14,607,533	14,607,533	10,026,365
Fixed assets and construction materials	332,432,968	320,596,269	256,687,430
Deferred income tax assets	—	965,259	—
less: Borrowings	(262,150,000)	(262,150,000)	(186,000,000)
Payables	(42,762,400 )	(42,762,400 )	(54,159,831 )
Deferred income tax liabilities	(1,993,916 )	—	—
Net assets	92,246,882	83,369,358	86,957,543
Less: minority interests	—	—	—
Net assets acquired	92,246,882	83,369,358	86,957,543

Consideration in cash	227,000,000
Less: cash and cash equivalents from the subsidiary acquired	(52,112,697 )
Less: Unpaid consideration	(160,184,384)
Net cash paid for acquiring the subsidiary	14,702,919



(iii) The operating revenue, net profit and cash flows of Enshi Hydropower for the period from the acquisition date to 31 December 2011 are as follows:

Operating revenue	—
Net profit	—
Cash flows from operating activities	—
Net cash flows	—

(4) Exchange rates for translation of key financial statement items of overseas operating entities

	Asset and liability items		Income and cash flow statement items
	31 December 2011	31 December 2010	
Subsidiaries registered in Singapore	1 SGD = 4.8679 RMB	1 SGD = 5.1191 RMB	Average exchange rates approximating the rate on transaction dates

## 5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

	(1)			Cash		
	31 December 2011			31 December 2010		
	Original currency amount	Exchange rate	RMB equivalent	Original currency amount	Exchange rate	RMB equivalent
Cash – RMB	2,069,119	1	2,069,119	2,318,183	1	2,318,183
– SGD	7,001	4.8679	34,080	5,406	5.1191	27,674
Subtotal		2,103,199			2,345,857	
Bank deposits–						
RMB	5,038,081,776	1	5,038,081,776	4,430,250,259	1	4,430,250,259
– USD	109,720,918	6.3009	693,822,847	183,425,813	6.6227	1,208,447,052
– JPY	3,040,727	0.0816	248,081	81,114,379	0.0813	6,556,523
– HKD	1,662	0.8139	1,353	2,364,999,900	0.8509	2,012,378,415
– SGD	603,085,128	4.8679	2,935,758,095	368,801,174	5.1191	1,887,930,090
Subtotal		8,667,912,152			9,545,562,339	
		8,670,015,351			9,547,908,196	

Please refer to Note 5(48) for the balances and changes of cash and cash equivalents stated in the cash flow statement.

Please refer to Note 7(6) for cash deposits in a related party.

## (2) Held for trading financial assets

	31 December 2011	31 December 2010
Held for trading financial assets	96,153,714	—

In December 2011, SinoSing Power acquired 70,320,000 shares of Beijing Jingneng Clean Energy Co., Ltd. (“Beijing Jingneng”), a listed entity in Hong Kong. The fair value of such trading securities as at 31 December 2011 was determined based on quoted market price of HKD 1.68 per share on the last trading day of 2011.

## (3) Derivative financial assets and liabilities

	31 December 2011	31 December 2010
Derivative financial assets		
–Hedging instruments of cash flow hedge (fuel swap contracts)	98,975,718	144,289,348
–Hedging instruments of cash flow hedge (forward exchange contracts)	64,641,666	117,418
–Hedging instruments of cash flow hedge (Interest rate swap contracts)	—	75,893,947
–Financial instruments at fair value through profit or loss (fuel swap contracts)	226,046	3,809,826
Subtotal	163,843,430	224,110,539
Less: non-current portion	(16,388,824 )	(91,478,179 )
Total	147,454,606	132,632,360
Derivative financial liabilities		
–Hedging instruments of cash flow hedge (fuel swap contracts)	35,117,749	3,399,214
–Hedging instruments of cash flow hedge (forward exchange contracts)	10,799,584	94,520,519
–Hedging instruments of cash flow hedge (Interest rate swap contracts)	567,687,971	82,158,243
–Financial instruments at fair value through profit or loss (fuel swap contracts)	142,428	2,396,547
Subtotal	613,747,732	182,474,523
Less: non-current portion	(578,198,363 )	(95,862,772 )
Total	35,549,369	86,611,751

Overseas subsidiaries of the Company use forward exchange contracts to hedge foreign exchange risk arising from highly probable forecast purchase transactions. The subsidiaries also use fuel swap contracts to hedge fuel price risk arising from highly probable forecast fuel purchases.

The Company and its overseas subsidiaries use interest rate swap contracts to hedge interest rate risk arising from floating rate borrowing.

The fair value of the exchange forward contracts, fuel swap contracts and interest rate swap contracts was measured based on directly or indirectly observed market price.

The analysis of contractual cash inflows/(outflows) of major derivative financial instruments are as follows:

	Carrying amount	Contractual cash flows	Within 1 year	Cash flow Between 1 and 5 years	After 5 years
As at 31 December 2011					
Derivative financial assets					
Fuel derivatives used for hedging (net settlement)	98,975,718	98,975,718	95,219,603	3,756,115	—
Forward exchange contracts used for hedging					
– inflows		2,993,085,612	2,589,057,105	404,028,507	—
– outflows		(2,926,888,270)	(2,537,998,017)	(388,890,253)	—
Subtotal	64,641,666	66,197,342	51,059,088	15,138,254	—
Fuel derivatives that do not qualify as hedges (net settlement)	226,046	226,046	226,046	—	—
Derivative financial liabilities					
Fuel derivatives used for hedging (net settlement)	35,117,749	(35,117,749 )	(25,062,468 )	(10,055,281 )	—
Forward exchange contracts used for hedging					
– inflows		1,503,309,174	1,457,507,695	45,801,479	—
– outflows		(1,513,663,916)	(1,467,732,449)	(45,931,467 )	—
Subtotal	10,799,584	(10,354,742 )	(10,224,754 )	(129,988 )	—
Net-settled interest rate swaps used for hedging –	567,687,971	(591,911,833 )	(216,817,601 )	(444,207,554)	69,113,322
Fuel derivatives that do not qualify as hedges (net settlement)	142,428	(142,428 )	(142,428 )	—	—



	Carrying amount	Contractual cash flows	Within 1 year	Cash flow Between 1 and 5 years	After 5 years
As at 31 December 2010					
Derivative financial assets					
Fuel derivatives used for hedging (net settlement)	144,289,348	144,289,348	128,803,720	15,485,628	—
Forward exchange contracts used for hedging					
– inflows		22,854,543	5,578,482	17,276,061	—
– outflows		(22,841,505 )	(5,587,112 )	(17,254,393 )	—
Subtotal	117,418	13,038	(8,630 )	21,668	—
Net-settled interest rate swaps used for hedging –					
net cash inflows/(outflows)	75,893,947	78,701,043	(90,387,949 )	(77,252,338 )	246,341,330
Fuel derivatives that do not qualify as hedges (net settlement)					
	3,809,826	3,809,826	3,809,826	—	—
Derivative financial liabilities					
Fuel derivatives used for hedging (net settlement)					
	3,399,214	(3,399,214 )	(2,818,076 )	(581,138 )	—
Forward exchange contracts used for hedging					
– inflows		3,854,529,770	3,609,448,866	245,080,904	—
– outflows		(3,950,469,155 )	(3,692,238,493 )	(258,230,662 )	—
Subtotal	94,520,519	(95,939,385 )	(82,789,627 )	(13,149,758 )	—
Net-settled interest rate swaps used for hedging –					
net cash inflows/(outflows)	82,158,243	(69,965,124 )	(74,596,366 )	(64,088,595 )	68,719,837
Fuel derivatives that do not qualify as hedges (net settlement)					
	2,396,547	(2,396,547 )	(2,396,547 )	—	—



(4)	Notes receivable	31 December 2011	31 December 2010
Banking notes receivable		561,762,128	494,982,203
Commercial notes receivable		1,600,000	141,560,000
		563,362,128	636,542,203

As at 31 December 2011, the balance of notes discounted by the Company and its subsidiaries that were yet to mature amounted to RMB59,756,865. As these notes receivable were yet to mature, the proceeds received were recorded as short-term loans (31 December 2010: RMB10,000,000) (Note 5(19)(a)).

As at 31 December 2011, notes receivable of RMB15,000,000 of the Company and its subsidiaries were pledged to a bank as collateral against banking notes of RMB10,838,842 (As at 31 December 2010, notes receivable of RMB10,000,000 of the Company and its subsidiaries were pledged to a bank as collateral against banking notes of RMB7,243,500) (Note 5(20)).

(5)	Accounts receivable	31 December 2011	31 December 2010
Accounts receivable		14,967,696,122	10,426,783,940
Less: provision for doubtful accounts		(153,214,935 )	(154,190,526 )
		14,814,481,187	10,272,593,414

(a) The ageing analysis of accounts receivable are as follows:

	31 December 2011	31 December 2010
Within 1 year	14,772,356,995	10,267,980,557
1-2 years	40,158,117	535,091
2-3 years	219,229	24,956,793
3-4 years	23,996,305	—
4-5 years	—	—
Over 5 years	130,965,476	133,311,499
	14,967,696,122	10,426,783,940

(b) As at 31 December 2011, the individually significant (over 10% of accounts receivable balance) accounts receivable of the Company and its subsidiaries amounted to RMB3,491,532,262 (31 December 2010: RMB3,589,215,456), representing 23.33% (31 December 2010: 34.42%) of the total accounts receivable. There was no bad debt provision made on these accounts receivable based on the assessment as at 31 December 2011 (31 December 2010: Nil).





(c) As at 31 December 2011, the provision for doubtful accounts of accounts receivables which were individually insignificant but tested for impairment on an individual basis are as follows:

	Amount	Provision for doubtful accounts	Percentage
Chongqing Special Steel Co., Ltd	103,773,448	(103,773,448)	100 %
Chongqing No.3 Textile Factory	13,458,241	(13,458,241)	100 %
Others	35,983,246	(35,983,246)	100 %
	153,214,935	(153,214,935)	

\* As at 31 December 2011, accounts receivable of the Company and its subsidiaries which need individual impairment test were mainly past due receivables due from local customers of subsidiaries. Provisions for doubtful accounts have been made for these receivables based on the operating and financial condition of these customers.

(d) There were no significant account receivables written off during 2011 (2010: Nil).

(e) As at 31 December 2011, there was no accounts receivable from shareholders who held 5% or more of the equity interest in the Company (31 December 2010: Nil).

(f) As at 31 December 2011, the top five accounts receivable of the Company and its subsidiaries are as follows:

	Relationships	Amount	Ageing	Percentage
Jiangsu Electric Power Company	Non-related Party	1,936,768,749	Within one year	12.94 %
Shandong Power	Non-related Party	1,554,763,513	Within one year	10.39 %
ZheJiang Electric Power Corporation	Non-related Party	1,126,714,049	Within one year	7.53 %
Shanghai Electric Power Corporation	Non-related Party	1,071,901,729	Within one year	7.16 %
Guangdong Power Grid Corporation	Non-related Party	944,203,144	Within one year	6.31 %
		6,634,351,184		44.33 %

(g) As at 31 December 2011, there were no accounts receivable from the related parties (31 December 2010: Nil).

(h) As at 31 December 2011, accounts receivable (within one year and no provision of doubtful accounts) of the Company and its subsidiaries approximating RMB2,770,903,857 (2010: RMB1,513,050,207) were secured to a bank as collateral against a short-term loan of RMB2,490,400,628 (2010: RMB1,389,449,751) (Note 5(19)(a)).

(i) As at 31 December 2011, long-term loans of Diandong Energy and Diandong Yuwang, subsidiaries of company amounting to RMB13,094 million were secured by tariff collection rights (2010: nil) (Note 5(28)(b)).

As at 31 December 2011, long-term loans of Enshi Hydropower which a subsidiary of the Company of RMB235 million were secured by property, plant and equipment with net book value amounting to RMB332 million and tariff collection right of the subsidiary



of the Company. These loans are also guaranteed by former shareholders of the subsidiary of the Company (2010: nil).

(j) Accounts receivable balances by currency are as follows:

	31 December 2011			31 December 2010		
	Original currency amount	Exchange rate	RMB Original	Original currency amount	Exchange rate	RMB equivalent
RMB	13,451,121,531	1	13,451,121,531	9,247,178,702	1	9,247,178,702
SGD	306,711,863	4.8679	1,493,042,681	220,863,659	5.1191	1,130,623,155
USD	3,720,255	6.3009	23,531,910	7,440,509	6.6227	48,982,083
<b>Total</b>			<b>14,967,696,122</b>			<b>10,426,783,940</b>

(6) Advances to suppliers

(a) The ageing analysis of advances to suppliers is as follows:

Ageing	31 December 2011			31 December 2010		
	Amount	Percentage		Amount	Percentage	
Within one year	992,423,495	96.14	%	1,189,553,596	96.82	%
1-2 years	27,020,922	2.62	%	22,686,535	1.85	%
2-3 years	9,939,372	0.96	%	360,436	0.03	%
Over 3 years	2,860,905	0.28	%	15,914,851	1.30	%
	<b>1,032,244,694</b>	<b>100.00</b>	<b>%</b>	<b>1,228,515,418</b>	<b>100.00</b>	<b>%</b>

As at 31 December 2011, advances to suppliers aged over one year of the Company and its subsidiaries were mainly prepayments for coal. These advances have not been settled, as the supply is continuing.

(b) As at 31 December 2011, the five largest advances to suppliers of the Company and its subsidiaries are as follows:

	Relationship	Amount	Percentage		Prepaid Time	Reasons for unsettlement
Xuanwu Gongtuo Impetus and Coal Co., Ltd	Non-related party	93,627,001	9.07	%	Within one year	Prepayments for coal
Yangquan Tiancheng Coal Railway Transportation Co., Ltd.	Non-related party	79,396,118	7.69	%	Within one year	Prepayments for coal
Shanxi Xishan Coal and Electricity Co., Ltd	Non-related party	66,500,586	6.44	%	Within one year	Prepayments for coal
Yangquan Coal (Group) Co., Ltd	Non-related party	49,112,819	4.76	%	Within one year	Prepayments for coal
Shanghai Ruiyelian Industrial Co., Ltd	Non-related party	43,181,127	4.18	%	Within one year	Prepayments for coal
		331,817,651	32.14	%		

(c) As at 31 December 2011, there were no advances to suppliers who held 5% or more of the equity interest in the Company (31 December 2010: Nil).

(d) Prepayments to the related parties are as follows:

	Relationship	31 December 2011			31 December 2010		
		Amount	Percentage	Provision	Amount	Percentage	Provision
HEC and its subsidiaries	Subsidiaries of Huaneng Group	3,265,890	0.32	%	—	—	—
Shandong Rizhao Power Limited Company ("Rizhao Power Company")	An associate of the Company	35,918,593	3.48	%	—	73,368,050	5.97 %
Xi'an Thermal Power	Subsidiaries of Huaneng Group	—	—	—	2,247,750	0.18	%
Research Institute Co., Ltd. ("Xi'an Thermal") and its							

subsidiaries

39,184,483	3.80	%	—	75,615,800	6.15	%	—
------------	------	---	---	------------	------	---	---

(e) Advances to suppliers balances by currency are as follows:

	31 December 2011			31 December 2010		
	Original currency amount	Exchange rate	RMB equivalent	Original currency amount	Exchange rate	RMB equivalent
RMB	1,021,397,130	1	1,021,397,130	1,148,002,568	1	1,148,002,568
SGD	2,228,387	4.8679	10,847,564	15,727,931	5.1191	80,512,850
Total			1,032,244,694			1,228,515,418

239

(7)

## Other receivables

	31 December 2011	31 December 2010
Receivable from Administration Center of Housing Fund for proceeds from sales of staff quarters	62,112,167	62,233,204
Staff advances	17,877,095	15,557,891
Warranties	75,674,629	—
Prepayments for constructions and projects	219,702,823	344,660,505
Prepayments for investments	—	373,440,000
Receivables from fuel sales	208,051,230	260,447,555
Proceeds from disposals of assets	20,448,065	—
Others	547,039,641	588,638,110
<b>Total</b>	<b>1,150,905,650</b>	<b>1,644,977,265</b>
Less: provision for bad debts	(26,536,590 )	(42,075,704 )
	<b>1,124,369,060</b>	<b>1,602,901,561</b>

(a) The ageing analysis of other receivables is as follows:

	31 December 2011	31 December 2010
Within 1 year	785,810,007	669,687,029
1-2 years	124,159,569	678,491,074
2-3 years	71,339,453	161,111,603
3-4 years	46,198,178	10,030,296
4-5 years	10,230,276	13,220,585
Over 5 years	113,168,167	112,436,678
	<b>1,150,905,650</b>	<b>1,644,977,265</b>

(b) As at 31 December 2011, there were no individually significant (over 10% of other receivables balance) other receivables of the Company and its subsidiaries (31 December 2010: RMB440,128,690, representing 26.75%, and with no bad debt provision made on these other receivables based on the assessment).

(c) As at 31 December 2011, the provisions for doubtful accounts on other receivables which were individually insignificant but tested for impairment on an individual basis are as follows:

	Amount	Provision for doubtful accounts	Percentage	
Dalian Development Zone Trust and Investment Corporation	4,700,000	4,700,000	100.00	%
Hebei Convention and Exhibition Center	5,000,000	5,000,000	100.00	%
Heshun Company	1,000,000	1,000,000	100.00	%
Xiangtan Branch of China Construction Bank	1,157,313	1,074,612	92.85	%
Huaxing Company	2,576,874	2,576,874	100.00	%
Yushe Financial Bureau	2,400,000	2,400,000	100.00	%
Yushe Yunzhu Road Reconstruction Office	1,800,000	1,800,000	100.00	%
Shanxi Province Power Supply Company	2,000,000	2,000,000	100.00	%
Others	15,754,074	5,985,104	37.99	%
	36,388,261	26,536,590		

Provision for doubtful accounts have been made for these receivables based on the operating and financial condition of these customers.

(d) There were no significant other receivables written off during 2011 (2010: Nil).

(e) As at 31 December 2011, except the one from Huaneng Group amounting to RMB37,000, there was no other receivable from shareholders who held 5% or more of the equity interest in the Company (31 December 2010: Nil).

(f) As at 31 December 2011, the top five other receivables of the Company and its subsidiaries are as follows:

	Relationships	Amount	Ageing	Percentage	
Huaneng Wuhan Power Co., Ltd. ("Wuhan Power")	A subsidiary of Huaneng Group	82,494,775	Within one year	7.17	%
Shandong Rizhao Power Company Ltd. ("Rizhao Power Company")	An associate of the Company	65,640,527	Within one year	5.70	%
Huaneng Ruijin Power Generation Co., Ltd. ("Ruijin Power")	A subsidiary of Huaneng Group	42,766,640	Within one year	3.72	%
Fuyuan non-taxable income administrative bureau	Non-related Party	40,000,000	Within one year	3.48	%
Shangdong Jining Huaneng Industrial Co., Ltd	Non-related Party	34,055,391	Within one year	2.96	%
		264,957,333		23.03	%



(g) Other receivables from related parties are as follows:

	Relationship	31 December 2011			31 December 2010		
		Amount	Percentage	Provision	Amount	Percentage	Provision
Huaneng Group	Ultimate parent company	37,000	—	—	—	—	—
HEC and its subsidiaries	Subsidiaries of Huaneng Group	—	—	—	283,542	0.02 %	—
Rizhao Power Company	An associate of the Company	65,640,527	5.70 %	—	19,118,470	1.16 %	—
Alltrust Property Insurance Co., Ltd. (“Alltrust Insurance”)	A subsidiary of Huaneng Group	—	—	—	3,394,066	0.21 %	—
Huaneng Suzhou Thermoelectric Power Company Ltd. (“Suzhou Power”)	A subsidiary of Huaneng Group	10,224,763	0.89 %	—	244,816	0.01 %	—
Huaneng Yantai Wind Power Co. Ltd (“Yantai Power”)	A subsidiary of Huaneng Group	6,924,525	0.60 %	—	—	—	—
Huaneng Tibet Power Generation Co., Ltd. (“Tibet Power”)	A subsidiary of Huaneng Group	—	—	—	876,631	0.05 %	—
Ruijin Power	A subsidiary of Huaneng Development	42,766,640	3.72 %	—	194,008,690	11.79 %	—
Xi’an Thermal and its subsidiaries	A subsidiary of Huaneng Group	991,539	0.09 %	—	—	—	—
Wuhan Power	A subsidiary of Huaneng Group	82,494,775	7.17 %	—	17,650,205	1.07 %	—
		209,079,769	18.17 %	—	235,576,420	14.31 %	—

(h) Other receivables balances by currency are as follows:

	31 December 2011		31 December 2010	
	Original	RMB	Original	RMB

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

	currency amount	Exchange rate	equivalent	currency amount	Exchange rate	equivalent
RMB	1,052,689,843	1	1,052,689,843	1,537,726,683	1	1,537,726,683
SGD	12,318,579	4.8679	59,965,612	10,501,805	5.1191	53,759,790
USD	6,042,799	6.3009	38,250,195	8,125,394	6.6227	53,490,792
<b>Total</b>			<b>1,150,905,650</b>			<b>1,644,977,265</b>

242

---

(8)

## Inventories

(a) The categories of Inventories are as follows:

	31 December 2011			31 December 2010		
	Book value	Provision	Net book value	Book value	Provision	Net book value
Fuel (coal and oil)	6,312,592,283	—	6,312,592,283	4,024,586,473	—	4,024,586,473
Materials and spare parts	1,395,887,677	(182,859,375)	1,213,028,302	1,360,336,304	(194,487,621)	1,165,848,683
	7,708,479,960	(182,859,375)	7,525,620,585	5,384,922,777	(194,487,621)	5,190,435,156

(b) The analysis of provision for inventory is as follows:

	31 December 2010	Current year additions	Current year deductions		Currency translation differences	31 December 2011
			Reversal	Write off		
Materials and spare parts	194,487,621	238	(3,351,924)	(2,408,194)	(5,868,366)	182,859,375

(c) The status of provision for inventory is as follows:

	The basis of provision for inventory	The reasons for the reversal of the provision for inventory	The percentage of reversal amount over the ending balance of such inventory
Materials and spare parts	The excess of book value over net realizable value	Increase of the net realizable value of the materials and spare parts which had impairment provisions in previous years	0.24%

(9)

## Available-for-sale financial assets

	31 December 2011	31 December 2010
Available-for-sale equity instrument	1,638,080,010	1,949,727,308

Available-for-sale financial assets represent the equity investment in China Yangtze Power Co., Ltd. (“Yangtze Power”). As at 31 December 2011, the Company had approximately 257.56 million shares of Yangtze Power, representing 1.56% (31 December 2010: approximately 257.56 million shares, 1.56%) of its total share capital. The fair value of the above available-for-sale equity instrument as at 31 December 2011 was determined based on the closing market price of RMB6.36 per share quoted in the Shanghai Stock Exchange on the last trading day of 2011 (31 December 2010: the closing market price of Yangtze Power was RMB7.57 per share quoted in the Shanghai Stock Exchange on the last trading day of 2010).

## (10) Long-term receivables

As at 31 December 2011 and 31 December 2010, long-term receivables of the Company and its subsidiaries primarily represent long-term receivables from finance lease out of fixed assets and construction-in-progress (Note 5(12), (13)).

## (11) Long-term equity investments

	31 December 2011	31 December 2010
Jointly controlled entities (a)	1,244,072,861	1,058,000,000
Associates (a)		
–With quoted prices	1,800,696,607	—
–With no quoted prices	10,247,869,917	10,648,718,644
Other long-term equity investments	721,002,933	282,002,933
	14,013,642,318	11,988,721,577
Less: impairment provision for long-term equity investments	(6,088,243 )	(6,088,243 )
	14,007,554,075	11,982,633,334

The long-term investments of the Company and its subsidiaries are not subject to restriction on conversion into cash or remittance of investment income.

## (a) Jointly controlled entities and associates

	Accounting method	Initial investment cost	31 December 2010	Increase or decrease during the year			
				Additions or deductions	Net profit or loss adjusted by the equity method	Dividends declared	Other equity movement
<b>Jointly controlled entity</b>							
Shanghai Time Shipping Co., Ltd. ("Time Shipping")	Equity method	1,058,000,000	1,058,000,000	—	76,036,099	(49,963,238 )	—
Jiangsu Nantong Power Generation Co., Ltd. ("Jiangsu Nantong Power")*	Equity method	160,000,000	—	160,000,000	—	—	—
			1,058,000,000	160,000,000	76,036,099	(49,963,238 )	—
<b>Associates</b>							
Rizhao Power Company	Equity method	561,502,261	357,099,546	—	(42,572,404 )	—	—
Shenzhen Energy Group Co., Ltd. ("SEG")**	Equity method	466,623,076	3,762,097,632	(2,859,140,019)	15,828,754	(150,000,000)	(4,475,321 )
Shenzhen Energy Management Co., Ltd ("SEM")**	Equity method	1,803,162,133	—	2,859,140,019	199,076,128	—	(26,078,300)
Hebei Hanfeng Power Generation Limited Liability Company ("Hanfeng Power Company")	Equity method	1,382,210,557	1,111,251,916	—	(25,702,667 )	—	—

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Chongqing Huaneng Lime Company Limited (“Lime Company”) ***	Equity method	24,295,710	28,266,914	—	1,550,350	(1,810,000 )	—
China Huaneng Finance Corporation Ltd. (“Huaneng Finance”)	Equity method	1,040,634,130	560,213,462	600,000,000	81,939,333	(60,000,000 )	(3,520,075 )

\* Jiangsu Nantong Power Generation Co., Ltd. (“Jiangsu Nantong Power”) is the jointly controlled entity of Nantong Power Company (one of the subsidiary of the Company).

\*\* In accordance with <Corporate Restructuring Proposal>, SEG was restructured into two entities, namely, SEG and Shenzhen Energy Management Corporation. After restructuring, the shares of SEC originally held by SEG were transferred to Shenzhen Energy Management Corporation. The deductions of investment in SEG was calculated by the proportion of company owned shares of the net assets of SEG at the restructuring date, while the additions of investment in SEM was in accordance with the restricting plan.

\*\*\* Lime Company is the associate of Luohuang Power Company (a subsidiary of the Company).

				Increase or decrease during the year					
	Accounting method	Initial investment cost	31 December 2010	Additions or deductions	Net profit or loss adjusted by the equity method	Dividends declared	Other equity movement		
Associates (Cont'd)									
Huaneng Sichuan Hydropower Co., Ltd. ("Sichuan Hydropower Company")	Equity method	1,461,457,497	1,591,459,138	—	296,201,591	(220,118,392)	(288,326)	1,591,459,138	
Shenzhen Energy Corporation ("SEC")*	Equity method	1,448,200,000	1,724,785,268	—	107,843,565	(20,000,000)	(11,932,226)	1,724,785,268	
Yangquan Coal Industry Group Huaneng Coal-fired Electricity Investment Co., Ltd ("Yangmei Huaneng Company")	Equity method	490,000,000	494,450,564	—	(1,759,075)	—	17,010,997	494,450,564	
Huaneng Shidaowan Nuclear Power Development Co. Ltd. ("Shidaowan Nuclear Power")	Equity method	450,000,000	300,000,000	150,000,000	—	—	—	450,000,000	
Bianhai Railway Co., Ltd. ("Bianhai Railway")	Equity method	143,930,000	143,930,000	—	(6,657,395)	—	—	143,930,000	
Shanxi Luan Group Zuoquan Wulihou Coal Co., Ltd. ("Wulihou Coal")	Equity method	425,000,000	346,164,204	68,000,000	(41,322,241)	—	(1,420,416)	372,421,547	



Company")\*\*

Huaneng Shenbei Cogeneration Limited Liability Company ("Shenbei Cogeneration")	Equity method	13,000,000	13,000,000	—	—	—	—	13
--	------------------	------------	------------	---	---	---	---	----

\*The Company holds 240 million shares, representing 9.08% shareholding of SEC, which is also the subsidiary of SEG, one of the Company's associates. Considered the equity interest effectively held by the Company directly and indirectly through SEG, and directors as well as supervisors appointed by the Company in SEC, the Company exercises significant influence on operations of SEC and classified this as an associate. As at 31 December 2011, the fair value of these 240 million shares was 1464 million (31 December 2010: The 200 million shares mentioned above are subject to a lock-up period of 3 years from the acquisition date. As there is no published price quotation for shares with such specific lock-up arrangement there is no price information available for the disclosure purpose.). The fair value of the price with SEC was RMB6.10 quoted the closing price of the last trading day from Shenzhen Stock Exchange in 2011.

\*\* In November 2011 associate of the company Zuoquan Longquan Metallurgy Casting Co., Ltd, one of the associate of the company, was renamed as Shanxi Luan Group Zuoquan Wulihou Coal Co., Ltd.

	Accounting method	Initial investment cost	31 December 2010	Additions or deductions	Increase or decrease during the year Net profit or loss adjusted by the equity method	Dividends declared	Other movements
Associates (Cont'd)							
Hainan Nuclear Power Co., Ltd. ("Hainan Nuclear Power")	Equity method	393,804,000	216,000,000	177,804,000	—	—	—
Huaneng Jinling Combined Cycle Co-generation Co., Ltd. ("Jinling Combined Cycle Co-generation")*	Equity method	38,250,000	—	38,250,000	—	—	—
Huaneng (Tianjin) Coal Gasification Power Generation Co., Ltd. ("Tianjin Coal Gasification Power")	Equity method	264,000,000	—	264,000,000	—	—	—
		10,648,718,644	1,298,054,000	584,425,939	(451,928,392)	(30,703,667)	12,048,566

\*Jinling Combined Cycle Co-generation is an associate of the company on which the company has significant influence according to the agreement set by the two parties.

As at 31 December 2011, total net assets of jointly controlled entity amounted to RMB2,451,498,481 (31 December 2010: RMB2,079,352,757), Total revenue and total profit attributable to shareholders of jointly controlled entity are RMB2,284,728,714 and RMB152,072,201 respectively (2010: nil).

Total net assets of the above-specified associates of the Company and its subsidiaries amounted to RMB39,188,064,623 (31 December 2010: RMB33,459,166,913). Total revenue and total profit attributable to shareholders of the associates are RMB26,291,581,074 and RMB1,572,447,196 respectively (2010: RMB22,932,949,324 and RMB1,545,521,197).

(12)

## Fixed assets

	31 December 2010	Reclassification	Additions from acquisition	Current year additions	Current year deductions	Currency translation differences	
Total of original cost	216,212,316,878	—	15,985,354,739	29,508,305,910	(1,597,257,610)	(677,366,591)	259
Ports facilities	1,315,393,029	—	1,088,995,750	2,882,182	—	—	2,4
Dam	—	—	110,801,656	—	—	—	110
Buildings	3,990,197,118	(257,284,043)	622,499,790	363,161,200	(2,798,105)	—	4,7
Electric utility plant in service	206,205,599,722	246,754,544	13,851,515,397	28,753,114,784	(1,488,736,638)	(663,962,443)	246
Transportation facilities	703,507,471	(5,652,174)	—	164,379,169	—	—	862
Others	3,997,619,538	16,181,673	311,542,146	224,768,575	(105,722,867)	(13,404,148)	4,4
Total of accumulated depreciation	87,952,361,718	—	2,129,970,817	11,729,663,876	(1,357,123,091)	(246,316,671)	100
Ports facilities	74,822,328	—	69,423,661	67,029,983	—	—	211
Dam	—	—	5,772,445	—	—	—	5,7
Buildings	1,487,371,719	(98,180,801)	45,146,287	156,758,217	(1,130,976)	—	1,5
Electric utility plant in service	83,809,326,025	86,999,670	1,945,975,675	11,182,367,952	(1,276,119,535)	(236,090,773)	95,
Transportation facilities	347,767,355	(2,138,331)	—	36,489,815	—	—	382
Others	2,233,074,291	13,319,462	63,652,749	287,017,909	(79,872,580)	(10,225,898)	2,5
Total of book value	128,259,955,160	—	—	—	—	—	159
Ports facilities	1,240,570,701	—	—	—	—	—	2,1
Dam	—	—	—	—	—	—	105
Buildings	2,502,825,399	—	—	—	—	—	3,1
Electric utility plant in service	122,396,273,697	—	—	—	—	—	151
Transportation facilities	355,740,116	—	—	—	—	—	480
Others	1,764,545,247	—	—	—	—	—	1,9
Total of provision	4,606,508,476	—	23,240,282	71,276,445	(91,517,150)	(194,731,820)	4,4

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Ports facilities	—	—	—	—	—	—	—
Dam	—	—	—	—	—	—	—
Buildings	—	—	—	—	—	—	—
Electric utility plant in service	4,606,508,476	—	—	50,853,920	(91,261,294 )	(194,731,820)	4,3
Transportation facilities	—	—	—	—	—	—	—
Others	—	—	23,240,282	20,422,525	(255,856 )	—	43,
<b>Total of net book Value</b>	<b>123,653,446,684</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>154</b>
Ports facilities	1,240,570,701	—	—	—	—	—	2,1
Dam	—	—	—	—	—	—	105
Buildings	2,502,825,399	—	—	—	—	—	3,1
Electric utility plant in service	117,789,765,221	—	—	—	—	—	147
Transportation facilities	355,740,116	—	—	—	—	—	480
Others	1,764,545,247	—	—	—	—	—	1,8

(a) For the year ended 31 December 2011, depreciation charge amounted to RMB11,729,663,876 (2010: RMB10,189,465,124), in which depreciation charged to operations cost, general and administrative expenses, other operating expense and sales expense amounted to RMB11,620,981,277, RMB52,420,975, RMB41,381,472, and RMB381,362 respectively, (2010: depreciation charged to operations cost, general and administrative expenses, and other operating expense amounted to RMB10,124,197,068, RMB24,808,880 and RMB26,221,977, respectively).

(b) The cost transferred from construction-in-progress was RMB28,913,536,966 (2010: RMB23,198,015,732).

(c) As at 31 December 2011 and 31 December 2010, electricity utilities plant of the company and its subsidiaries with original cost SGD17,627,010 (RMB85,806,522) was transferred under finance lease arrangement (31 December 2010: SGD17,627,010, equals to RMB90,234,427).

(d) Temporarily idle assets

As at 31 December 2011, the buildings and electric utility plant in service with the book value amounted to approximately RMB163,994 (original cost of RMB806,577) (31 December 2010: book value of RMB225,230 and original cost of RMB809,110) was temporarily idle. The analysis is as follows:

	Cost	Accumulated depreciation	Provision	Net book value
Electric utility plant in service	806,577	(642,583 )	—	163,994

(e) As at 31 December 2011, Number 4 berth of Luoyuanwan Harbour, a subsidiary of the company, was secured to a bank as collateral against a long-term loan of RMB169 million (2010: nil) (Note 5(28)(b)).

(f) As at 31 December 2011, long-term loans of the Company and its subsidiaries of RMB235 million (31 December 2010: nil) were secured by construction in progress, fixed assets and construction materials with net book value amounting to RMB332 million and electricity fee collection right of Enshi Hydropower, a subsidiary of the Company. These loans are also guaranteed by former shareholders of the subsidiary of the Company (Notes 5(28)(b)).

(g) As at 31 December 2011, fixed assets pending for disposal of the Company and its subsidiaries aged over one year amount to RMB86,818,774 (31 December 2010: nil), and the disposing is in progress.

(13)

## Construction-in-progress

Project	Budget	31 December 2010	Additions from acquisition	Current year acquisition	Transfers to fixed assets during current year	Sale of subsidiary
Fuzhou Power Plant Phase III project	5,398,185,826	1,869,125,875	—	149,935,800	(1,101,381,701 )	—
Wafangdian Wind Power project	471,726,300	221,994,359	—	178,212,051	(399,426,954 )	—
Beijing Cogeneration Phase II project	3,194,000,000	272,639,359	—	2,246,023,529	(2,483,696,740 )	—
Weihai Power Company Phase III Expansion project	5,448,150,000	1,555,483,238	—	140,606,973	(1,696,090,211 )	—
Jinggangshan Power Plant Expansion project	4,552,230,000	308,092,383	—	103,980,332	(412,072,715 )	—
Yueyang Power Company Phase III project	4,925,153,110	3,509,087,759	—	197,356,886	(3,704,454,645 )	—
Kangbao Wind Power Phase I project	450,260,000	331,772,419	—	29,568,647	(361,341,066 )	—
Jiuquan Wind Power Qiaowan 2nd Plant	2,047,228,700	740,300,430	—	685,563,519	(1,425,863,949 )	—
Jiuquan Wind Power Qiaowan	1,049,797,900	396,798,828	—	325,320,499	(722,119,327 )	—

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Sanbei Plant							
Jiuquan Wind							
Power							
Ganhekou							
2nd Plant	2,037,353,600	989,018,912	—	499,239,789	(1,488,258,701 )	—	—
Jinling Power							
Company							
project	8,933,700,000	3,465,514,235	—	532,157,629	(3,997,671,864 )	—	—
Huaneng							
Haimen							
Power Plant							
project	8,007,720,000	3,105,078,302	—	2,126,122,325	(3,928,174,462 )	—	—
Qinbei Power							
Expansion							
project	8,368,030,000	3,047,528,837	—	2,120,662,700	—	—	—
Xiangqi							
Hydro Power							
Plant project	1,124,553,500	243,690,765	—	409,766,794	(176,748,294 )	—	—
Zuoquan							
Coal-fired							
Power							
Company							
Phase I							
project	5,393,450,000	1,017,177,304	—	2,847,681,147	(2,910,342,930 )	—	—
SinoSing							
Power CCP5							
Project	2,098,831,000	204,374,159	—	923,387,723	—	—	(5)
SinoSing							
Power							
Tembusu							
Phase I							
project	10,238,200,000	516,766,173	—	2,152,471,097	—	—	(14)
Diandong							
Energy Coal							
Project	4,370,000,000	—	2,902,394,581	335,517,976	—	—	—
Diandong							
Yuwang Coal							
Project	3,260,747,380	—	415,283,180	128,307,328	—	—	—
Qingdao Port							
project	857,166,800	591,481,285	—	116,598,575	(821,325 )	—	—
Other projects		3,857,138,905	1,489,362,493	4,322,702,452	(4,105,072,082 )	(308,129,838)	(4)
		26,243,063,527	4,807,040,254	20,571,183,771	(28,913,536,966)	(308,129,838)	(2)
Impairment		—	(22,632,443 )	(9,550,976 )	—	—	—
		26,243,063,527	4,784,407,811	20,561,632,795	(28,913,536,966)	(308,129,838)	(2)

Source of financing of all projects above are funds borrowed from financial institutions and internal funds.

As at 31 December 2011, long-term loans of the Company and its subsidiaries of RMB235 million (31 December 2010: nil) were secured by construction in progress, fixed assets and construction materials with net book value

amounting to RMB332 million and electricity fee collection right of Enshi Hydropower, a subsidiary of the Company. These loans are also guaranteed by former shareholders of the subsidiary of the Company (Notes 5(28)(b)).

250

---



In 2011, included in the disposal of CIP was SGD83,049,316 (RMB404,275,765) relating to a finance lease arrangement (31 December 2010: SGD83,049,316, equals to RMB412,904,590).

	(14) Construction materials				
	31 December 2010	Additions from acquisition	Current year additions	Current year deductions	31 December 2011
Specialised materials and equipment	1,640,282,108	—	7,553,873,783	(8,979,163,740 )	214,992,151
Prepayments for major equipment	4,362,138,507	35,243,808	1,006,400,363	(3,860,583,262 )	1,543,199,416
Tools and spare parts	12,558,992	—	10,016,286	(14,715,261 )	7,860,017
	6,014,979,607	35,243,808	8,570,290,432	(12,854,462,263)	1,766,051,584

As at 31 December 2011, long-term loans of the Company and its subsidiaries of RMB235 million (31 December 2010: nil) were secured by construction in progress, fixed assets and construction materials with net book value amounting to RMB332 million and electricity fee collection right of Enshi Hydropower, a subsidiary of the Company. These loans are also guaranteed by former shareholders of the subsidiary of the Company (Notes 5(28)(b)).

	(15)		Intangible assets				
	31 December 2010	Additions from acquisition	Current year additions	Current year transfer	Current year deductions	Currency translation differences	31 December 2011
Total of original cost	8,765,374,185	3,050,213,421	117,202,118	(32,789,085)	(2,195,365)	(256,361,535)	11,641,443,739
Land use rights	4,251,604,528	406,999,859	70,547,879	(32,619,155)	(2,195,365)	(50,539,101 )	4,643,798,645
Power generation licence	4,105,518,200	—	—	—	—	(201,462,400)	3,904,055,800
Mining rights	—	1,922,655,500	—	—	—	—	1,922,655,500
Others	408,251,457	720,558,062	46,654,239	(169,930 )	—	(4,360,034 )	1,170,933,794
Total of accumulated amortization	999,326,384	27,476,035	166,430,185	(2,732,450 )	—	(17,157,571 )	1,173,342,583
Land use rights	895,670,816	9,817,075	106,546,487	(2,698,464 )	—	(15,731,864 )	993,604,050
Power generation licence	—	—	—	—	—	—	—
Mining rights	—	—	—	—	—	—	—
Others	103,655,568	17,658,960	59,883,698	(33,986 )	—	(1,425,707 )	179,738,533
Total of book value	7,766,047,801	—	—	—	—	—	10,468,101,156
Land use rights	3,355,933,712	—	—	—	—	—	3,650,194,595
Power generation licence	4,105,518,200	—	—	—	—	—	3,904,055,800
Mining rights	—	—	—	—	—	—	1,922,655,500
Others	304,595,889	—	—	—	—	—	991,195,261
Total of impairment provision	258,830,459	—	15,660,890	—	—	(13,547,447 )	260,943,902
	234,422,591	—	—	—	—	(11,503,380 )	222,919,211

Land use rights							
Power generation licence	—	—	—	—	—	—	—
Mining rights	—	—	—	—	—	—	—
Others	24,407,868	—	15,660,890	—	—	(2,044,067 )	38,024,691
<b>Total of net book value</b>	<b>7,507,217,342</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>10,207,157,254</b>
Land use rights	3,121,511,121	—	—	—	—	—	3,427,275,384
Power generation licence	4,105,518,200	—	—	—	—	—	3,904,055,800
Mining rights	—	—	—	—	—	—	1,922,655,500
Others	280,188,021	—	—	—	—	—	953,170,570

(a) For the year ended 31 December 2011, amortization of intangible assets amounted to RMB166,430,185 (2010: RMB129,934,414).

(b) As at 31 December 2010, land use right of Qingdao Port, a subsidiary of the Company amounting to approximately RMB28,306,601 was secured to a bank as collateral against a long-term loan of RMB30 million. It was changed into credit loans in 2011 (Note 5(28)(b)).

(c) As at 31 December 2011, territorial waters use right with net book value amounting to RMB86.37 million was secured to a bank as collateral against a long-term loan of RMB78 million (31 December 2010: nil) (Note 5(28)(b)).

(d) In 2011, the company and its subsidiaries adopted the assessed value as the original cost of intangible assets more than RMB1 million. These intangible assets mainly include the mining rights, land use rights, and territorial waters use right due to the acquisition of Diandong Energy, Diandong Yuwang, Luoyuanwan Harbour, Luoyuanwan Pier and Ludao Pier.

Mining rights was assessed by discounted cash flow method; land use rights by cost approaching methods and market value comparison methods, and territorial waters use right by cost approaching methods as well as land use rights.

The intangible assets above were all assessed by Beijing Zhongqihua Evaluation Co., Ltd.

(e) The Company acquired the power generation licence as part of the business combination with Tuas Power. As the power generation licence is expected to be renewed without significant restriction and cost, with the consideration of related future cash flows generated and the expected continuous operations of management, such a power generation licence is considered to have indefinite useful life.

#### Impairment test of power generation licence

Power generation licence belongs to the single assets group of Tuas Power. The recoverable amount of the assets group is determined based on value-in-use calculation. Management prepared the impairment model based on budget approved by the Board and various factors, such as inflation, power demand and other factors as well as the terminal value.

#### Key assumptions used for value-in-use calculation:

Management has assessed that, amongst all assumptions used in the value-in-use calculations, the most sensitive key assumption is the discount rate which was arrived at based on weighted average cost of capital. The discount rate applied in determining the recoverable amounts of the assets group or group of assets was 7.42% (2010: 6.85%). An absolute change in the discount rate of 0.5% (2010: 0.5%) would result in approximately RMB1,689 million (2010: RMB1,520 million) change in the recoverable amount of the assets group or group of assets.

Other key assumptions include projection of its business performance based on estimation of future electricity tariffs, volume of electricity sold, fuel prices and other operating expenses, which are largely based on advices from the financial advisor engaged and an external study conducted by industry specialist to project the market demand and supply situation, as well as forward trend of electricity prices. On average, the growth and inflation rate of 3.8% and 2.1% respectively was used in consideration of future expansion plans and new development projects as part of the long term strategy. The growth rate used did not exceed the long term average growth rate for the Singapore market.

Based on the assessments, no impairment was provided for power generation licence.

	(16)		Goodwill			
	31 December 2010	Additions from acquisition	Current year additions	Current year deductions	Currency translation differences	31 December 2011
Goodwill	12,083,452,731	2,134,274,815	—	(34,330,749)	(558,935,325)	13,624,461,472
Less: impairment provision (a)	(127,913,041 )	—	(291,733,921)	—	—	(419,646,962 )
	11,955,539,690	2,134,274,815	(291,733,921)	(34,330,749)	(558,935,325)	13,204,814,510

As at 31 December 2011, goodwill of the Company and its subsidiaries was primarily from the acquisitions of subsidiaries under business combinations not under common control.

In 2011, based on the results of assessment, except for the goodwill impairment from the acquisition of Zhanhua Cogeneration, no other impairment occurred. It was expected by the management that Zhanhua Cogeneration will incur loss in the future as the lasting low profit rate, and thus the relevant goodwill impaired in full value.

(a) Impairment

Goodwill is allocated to the assets group of the Company and its subsidiaries identified according to their operations in different regions.

The carrying amount of significant portion of goodwill was as follow:

	2011	2010
Tuas Power	10,919,538,180	11,478,473,505

The recoverable amounts of assets group are determined based on value-in-use calculations. For domestic Assets group, these calculations use cash flow projections based on management's financial budgets covering a five-year period. The Company expects cash flows beyond the five-year period will be similar to that of the fifth year based on existing production capacity.

In connection to the goodwill attached to Tuas Power, management has based their assessment of recoverable amount on value-in-use calculation. Management prepared the impairment model based on budget approved by the Board and various factors, such as inflation, power demand and other factors as well as terminal value. On average, the growth and inflation rate of 3.8% and 2.1% respectively was used in consideration of future expansion plans and new development projects as part of the long term strategy. The growth rate used did not exceed the long term average growth rate for the Singapore market. The discount rate used for value-in-use calculations is 7.42%.

Key assumptions used for value-in-use calculations:

Key assumptions applied in the impairment tests include the expected tariff rates, demands of electricity in specific regions where these power plants are located and fuel cost. Management determined these key assumptions based on past performance and its expectations on market development. The discount rates used reflect specific risks relating to individual assets group or group of assets groups. Management



believes that any reasonably possible change in any of these key assumptions on which recoverable amounts of individual assets group or group of assets groups are based may cause carrying amounts of individual assets group or group of assets groups to exceed their recoverable amounts.

No goodwill was impaired in 2011 and 2010. The rest of movement of goodwill balance was due to the opening and closing foreign currency exchange difference.

(17) Deferred income tax assets and liabilities

(a) Deferred income tax assets before offsetting

	31 December 2011		31 December 2010	
	Amount	Deductible temporary difference and deductible losses	Amount	Deductible temporary difference and deductible losses
Provision for assets impairment	221,955,821	940,867,218	210,996,174	874,084,871
Fixed assets depreciation	132,084,271	595,262,802	65,143,125	266,134,974
Accrued expenses	47,942,143	191,767,797	158,587,538	638,005,944
Tax refund on purchase of domestically-manufactured equipment	330,925,280	1,330,318,391	352,474,786	1,456,385,671
Deductible tax losses	139,785,971	769,483,983	167,303,994	674,028,294
Derivative financial instruments-fair value change	92,658,009	449,831,420	20,539,561	82,158,243
Others	199,187,506	772,529,654	193,074,389	684,336,861
	1,164,539,001	5,050,061,265	1,168,119,567	4,675,134,858

(b) Deferred income tax liabilities before offsetting

	31 December 2011		31 December 2010	
	Amount	Taxable temporary difference	Amount	Taxable temporary difference
Fixed assets depreciation	899,609,085	5,243,973,250	810,999,510	4,638,327,691
Intangible assets	1,034,515,822	5,960,384,705	788,718,142	4,573,670,928
Available-for-sale-fair value change	181,630,489	726,521,958	259,542,315	1,038,169,256
Derivative financial instruments-fair value change	—	—	20,574,705	121,027,678
Others	75,119,461	325,881,733	26,818,215	93,929,491
	2,190,874,857	12,256,761,646	1,906,652,887	10,465,125,044





(c) As at 31 December 2011, deductible tax losses of the Company and its subsidiaries with no deferred income tax assets recognized amounted to RMB4,286,719,398 (31 December 2010: RMB2,294,483,309).

Maturity analysis of the above deductible tax losses with no deferred income tax assets recognized are as follows:

	31 December 2011	31 December 2010
2012	2,432,119	2,432,119
2013	1,185,790,910	823,244,908
2014	581,379,579	513,993,693
2015	938,600,541	954,812,589
2016	1,578,516,249	—
	4,286,719,398	2,294,483,309

The offset amounts of deferred income tax assets and deferred income tax liabilities:

	31 December 2011	31 December 2010
Deferred income tax assets	453,968,028	300,936,724
Deferred income tax liabilities	(453,968,028)	(300,936,724)

The net balance of deferred income tax assets and deferred income tax liabilities after offsetting are as follows:

	31 December 2011		31 December 2010	
	Net balance	Deductible/Taxable temporary difference after offsetting	Net balance	Deductible/Taxable temporary difference after offsetting
Deferred income tax assets	710,570,973	2,843,793,663	867,182,843	3,436,980,341
Deferred income tax liabilities	1,736,906,829	10,050,494,044	1,605,716,163	9,239,646,136

## (18) Provision for assets impairment

## Current year deductions

	31 December 2010	Acquisition	Current year additions	Reversal	Write off	Currency translation differences	31 Dec
Provision for doubtful debts	196,266,230	4,591,628	79,094	(19,824,705)	(393,189 )	(967,533 )	179,75
Including: Provision for doubtful accounts receivable	154,190,526	3,237,034	79,094	(2,930,997 )	(393,189 )	(967,533 )	153,21
Provision for doubtful other receivables	42,075,704	1,354,594	—	(16,893,708)	—	—	26,536
Provision for inventory	194,487,621	—	238	(3,351,924 )	(2,408,194 )	(5,868,366 )	182,85
Impairment provision for long-term equity investments	6,088,243	—	—	—	—	—	6,088,2
Impairment provision for fixed assets	4,606,508,476	23,240,282	71,276,445	—	(91,517,150)	(194,731,820)	4,414,7
Impairment provision for intangible assets	258,830,459	—	15,660,890	—	—	(13,547,447 )	260,94
Impairment provision for goodwill	127,913,041	—	291,733,921	—	—	—	419,64
Impairment provision for construction-in-progress	—	22,632,443	9,550,976	—	—	—	32,183
	5,390,094,070	50,464,353	388,301,564	(23,176,629)	(94,318,533)	(215,115,166)	5,496,2

## (19)

## Short-term loans

	31 December 2011			31 December 2010		
	Original currency amount	Exchange rate	RMB equivalent	Original currency amount	Exchange rate	RMB equivalent
Credit loans – RMB	40,929,042,078	1	40,929,042,078	40,649,000,000	1	40,649,000,000
Guaranteed loans (a)						
–Pledge – RMB	2,490,400,628	1	2,490,400,628	1,389,449,751	1	1,389,449,751
–Guarantee – RMB	500,000,000	1	500,000,000	1,998,734,247	1	1,998,734,247
–Discounted notes – RMB	59,756,865	1	59,756,865	10,000,000	1	10,000,000
Total			43,979,199,571			44,047,183,998

(a) As at 31 December 2011, the guaranteed short-term loans include:

Bank loans of RMB59,756,865 (31 December 2010: RMB10,000,000) represented the discounted notes receivable with recourse. As these notes receivable were yet to be mature, the proceeds received were recorded as short-term loans (Note 5(4)).

As at 31 December 2011, pledged bank loans of RMB2,490,400,628 were secured by accounts receivable of the Company with book value amounting to RMB2,770,903,857 (31 December 2010: pledged bank loans of RMB1,389,449,751 were secured by

accounts receivable of the Company with book value amounting to RMB1,513,050,207) (Note 5 (5)).

As at 31 December 2010, bank loan of RMB1,998,734,247 from China National Petroleum Corporation through Kunlun Bank was secured by Beijing Branch of Industrial and Commercial Bank of China, and was fully repaid in 2011 on schedule.

As at 31 December 2011, short term bank guaranteed loans of RMB500 million (31 December 2010: Nil) was secured by Diandong Energy, a subsidiary of the company.

As at 31 December 2011, short term loans of RMB1,465,000,000 was borrowed from Huaneng Finance with interest rate from 4.78% to 6.56% (31 December 2010: RMB605,000,000 with interest rate of 4.78%) (Notes 7 (5)).

As at 31 December 2011, short-term loans of RMB4,500,000,000 were borrowed from Huaneng Guicheng Trust Co., Ltd. (“Huaneng Guicheng Trust”), with annual interest rates ranging from 4.56% to 7.22% in 2011 (31 December 2010: short-term loans of RMB3,180,000,000 were borrowed from Huaneng Guicheng Trust Co., Ltd. (“Huaneng Guicheng Trust”), with annual interest rates ranging from 4.35% to 4.94%) (Note 7 (5)).

As at 31 December 2011, short term loans of RMB70,000,000 was borrowed from Xi’an Thermal through Huaneng Finance with an interest rate of 6.89% (31 December 2010: Nil) (Notes 7 (5)).

As at 31 December 2011, short term loans of RMB100,000,000 was borrowed from China Huaneng Group Clean Energy Technology Research Institute Co. Ltd. (“Huaneng Clean Energy”) through Huaneng Finance with an interest rate of 6.56% (31 December 2010: Nil) (Notes 7 (5)).

In 2011, annual interest rates of RMB credit loans ranged from 4.35% to 7.22% (2010: 3.79% to 5.72%); annual interest rates of SGD credit loans was 1.36% (2010: 1.80% to 1.84%); annual interest rate of pledged short-term RMB loans ranged from 4.13% to 7.13% (2010: 3.89% to 4.13%), annual interest rate of guaranteed loan ranged from 4% to 6.56% (2010: 4%); and annual interest rates of discounted notes loans ranged from 4.32% to 8.52% (2010: 2.40% to 5.04%).

(20)	Notes payable	
	31 December 2011	31 December 2010
Banking notes payable	13,448,478	40,351,966
Commercial notes payable	—	35,000,000
	13,448,478	75,351,966

As at 31 December 2011, banking notes receivable of RMB15 million was secured as collateral against notes payables of RMB10,838,842 (31 December 2010: banking notes receivable of RMB10 million was secured as collateral against notes payables of RMB7,243,500) (Note 5(4)).

As at 31 December 2011 and 31 December 2010, all the notes payable of the Company and its subsidiaries were expected to be due within one year.

(21) Accounts payable

Accounts payable mainly represents the amounts due to coal suppliers. As at 31 December 2011 and 31 December 2010, there was no accounts payable to any shareholder who held 5% or more of the equity interest in the Company, and there was no significant accounts payable aged over 1 year.

Accounts payable balances by currency are as follows:

	31 December 2011			31 December 2010		
	Original currency amount	Exchange rate	RMB equivalent	Original currency amount	Exchange rate	RMB equivalent
RMB	7,825,973,195	1	7,825,973,195	4,614,624,003	1	4,614,624,003
SGD	76,786,590	4.8679	373,789,443	42,656,790	5.1191	218,364,374
USD	143,759,045	6.3009	909,326,166	76,709,143	6.6227	506,804,095
<b>Total</b>			<b>9,109,088,804</b>			<b>5,339,792,472</b>

Accounts payable due to related parties:

	31 December 2011			31 December 2010	
	Percentage			Percentage	
HEC and its subsidiaries	48,913,802	0.54 %	%	71,345,774	1.34 %
Xi'an Thermal and its subsidiaries	9,745,206	0.11 %	%	6,340,736	0.12 %
Inner Mongolia Power Fuel Company ("Inner Mongolia Power")	—	—	%	10,302,329	0.19 %
Time Shipping	209,847,741	2.30 %	%	109,877,034	2.06 %
Huaneng Hulunbeier Energy Development Company Ltd. ("Hulunbeier Energy")	35,702,097	0.39 %	%	46,998,894	0.88 %
Huaneng Gansu Huating Coal and Power Co., Ltd. ("Huating Coal")	86,427,858	0.95 %	%	301,422,655	5.64 %
Lime Company	38,867,173	0.43 %	%	11,662,564	0.22 %
North United Power Coal Transportation and Marketing Co., Ltd. ("North United Power")	8,274,684	0.09 %	%	—	—
China Huaneng Group Fuel Co., Ltd ("Huaneng Group Fuel")	30,673,255	0.34 %	%	—	—
	<b>468,451,816</b>	<b>5.15 %</b>	<b>%</b>	<b>557,949,986</b>	<b>10.45 %</b>

(22)

## Salary and welfare payable

	31 December 2010	Additions from acquisition	Current year additions	Current year deductions	Currency translation differences	31 December 2011
Salary, bonus, allowance and subsidy	105,465,765	—	2,978,375,116	(2,981,745,547)	(3,702,051)	98,393,283
Welfare, award and welfare fund	87,523,342	—	372,698,580	(394,670,500)	—	65,551,422
Social insurance	4,797,507	1,736,031	994,820,664	(996,601,702)	(170,825)	4,581,675
Including: Medical insurance	864,290	665,777	305,355,636	(306,101,437)	—	784,266
Basic pension insurance	486,824	797,125	465,564,324	(466,848,273)	—	—
Supplementary pension insurance	14,944	134,600,646	(134,609,118)	—	114,243	—
Unemployment insurance	55,719	192,954	33,709,900	(33,958,573)	—	—
Industrial injury insurance	29,315	37,176	16,748,288	(16,814,779)	—	—
Childbirth insurance	23,235	28,055	14,491,612	(14,542,902)	—	—
Singapore central provident funds	—	18,909,944	(18,288,137)	(156,581)	2,971,337	—
Housing fund	14,423,785	2,752,813	407,049,358	(417,799,092)	—	6,426,864
Labor union fee and employee education fee	5,438,229	120,217,530	(122,276,960)	—	29,021,635	—
Employment termination compensation	33,208,385	—	1,122,725	(8,023,375)	—	26,307,735
	271,061,620	9,927,073	4,874,283,973	(4,921,117,176)	(3,872,876)	230,282,614

As at 31 December 2011, none of the balance of salary and welfare payable is overdue. All the balances are to be distributed by the end of 2012, except for those can only be used in compliance with relevant requirement.

(23)

## Taxes payable

The detailed breakdown of taxes payable is as follows:

	31 December 2011	31 December 2010
EIT payable	503,252,250	280,917,052
Deductible VAT payable	(1,689,760,373)	(2,427,947,144)
Others	191,758,086	129,682,853

(994,750,037 ) (2,017,347,239)

260

---

## (24) Dividends payable

	31 December 2011	31 December 2010
Beijing Jingneng Clean Energy Co., Limited	48,466,400	—
China Huaneng Group Hongkong Company Ltd. (“Huaneng Hongkong”)	35,637,100	—
State Grid Energy Fuel Co. Ltd*	34,000,000	41,215,066
Gemeng International Energy Co., Ltd.	20,733,907	20,733,907
Weihai Zhenghua Investment Management Co., Ltd.	9,707,680	7,922,680
Shangdong Longkou Hualong Industry Co., Ltd	9,707,680	7,922,680
Xiangtuo International Investment Co., Ltd	7,078,691	—
Weihai Sea Transportation Co., Ltd.	2,311,353	1,886,353
	167,642,811	79,680,686

\* State Grid Energy Fuel Co. Ltd. was using the name of Shandong Guangyu Energy Co. Ltd.

## (25) Other payables

The breakdown of other payables is as follows:

	31 December 2011	31 December 2010
Payables to contractors	4,471,453,680	4,294,740,299
Payables for purchases of equipment	5,895,524,690	4,323,906,042
Quality warranty	1,615,101,325	1,504,310,853
Payables for purchases of materials	302,554,277	277,195,218
Accrued expenses	160,218,483	108,211,671
Construction bonus paybles	56,699,228	53,341,193
Payables of housing maintenance funds	34,573,918	38,696,046
Payables of pollutants discharge fees	12,209,826	17,198,548
Payables to Luneng Development	—	277,043,488
Payable for investment	155,903,104	309,110,505
Payable for port construction charge	64,792,719	35,443,972
Payable for quota of shut-down capacity	361,440,000	—
Selling quota of shut-down capacity	102,546,184	160,000,000
Security deposits	72,020,383	1,386,563
Others	1,357,364,436	836,550,785
	14,662,402,253	12,237,135,183

As at 31 December 2011, there were no other payables due to shareholders who held 5% or more of the equity interest in the Company except for payables to HIPDC of RMB27,425,275 (31 December 2010: payable to HIPDC of RMB33,844,343; payable to Huaneng Group of RMB468,093) mentioned above.





Other payables to related parties:

	31 December 2011	Percentage of total other payables		31 December 2010	Percentage of total other payables	
Huaneng Group	—	—		468,093	—	
HIPDC	27,425,275	0.19	%	33,844,343	0.28	%
HEC and its subsidiaries	113,226,768	0.77	%	22,417,780	0.18	%
Xi'an Thermal and its subsidiaries	71,455,845	0.49	%	75,100,435	0.61	%
Time Shipping	134,855	—		134,855	—	
Huaneng Group Technology Innovation Center ("Huaneng Group Innovation Center")	1,520,000	0.01	%	5,000,000	0.04	%
Alltrust Insurance	—	—		7,305	—	
Tibet Power	—	—		2,117,704	0.02	%
IGCC	759,763	0.01	%	—	—	
Huaneng Dongying New Energy Co., Ltd ("Dongying New Energy")	2,942,120	0.02	%	—	—	
Huaneng Shanxi Qinling Power Co., Ltd (Shanxi Qinling Power")	178,440,000	1.22	%	—	—	
Huaneng Finance	3,819	—		—	—	
Huaneng Property Co., Ltd. ("Huaneng Property")	228,788	—		—	—	
	396,137,233	2.71	%	139,090,515	1.13	%

Other payables balances by currency are as follows:

	Original currency amount	31 December 2011 Exchange rate	RMB equivalent	Original currency amount	31 December 2010 Exchange rate	RMB equivalent
RMB	13,844,524,343	1	13,844,524,343	12,029,243,637	1	12,029,243,637
SGD	105,233,600	4.8679	512,266,642	32,274,720	5.1191	165,217,520
USD	36,077,092	6.3009	228,190,229	854,929	6.6227	5,628,138
JPY	948,844,525	0.0816	77,412,434	448,521,113	0.0813	36,254,226
EUR	1,051	8.1625	8,605	57,520	8.8065	503,393
GBP	—	—	—	8,593	10.2182	87,334
AUD	—	—	—	30,000	6.7139	200,935
Total			14,662,402,253			12,237,135,183

The ageing analysis of other payables are as follows:

	31 December 2011			31 December 2010		
	Amount	Proportion		Amount	Proportion	
Within 1 year	11,466,556,824	78.21	%	9,785,601,696	79.97	%
1-2 years	1,759,883,763	12.00	%	1,468,431,106	12.00	%
2-3 years	862,311,510	5.88	%	636,818,566	5.20	%
3-4 years	380,223,124	2.59	%	78,414,273	0.64	%
4-5 years	68,668,577	0.47	%	40,445,093	0.33	%
Over 5 years	124,758,455	0.85	%	227,424,449	1.86	%
	14,662,402,253	100.00	%	12,237,135,183	100.00	%

As at 31 December 2011, other payables aged over 1 year mainly comprised of payables to contractors, equipments and quality warranty which have not been settled for construction cost disputation.

(26) Current portion of non-current liabilities

All the current portion of non-current liabilities of the Company and its subsidiaries are current portion of long-term loans and bonds payables, the breakdown is as follows:

	31 December 2011	31 December 2010
Guaranteed loans	1,680,809,433	1,020,757,803
Credit loans	12,459,460,151	12,761,792,235
Corporate Bonds Phase I 2007 (5 Years)	996,092,760	—
	15,136,362,344	13,782,550,038

Five largest current portions of long-term loans:

	Start date	Annual interest End date	Currency	31 December 2010 rate (%) RMB equivalent
China Citic Bank (Head office)	22/08/2009	10/09/2012	RMB	4.20-4.99 3,000,000,000
China Ping An Trust and Investment Co., Ltd	22/06/2009	05/07/2012	RMB	4.31-5.05 3,000,000,000
Zhonghai Trust Co., Ltd	23/07/2009	22/07/2012	RMB	4.31-5.12 2,000,000,000
Bank of China (Bayuquan Branch)	21/03/2007	20/03/2012	RMB	5.36-5.99 500,000,000
China Construction Bank (Jiyuan Branch)	26/11/2007	25/11/2012	RMB	5.35-6.21 449,500,000
Total				8,949,500,000

Please refer to Note 5 (28) & (29) for details of current portion of non-current liabilities.



(27)

## Other current liabilities

Other current liabilities are mainly short-term bonds payable.

The Company issued unsecured short-term bonds amounting to RMB5 billion bearing annual interest rate of 3.20% on 2 July 2010. The bonds are denominated in RMB and issued at face value and will mature in 365 days from the issuance date. The annual effective interest rate of these bonds is 3.61%. As at 31 December 2011, the short term bonds above was fully repaid, and no interest payables.(31 December 2010: interest payable was 80.22 million)

The Company issued unsecured short-term bonds amounting to RMB5 billion bearing annual interest rate of 3.95% on 13 January 2011. The bonds are denominated in RMB and issued at face value and will mature in 365 days from the issuance date. The annual effective interest rate of these bonds is 4.37%. As at 31 December 2011, interest payable of the short term bonds above was RMB191.55 million.

The Company issued unsecured short-term bonds amounting to RMB5 billion bearing annual interest rate of 6.04% on 19 September 2011. The bonds are denominated in RMB and issued at face value and will mature in 366 days from the issuance date. The annual effective interest rate of these bonds is 6.47%. As at 31 December 2011, interest payable of the short term bonds above was RMB85.81 million.

(28)

## Long-term loans

	31 December 2011	31 December 2010
Long-term loans from ultimate parent company (a)	800,000,000	800,000,000
Long-term bank loans (b)	86,952,526,242	70,884,019,762
Other long-term loans (c)	6,232,614,930	7,283,432,778
	93,985,141,172	78,967,452,540
Less: current portion of long-term loans	(14,140,269,584)	(13,782,550,038)
	79,844,871,588	65,184,902,502

(a)

## Long-term loans from ultimate parent company

As at 31 December 2011, detailed information of the long-term loans from ultimate parent company is as follows:

Lender	31 December 2011	Terms of loan	Annual interest rate	Current portion	Terms
<b>RMB loans</b>					
Entrusted loans from Huaneng Group through Huaneng Finance	800,000,000	2004-2013	4.05%-4.60%	—	Credit

## (b) Long-term bank loans

The breakdown of long-term bank loans (including the current portion) is as follows:

	31 December 2011						
	Original currency amount	Exchange rate	RMB equivalent	Less: current portion	Long-term portion	Annual interest rate	
<b>Credit loans</b>							
– RMB loans	51,130,489,861	1	51,130,489,861	(6,918,810,000)	44,211,679,861	3.51%-7.40%	
– USD loans	719,747,279	6.3009	4,535,055,629	(397,208,736 )	4,137,846,893	1.40%-1.79%	
– EUR loans	39,658,019	8.1625	323,708,580	(43,441,415 )	280,267,165	2.00 %	
<b>Guaranteed loans*</b>							
– RMB loans	15,603,650,000	1	15,603,650,000	(826,000,000 )	14,777,650,000	5.00%-8.65%	
<b>including:</b>							
secured loans	13,603,650,000	1	13,603,650,000	(826,000,000 )	12,777,650,000	5.35%-8.65%	
– USD loans	59,067,414	6.3009	372,177,868	(185,732,849 )	186,445,019	0.51%-6.60%	
<b>including:</b>							
secured loans	745,883	6.3009	4,699,735	—	4,699,735	2.74 %	
– SGD loans	3,001,286,369	4.8679	14,609,961,914	(369,585,362 )	14,240,376,552	1.94%-2.15%	
– EUR loans	46,245,928	8.1625	377,482,390	(32,824,556 )	344,657,834	2.15 %	
			86,952,526,242	(8,773,602,918)	78,178,923,324		

\*Bank loans amounting to approximately RMB2,113 million and RMB632 million (31 December 2010: approximately RMB2,552 million and RMB946 million) were guaranteed by HIPDC and Huaneng Group, respectively (Note 7).

As at 31 December 2011, bank loans borrowed by an overseas subsidiary of the Company amounting to RMB14.610 billion (31 December 2010: RMB15.653 billion) were guaranteed by the Company (Note 8).

As at 31 December 2011, Bank loans amounting to approximately RMB310 million were guaranteed Shandong Luneng Group, and terminated in 2011.

As at 31 December 2011, a long-term loan of a subsidiary of the Company of RMB28 million (2010: nil) was secured by listed shares held by a former shareholder of the subsidiary of the Company.

As at 31 December 2011, long-term loans of the Company and its subsidiaries of RMB235 million (31 December 2010: nil) were secured by construction in progress, fixed assets and construction materials with net book value amounting to RMB332 million and electricity fee collection right of Enshi Hydropower, a subsidiary of the Company. These loans are also guaranteed by former shareholders of the subsidiary of the Company (Notes 5(5)(i), 5(12)(f) 5(13) and 5(14)).

As at 31 December 2011, a long-term loan of RMB78 million was secured by territorial waters use rights with net book value amounting to RMB86.37 million (31 December 2010: nil).

As at 31 December 2011, Number 4 berth of Luoyuanwan Harbour, a subsidiary of the company, was secured to a bank as collateral against a long-term loan of RMB169 million (31 December 2010: nil) (Note 5(12)(e)).



As at 31 December 2011, long-term loans of RMB13,094 million were secured by tariff collection rights (31 December 2010: nil) (Notes (5)(i)).

As at 31 December 2010, a long term loan of 30 million was secured by land use rights of Qingdao Port, a subsidiary of the Company with net book value of RMB28,306,601 as collateral. This loan was re-negotiated and renewed as an unsecured loan in 2011 (Notes(15)(b)).

As at 31 December 2011, a long-term loan of a subsidiary of the Company of RMB4.70 million was secured by current and future assets of the subsidiary (31 December 2010: nil).

(c) Other long-term loans

The breakdown of other long-term loans (including the current portion) is as follows:

	31 December 2011		
	Original currency amount	Exchange rate	RMB equivalent
<b>Credit Loans</b>			
–RMB loans	5,400,000,000	1	5,400,000,000
–USD loans	6,700,000	4.8679	32,614,930
<b>Guaranteed loans</b>			
–RMB loans	800,000,000	1	800,000,000
			6,232,614,930
Less: current portion of other long-term loans			(5,366,666,666)
			865,948,264

As at 31 December 2011, the breakdown of other long-term loans is as follows:

Lender	31 December 2011	Terms of Loan	Annual interest rate	Current portion	Terms
RMB loan	5,400,000,000	2008-2013	4.20%-6.65%	(5,100,000,000)	Credit
RMB loan	800,000,000	2011-2014	6.65%	(266,666,666 )	Guaranteed
SGD loan	32,614,930	2006-2021	4.25%	—	Credit
	6,232,614,930			(5,366,666,666)	

As at 31 December 2010 and 31 December 2011, other long term loans denominated in RMB of the Company and its subsidiaries were mainly borrowed from Trust Company.

As at 31 December 2011, the balance of other long-term loans that drawn from Huaneng Finance amounted to approximately RMB100 million (31 December 2010: RMB230 million). (Note 7).



As at 31 December 2011, other long-term loans amounted to RMB800 million were secured by right of income derived from generation units of the subsidiary of the Company, Dezhou Power Plant Phase I & II project. (31 December 2010: nil).

Five largest long-term loans:

	Start date	Annual interest End date	Currency	rate (%)	31 December 2011 Original currency amount	RMB equivalent	31 December Original currency amount	RMB
Bank of China (Head Office) China Development Bank (Yunnan Branch)	23/09/2009	22/09/2024	SGD	1.94-2.15	2,551,231,605	12,419,140,330	2,617,863,203	13,4
Bank of China (Beijing Branch)	23/11/2005	23/11/2023	RMB	5.35-6.35	—	6,288,000,000	—	—
The Export-Import Bank of China (Jiangsu Branch)	20/09/2011	18/09/2014	RMB	6.65	—	5,934,000,000	—	—
Bank of China (Jiangsu Branch)	18/03/2008	17/03/2023	USD	1.40-1.79	656,707,279	4,137,846,893	719,100,925	4,70
	10/11/2008	09/11/2023	RMB	5.35-6.35	—	2,640,000,000	—	2,64
					31,418,987,223	20,803,493,221		

Maturity analysis of long-term loans is as follows:

	31 December 2011	31 December 2010
1-2 years	10,700,827,400	14,530,147,677
2-5 years	25,399,295,650	14,634,114,297
Over 5 years	43,744,748,538	36,020,640,528
	79,844,871,588	65,184,902,502

(29)

Bonds payable

	31 December 2010	Current year additions	Current portion of bonds payable	31 December 2011
Phase I Corporate Bonds, 2007 (5 years)	991,966,186	4,126,574	(996,092,760)	—
Phase I Corporate Bonds, 2007 (7 years)	1,680,276,790	4,751,373	—	1,685,028,163
Phase I Corporate Bonds, 2007 (10 years)	3,252,948,240	5,965,362	—	3,258,913,602
Phase I Corporate Bonds, 2008	3,947,711,494	5,980,631	—	3,953,692,125
Phase I Medium-term Note, 2009	3,958,247,391	11,824,977	—	3,970,072,368
	—	4,987,213,115	—	4,987,213,115

Phase I Non-public Debt Financing  
Instrument, 2011

	13,831,150,101	5,019,862,032	(996,092,760)	17,854,919,373
--	----------------	---------------	---------------	----------------

267

---

Bond information is as follows:

	Face value	Issue date	Maturity	Issue amount
Phase I Corporate Bonds, 2007 (5 years)	1,000,000,000	December 2007	5 years	1,000,000,000
Phase I Corporate Bonds, 2007 (7 years)	1,700,000,000	December 2007	7 years	1,700,000,000
Phase I Corporate Bonds, 2007 (10 years)	3,300,000,000	December 2007	10 years	3,300,000,000
Phase I Corporate Bonds, 2008	4,000,000,000	May 2008	10 years	4,000,000,000
Phase I Medium-term Note, 2009	4,000,000,000	May 2009	5 years	4,000,000,000
Phase I Non-public Debt Financing Instrument, 2011	5,000,000,000	November 2011	5 years	5,000,000,000

Interest payable for the bonds is as follow:

	31 December 2010	Accrued interest	Interest paid	31 December 2011
Phase I Corporate Bonds, 2007 (a)	6,789,028	349,150,000	(349,150,000)	6,789,028
Phase I Corporate Bonds, 2008 (a)	134,193,548	208,000,000	(208,000,000)	134,193,548
Phase I Medium-term Note, 2009 (b)	94,172,055	148,800,000	(148,800,000)	94,172,055
Phase I Non-public Debt Financing Instrument, 2011 (c)	—	42,344,262	—	42,344,262
Total	235,154,631	748,294,262	(705,950,000)	277,498,893

(a) As is authorized in Document No. 489 [2007], CSRC, the issuer can publicly issue corporate bonds with total amount no more than 10 billion, the Company issued bonds with maturity of 5 years, 7 years and 10 years respectively in December 2007. The face value of such bonds is RMB1 billion, RMB1.7 billion and RMB3.3 billion with annual interest rates of 5.67%, 5.75% and 5.90%. The annual effective interest rates of these bonds are 6.13%, 6.10% and 6.17%. The Bonds were guaranteed by Bank of China and China Construction Bank. As at 31 December 2011, the bond with original maturity of 5 years will be due within 12 months, as a result of which such bonds are recorded as current portion of long term bonds. The Company issued bonds with maturity of 10 years in May 2008. The face value of such bonds is RMB4 billion with annual interest rate of 5.20%. The annual effective interest rate is 5.42%. It was guaranteed by the HIPDC.

(b) The Company issued medium-term note with maturity of 5 years in May 2009. The face value of such bond is RMB4 billion with annual interest rate of 3.72%. The annual effective interest rate is 4.06%.

(c) The Company issued Phase I non-public debt financing instrument, 2011 with maturity of 5 years in November 2011. The face value of such bond is RMB5 billion with annual interest rate of 5.74%. The actual proceeds received by the Company were approximately RMB4.985 billion. The annual effective interest rate is 6.04%.

The bonds mentioned-above are denominated in RMB and issued at par. Interest is payable annually and principals are paid when the bonds fall due.

	(30)		Other non-current liabilities	
			31 December 2011	31 December 2010
Environmental subsidies			548,765,870	509,923,168
VAT refund on domestic equipment purchase			1,499,276,360	1,620,954,013
Other			192,914,325	103,263,246
			2,240,956,555	2,234,140,427

	(31)		Share capital					
	31 December 2010	New shares issue	Current year additions and deductions			Others*	Sub-total	31 December 2011
Bonus issue			Transfer-in from capital surplus					
<b>Shares with lock-up limitation</b>								
<b>State-owned shares</b>								
State-owned shares	1,555,124,549	—	—	—	—	—		1,555,124,549
State-owned legal person shares	5,292,328,724	—	—	—	(69,169,952 )	(69,169,952 )		5,223,158,772
<b>Domestic non-state-owned legal person shares</b>								
Domestic non-state-owned legal person shares	774,333,394	—	—	—	(774,333,394 )	(774,333,394 )		—
<b>Foreign investor shares</b>								
Foreign investor shares	—	—	—	—	520,000,000	520,000,000		520,000,000
	7,621,786,667	—	—	—	(323,503,346)	(323,503,346)		7,298,283,321
<b>Shares without lock-up limitation</b>								
<b>Domestic shares</b>								
Domestic shares	2,878,213,333	—	—	—	843,503,346	843,503,346		3,721,716,679
<b>Overseas listed shares</b>								
Overseas listed shares	3,555,383,440	—	—	—	(520,000,000)	(520,000,000)		3,035,383,440
	6,433,596,773	—	—	—	323,503,346	323,503,346		6,757,100,119
	14,055,383,440	—	—	—	—	—		14,055,383,440

\* As at 31 December 2011, with the exception of 500 million shares of the Company held by Huaneng Group, non-publicly issued shares subscribed by other special investors are no longer within the lock-up period. At the same time, Huaneng Group further increase shareholding in the Company by 143,620,000 A shares. Pursuant to Regulation Act on Acquisition of Listed Company, Huaneng Group and its subsidiaries will not be at the liberty at trading shares (including A Shares and overseas listed shares) of the Company they hold within six months.

	Current year additions and deductions					Sub-total	31 December 2010
	31 December 2009	New shares issue	Bonus issue	Transfer-in from capital surplus	Others		
<b>Shares with lock-up limitation</b>							
State-owned shares	1,055,124,549	500,000,000	—	—	—	500,000,000	1,555,124,549
State-owned legal person shares	5,066,662,118	225,666,606	—	—	—	225,666,606	5,292,328,724
Domestic non-state-owned legal person shares	—	774,333,394	—	—	—	774,333,394	774,333,394
	6,121,786,667	1,500,000,000	—	—	—	1,500,000,000	7,621,786,667
<b>Shares without lock-up limitation</b>							
Domestic shares	2,878,213,333	—	—	—	—	—	2,878,213,333
Overseas listed shares	3,055,383,440	500,000,000	—	—	—	500,000,000	3,555,383,440
	5,933,596,773	500,000,000	—	—	—	500,000,000	6,433,596,773
	12,055,383,440	2,000,000,000	—	—	—	2,000,000,000	14,055,383,440

In December 2010, the Company issued 1,500,000,000 A shares (par value of RMB1.00 each) and 500,000,000 H shares (par value of RMB1.00 each) through private placement, respectively. Net proceeds from the issuance amounted to RMB10.274 billion after deducting issuance costs of RMB107 million from gross proceeds of RMB10.381 billion.

(32)

## Capital surplus

Movement of capital surplus is as follows:

	31 December 2010	Current year additions	Current year deductions	31 December 2011
Share premium	16,659,298,584	79,162,638	—	16,738,461,222
Other capital surplus-				
Changes in fair value of available-for-sale financial assets	601,698,248	—	(248,430,031)	353,268,217
Cash flow hedge	15,666,784	—	(409,379,851)	(393,713,067)
Others	469,535,453	1,367,100	(36,970,507)	433,932,046
Subtotal	1,086,900,485	1,367,100	(694,780,389)	393,487,196
	17,746,199,069	80,529,738	(694,780,389)	17,131,948,418
	31 December 2009	Current year additions	Current year deductions	31 December 2010
Share premium	7,864,018,087	8,795,280,497	—	16,659,298,584
Other capital surplus-				
Changes in fair value of available-for-sale financial assets	889,507,771	—	(287,809,523)	601,698,248
Cash flow hedge	128,043,958	—	(112,377,174)	15,666,784
Others	467,559,598	8,197,711	(6,221,856)	469,535,453
Subtotal	1,485,111,327	8,197,711	(406,408,553)	1,086,900,485
	9,349,129,414	8,803,478,208	(406,408,553)	17,746,199,069

As at 31 December 2011, the additions to share premium represented the capital funds allocated from government budget received from the Ministry of Finance of PRC through Huaneng Group amounting to RMB551,824,600 (31 December 2010: RMB487,114,600).

(33)

## Surplus reserves

	31 December 2010	Current year additions	Current year deductions	31 December 2011
Statutory surplus reserve	6,972,472,472	55,219,248	—	7,027,691,720
Discretionary surplus reserve	32,402,689	—	—	32,402,689
	7,004,875,161	55,219,248	—	7,060,094,409

  

	31 December 2009	Current year additions	Current year deductions	31 December 2010
Statutory surplus reserve	6,109,942,374	862,530,098	—	6,972,472,472
Discretionary surplus reserve	32,402,689	—	—	32,402,689
	6,142,345,063	862,530,098	—	7,004,875,161

According to the Company's articles of association and board resolutions on the meeting of the board, 20 March 2012, the Company appropriates 10% (2010: 10%) of this year's net profit of RMB127 million (2010: RMB354 million) to the statutory surplus reserve. The appropriation of the excess of the surplus reserve after the above-mentioned appropriation over 50% of the share capital is RMB72 million, which is subject to the approval from the annual general meeting of the shareholders. Therefore, only RMB55 million is reflected in this financial statement.

(34)

## Undistributed profits

As at 31 December 2011, the surplus reserve attributable to the Company's subsidiaries included in the undistributed profit amounted to RMB1,004,196,907 (31 December 2010: RMB916,310,860). The appropriation of subsidiaries' surplus reserve attributable to the Company this year amounted to RMB151,435,823 (2010: RMB150,352,407).

On 17 May 2011, on approval from the annual general meeting of the shareholders, the Company declared 2010 final dividend of RMB0.20 (2009: RMB0.21) per ordinary share, totaling approximately RMB2,807,083,860 (2009: RMB2,528,049,674). For the year ended 31 December 2011, the Company has already paid dividend specified above in full (For the year ended 31 December 2010: the Company paid dividend in full).

Pursuant to the resolution of the meeting of the Board of Directors on 20 March 2012, the proposed 2011 profit appropriation plan was made on the basis of a total of 14,055,383,440 ordinary shares outstanding as at 31 December 2011, a cash dividend of RMB0.05 (including tax) per ordinary share amounting to RMB702,769,172 to be distributed to the shareholders. This proposal is subject to the approval of the shareholders at the annual general meeting.

(35)

## Minority interests

Minority interests attributable to the minority shareholders of the subsidiaries are:

	31 December 2011	31 December 2010
Weihai Power Company	538,300,309	496,897,292
Huaiyin II Power Company	130,753,294	254,317,556
Taicang Power Company	217,960,962	217,036,473
Taicang II Power Company	292,780,519	267,633,627
Qinbei Power Company	733,476,440	623,663,846
Yushe Power Company	(202,269,960 )	(91,768,170 )
Xindian II Power Company	(27,043,488 )	(10,863,278 )
Yueyang Power Company	454,100,182	488,598,681
Luohuang Power Company	926,513,553	896,630,533
Shanghai Combined Cycle Power Company	276,789,931	251,961,758
Pingliang Power Company	151,054,493	295,560,996
Jinling Power Company	1,038,575,304	937,524,096
Subsidiaries of SinoSing Power	27,499,150	38,846,115
Shidongkou Power Company	506,178,580	495,033,126
Nantong Power Company	234,000,000	234,000,000
Yingkou Port	364,914,586	364,315,532
Beijing Cogeneration	1,367,334,613	1,218,251,684
Qidong Wind Power	124,427,988	96,916,771
Yangliuqing Power Company	657,531,300	653,840,712
Kaifeng Xinli	—	34,179,982
Zuoquan Cogeneration	96,000,000	96,000,000
Hualu Sea Transportation	100,712,957	106,819,515
Rudong Wind Power	2,550,000	2,550,000
Luoyuanwan Pier	72,457,752	—
	8,084,598,465	7,967,946,847

(36)

## Operating revenue and operating cost

	2011		2010	
	Revenue	Cost	Revenue	Cost
Principal operations	131,533,347,042	120,087,698,061	102,738,253,852	91,514,942,171
Other operations	1,887,421,902	1,729,069,801	1,569,448,058	1,303,509,657
Total	133,420,768,944	121,816,767,862	104,307,701,910	92,818,451,828

The principal operations of the Company and its subsidiaries are mainly sales of power and heat, port and transportation service.



## (a) Principal operating revenue and cost

Details of the principal operating revenue and cost categorized by industries are as follows:

	2011		2010	
	Principal operating revenue	Principal operating cost	Principal operating revenue	Principal operating cost
Sales of power and heat	131,109,705,359	119,834,949,698	102,497,639,714	91,333,682,676
Port service	319,388,326	158,714,500	229,699,735	171,119,214
Transportation service	104,253,357	94,033,863	10,914,403	10,140,281
	131,533,347,042	120,087,698,061	102,738,253,852	91,514,942,171

Details of the principal operating revenue and cost categorized by products are as follows:

	2011		2010	
	Principal operating revenue	Principal operating cost	Principal operating revenue	Principal operating cost
Power and heat	131,109,705,359	119,834,949,698	102,497,639,714	91,333,682,676
Port service	319,388,326	158,714,500	229,699,735	171,119,214
Transportation Service	104,253,357	94,033,863	10,914,403	10,140,281
	131,533,347,042	120,087,698,061	102,738,253,852	91,514,942,171

Details of the principal operating revenue and cost categorized by regions are as follows:

	2011		2010	
	Principal operating revenue	Principal operating cost	Principal operating revenue	Principal operating cost
China	110,355,321,970	101,202,165,759	87,696,328,489	77,978,478,664
Singapore	21,178,025,072	18,885,532,302	15,041,925,363	13,536,463,507
	131,533,347,042	120,087,698,061	102,738,253,852	91,514,942,171

## (b) Other operating revenue and cost

	2011		2010	
	Other operating revenue	Other operating cost	Other operating revenue	Other operating cost
Sales of raw materials and steam	930,888,102	891,496,132	1,136,268,860	1,036,881,412
Others	956,533,800	837,573,669	433,179,198	266,628,245
Total	1,887,421,902	1,729,069,801	1,569,448,058	1,303,509,657

## (c) Operating revenue from the five largest customers of the Company and its subsidiaries

	Operating revenue	Percentage in total operating revenue
Jiangsu Electric Power Corporation	16,121,842,910	12.08%
Shandong Power	15,151,313,330	11.36%
Energy Market Company (Singapore)	12,636,201,763	9.47%
Zhejiang Electric Power Company	10,075,554,041	7.55%
Guangdong Electric Power Co., Ltd.	9,169,988,726	6.87%
	63,154,900,770	47.33%

## (37) Tax and levies on operations

	2011	2010
City construction tax	210,254,509	58,972,212
Education surcharge	155,672,074	45,586,107
Others	118,092,398	43,082,884
	484,018,981	147,641,203

## (38) General and administrative expenses

	2011	2010
Salary, social insurance and employee education funds	1,428,795,141	1,494,564,786
Depreciation and amortization expense	217,292,529	160,699,327
Tax and other levies	499,336,413	437,517,615
Technology consulting and intermediary charges	109,368,480	99,953,972
Others	661,367,811	531,739,673
	2,916,160,374	2,724,475,373

## (39) Financial expenses, net

	2011	2010
Interest expense	7,736,186,195	5,282,549,046
Including: Interest expense on borrowings	7,730,728,872	5,279,508,068
Interest expense on notes discounts	5,457,323	3,040,978
Less: Interest income	(166,182,951 )	(89,025,746 )
Foreign currency exchange losses	208,967,081	196,758,086
Less: Foreign currency exchange gains	(356,348,886 )	(330,702,685 )
Others	70,907,916	45,980,575



## (40) Assets impairment loss

	2011	2010
(Reversal of)/Provision for doubtful accounts on receivables	(19,745,611 )	(2,756,378 )
(Reversal of)/Provision for inventory obsolescence	(3,351,686 )	(154,572 )
Fixed assets impairment	71,276,445	8,477,084
Construction in process impairment	9,550,976	—
Intangible assets impairment	15,660,890	23,705,542
Goodwill impairment	291,733,921	—
	365,124,935	29,271,676

## (41) Investment income

	2011	2010
Gains from available-for-sale financial assets	65,881,205	63,577,786
Shares of net profit of investees accounted for under equity method (a)	660,462,038	572,049,715
Long term equity investment income under cost method (b)	99,000,000	—
Disposal of a subsidiary	(33,583,200 )	—
Investment (loss)/income from derivative financial instruments	12,161,506	(3,564,555 )
	803,921,549	632,062,946

## (a) Long-term equity investment income under equity method

Investees from which investment income of the Company and its subsidiaries account for more than 5% of the total profit, or investees accounting for the top five of the total profit of the Company and its subsidiaries are listed as follows:

	2011	2010
SEG, Shenzhen Energy Management Corporation and SEC	322,748,447	339,247,814
Sichuan Hydropower Company	296,201,591	273,813,997
Huaneng Finance	81,939,333	66,240,899
Time Shipping	76,036,099	—
Rizhao Power Company	(42,572,404 )	(60,484,737 )
	734,353,066	618,817,973

## (b) Long-term equity investment income under cost method

	2011	2010
Shanxi Xishan Jinxing Energy Co., Ltd. (“Jinxing Energy”)	99,000,000	—

The change in investment income is mainly due to the variance of performance of the investee.

## (42) Non-operating income

	2011	2010	Amount recorded into non-recurring profit and loss of 2011
Gains on fixed assets disposal	53,129,390	73,937,919	53,129,390
Government subsidies (a)	1,138,371,275	445,425,346	1,138,371,275
Other	186,296,390	45,629,229	186,296,390
	1,377,797,055	564,992,494	1,377,797,055

## (a) Breakdown of government subsidies

	2011	2010
Environmental subsidy	46,311,798	38,403,565
VAT refund on purchase of domestically– manufactured equipment	121,677,653	122,524,489
Refund of previously levied VAT	15,307,710	17,930,481
Heating Supply subsidy	4,867,167	15,344,045
Desulfurization subsidy	38,030,000	—
Subsidy on interest	5,870,000	14,000,000
Coal security fund	400,650,000	117,960,000
Subsidy for disposal of backward capacity	439,957,000	81,000,000
Other	65,699,947	38,262,766
	1,138,371,275	445,425,346

## (43) Non-operating expenses

	2011	2010	Amount recorded into non-recurring profit and loss of 2011
Losses on fixed assets disposal	47,041,581	50,498,367	47,041,581
Non-recurring losses due to natural disasters	21,476,153	—	21,476,153
Other	100,403,087	43,279,223	100,403,087
	168,920,821	93,777,590	168,920,821

## (44) Income tax expense

	2011	2010
Current income tax	829,455,822	1,060,361,559

Deferred income tax	154,427,738	(147,265,811 )
	983,883,560	913,095,748

276

---

Reconciliation from income tax expense calculated based on applicable income tax rate and profit before taxation in consolidated income statements to income tax expense is as follows:

	2011	2010
Profit before taxation	2,348,142,819	4,593,423,909
Income tax expense calculated based on applicable income tax rate	493,185,362	987,874,737
Impact of the difference of tax rates	8,444,838	(30,454,228 )
Non-taxable income	(191,753,979 )	(151,207,134 )
Non-deductible costs, expenses and losses	213,262,407	134,627,771
Deductible tax loss without recognition of deferred income tax assets in the current year	464,892,915	189,353,879
Impact of income tax deduction due to purchase of domestically-manufactured equipment	(4,147,983 )	(217,099,277 )
Income tax expense	983,883,560	913,095,748

(45)

Earnings per share

Basic earnings per share

The basic earnings per share is calculated by dividing the consolidated net profit attributable to the shareholders of the Company by the weighted average number of the Company's outstanding ordinary shares during the year:

	2011	2010
Consolidated net profit attributable to shareholders of the Company	1,268,245,238	3,544,304,422
Weighted average number of the Company's outstanding ordinary shares	14,055,383,440	12,107,438,235
Basic earnings per share	0.09	0.29
Including:		
Continuing operation basic earnings per share	0.09	0.29
Discontinuing operation basic earnings per share	—	—

For the year ended 31 December 2011, as there were no potential dilutive ordinary shares, both the basic earnings per share and the diluted earnings per share were the same (2010: Nil).

## (46) Other comprehensive income

	2011	2010
Available-for-sale financial assets		
– (Losses)/Gains in current period	(311,647,298 )	(344,271,532)
Less: Income tax impact	77,911,824	86,067,882
<b>Subtotal</b>	<b>(233,735,474 )</b>	<b>(258,203,650)</b>
Shares in investees' other comprehensive (loss)/income under equity method	(49,825,334 )	(41,787,118 )
Less: Income tax impact	4,898,186	5,959,389
<b>Subtotal</b>	<b>(44,927,148 )</b>	<b>(35,827,729 )</b>
Hedging instruments of cash flow hedge	(22,675,815 )	(199,369,958)
Less: Transfer from other comprehensive income recorded in prior period to the income statements in current period	(482,136,066 )	52,241,399
Less: Income tax impact	95,432,030	34,751,385
<b>Subtotal</b>	<b>(409,379,851 )</b>	<b>(112,377,174)</b>
Currency translation differences	(665,745,144 )	457,670,280
<b>Total</b>	<b>(1,353,787,617)</b>	<b>51,261,727</b>

## (47) Notes to the cash flow statement

## (a) Other cash received relating to operating activities

	2011	2010
Income from materials sales	47,970,024	18,007,458
Subsidy income	824,920,023	221,659,140
Interest income	95,224,117	54,728,132
Venue leasing income	396,521,927	186,252,106
COM income	66,239,653	9,720,265
Other	328,706,503	201,607,720
	1,759,582,274	691,974,821



## (b) Other cash paid relating to operating activities

	2011	2010
Pollutants discharge fees paid	519,661,344	465,071,573
Other	519,784,950	459,519,976
	1,039,446,294	924,591,549

## (c) Other cash received relating to investing activities

	2011	2010
Finance lease income	68,110,507	21,082,102
Other	—	17,063,715
	68,110,507	38,145,817

## (d) Other cash received relating to financing activities

	2011	2010
Environmental subsidy	229,429,000	291,869,671

## (e) Other cash paid relating to financing activities

	2011	2010
Ancillary fees of borrowings	148,984,858	67,549,555
Other	3,293,440	22,486,228
	152,278,298	90,035,783

(48) Supplementary information on cash flow statement

(a) Supplementary information on cash flow statement

## Reconciliation of net profit to cash flows from operating activities

	2011	2010
Net profit	1,364,259,259	3,680,328,161
Add: Provision for assets impairment	365,124,935	29,271,676
Depreciation of fixed assets	11,715,165,086	10,175,227,925
Amortization of intangible assets	152,936,357	128,391,470
Amortization of long-term deferred expenses	31,991,535	26,592,568
(Gains)/Losses on disposal of fixed assets and intangible assets	(6,235,381 )	(32,118,807 )
(Gains)/Losses on changes in fair value	727,268	(11,850,976 )
Financial expenses	7,552,489,467	5,184,034,893
Investment income	(791,760,043 )	(635,627,501 )
Amortization of deferred income	(172,110,005 )	(164,088,999 )
Increase in deferred income tax assets	156,462,182	(319,347,062 )
Decrease in deferred income tax liabilities	(2,034,444 )	172,081,251
(Increase)/Decrease in inventories	(1,807,503,279 )	(1,031,870,652 )
Increase in operating receivable items	(4,033,811,404 )	(1,724,971,978 )
Increase/(Decrease) in operating payable items	6,423,453,457	2,590,672,815
Net cash flows generated from operating activities	20,949,154,990	18,066,724,784

## Change in cash and cash equivalents

	2011	2010
Cash at end of the year	8,552,782,233	9,426,437,511
Less: Cash at beginning of the year	(9,426,437,511)	(5,226,981,648)
Net increase/(decrease) in cash	(873,655,278 )	4,199,455,863

## (b) Cash paid to acquire subsidiaries and other operating units

	2011	2010
Consideration of acquiring subsidiaries	7,807,126,499	2,391,873,500
Prepayment from last year/current year	(3,834,773,515)	3,834,773,515
Less: Cash and cash equivalents held by subsidiaries and other operating units	(349,244,559 )	(90,533,598 )
Less: Unpaid considerations	(160,184,384 )	(309,110,505 )
Add: Consideration paid current year other than last year	309,110,505	—
<b>Cash paid to acquire subsidiaries and other operating units</b>	<b>3,772,034,546</b>	<b>5,827,002,912</b>

## (c) Cash and cash equivalents

	31 December 2011	31 December 2010
Cash –		
Cash on hand	2,103,199	2,345,857
Cash in bank	8,667,912,152	9,545,562,339
<b>Subtotal</b>	<b>8,670,015,351</b>	<b>9,547,908,196</b>
Less: restricted cash*	(117,233,118 )	(121,470,685 )
<b>Cash and cash equivalents at end of the year</b>	<b>8,552,782,233</b>	<b>9,426,437,511</b>

\* Restricted cash is mainly deposits for letter of credit deposit.

## 6. SEGMENT REPORTING

Directors and certain senior management of the Company perform the function as chief operating decision makers (collectively referred to as the “senior management”). The senior management reviews the internal reporting of the Company and its subsidiaries in order to assess performance and allocate resources. The Company has determined the operating segments based on these reports. In prior year, the operating segments of the Company included power segment and all other segments.

The senior management assesses the performance of the operating segments based on a measure of profit/(loss) before income tax expense in related periods excluding dividend income received from available-for-sale financial assets and operating results of those centrally managed and resource allocation functions in headquarters.

Segment assets exclude prepaid income tax, deferred income tax assets, available-for-sale financial assets, and assets related to those centrally managed and resource allocation functions in headquarters that are not attributable to any operating segment (“corporate assets”). Segment liabilities exclude current income tax liabilities, deferred income tax liabilities and liabilities related to those centrally managed and resource allocation functions in headquarters that are not attributable to any operating segment (“corporate liabilities”). These are part of the reconciliation to total balance sheet assets and liabilities.

All sales among the operating segments were performed at the price sold to the third party and have been eliminated as internal transactions when preparing the consolidated financial statements.



Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

	PRC Power Segment	Singapore Segment	All other Segment	Total
For the year ended 31 December 2011				
Total revenue	111,618,961,503	21,366,067,404	691,110,094	133,676,139,001
Inter-segment revenue	—	—	(255,370,057 )	(255,370,057 )
Revenue from external customers	111,618,961,503	21,366,067,404	435,740,037	133,420,768,944
Segment results	622,255,767	1,579,205,417	29,544,222	2,231,005,406
Interest income	88,498,145	77,043,140	641,666	166,182,951
Interest expense	(6,852,893,670 )	(475,847,837 )	(100,488,910 )	(7,429,230,417 )
Depreciation and amortization	(11,114,793,092 )	(611,041,375 )	(141,241,952 )	(11,867,076,419 )
Net gain on disposal of fixed assets	(3,379,862 )	8,531,170	936,501	6,087,809
Share of profits of associates and jointly controlled entities	552,225,317	—	26,297,388	578,522,705
Income tax expense	(666,423,108 )	(308,254,138 )	(9,206,314 )	(983,883,560 )
For the year ended 31 December 2010				
Total revenue	88,895,806,703	15,171,281,069	426,072,267	104,493,160,039
Inter-segment revenue	—	—	(185,458,129 )	(185,458,129 )
Revenue from external customers	88,895,806,703	15,171,281,069	240,614,138	104,307,701,910
Segment results	3,809,095,878	853,369,901	3,845,444	4,666,311,223
Interest income	50,012,457	38,787,289	226,000	89,025,746
Interest expense	(4,590,503,207 )	(421,399,104 )	(39,671,940 )	(5,051,574,251 )
Depreciation and amortization	(9,690,056,890 )	(561,846,589 )	(52,726,869 )	(10,304,630,348 )
Net (loss)/gain on disposal of fixed assets	10,612,517	12,827,035	—	23,439,552
Share of profits of associates	493,045,982	—	12,762,835	505,808,817
Income tax expense	(739,004,426 )	(172,659,302 )	(1,432,020 )	(913,095,748 )
31 December 2011				
Segment assets	210,274,298,159	30,791,093,808	8,707,162,709	249,772,554,676
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	33,535,106,779	3,449,724,936	3,865,074,057	40,849,905,772
Investment in associates	9,851,537,166	—	1,018,396,638	10,869,933,804
Investment in jointly controlled entities	160,000,000	—	1,084,072,861	1,244,072,861
Segment liabilities	(166,068,006,405)	(17,526,440,182)	(3,332,314,734)	(186,926,761,321)

31 December 2010

Segment assets	183,608,308,096	27,994,439,495	4,544,366,073	216,147,113,664
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	23,048,297,270	619,372,600	933,980,687	24,601,650,557
Investment in associates	9,103,960,414	—	984,544,768	10,088,505,182
Investment in a jointly controlled entity	—	—	1,058,000,000	1,058,000,000
Segment liabilities	(135,144,758,519)	(17,037,143,869)	(1,163,361,517)	(153,345,263,905)

282

A reconciliation of segment result to profit before income tax is provided as follows:

	2010	2011
Segment result	4,666,311,223	2,231,005,406
Reconciling item:		
Loss related to the headquarters	(202,705,979 )	(129,683,128 )
Investment income from Huaneng Finance	66,240,899	81,939,333
Dividend income of available-for-sale financial assets	63,577,766	164,881,208
Profit before income tax	4,593,423,909	2,348,142,819

Reportable segments' assets are reconciled to total assets as follows:

	31 December 2011	31 December 2010
Total segment assets	249,772,554,676	216,147,113,664
Reconciling items:		
Investment on Huaneng Finance	1,178,632,720	560,213,462
Deferred income tax assets	710,570,973	867,182,843
Prepaid income tax	101,959,268	76,429,736
Available-for-sale financial assets	1,638,080,010	1,949,727,308
Other long-term equity investments	713,086,300	274,086,300
Corporate assets	250,509,359	4,077,994,513
Total assets per consolidated balance sheet	254,365,393,306	223,952,747,826

Reportable segments' liabilities are reconciled to total liabilities as follows:

	31 December 2011	31 December 2010
Total segment liabilities	(186,926,761,321)	(153,345,263,905)
Reconciling items:		
Current income tax liabilities	(503,252,250 )	(280,917,052 )
Deferred income tax liabilities	(1,736,906,829 )	(1,605,716,163 )
Corporate liabilities	(7,038,610,781 )	(7,861,634,657 )
Total liabilities per consolidated balance sheet	(196,205,531,181)	(163,093,531,777)

## 6. SEGMENT REPORTING (Cont'd)

Other material items:

	Reportable segment totals	Headquarters	Investment income from Huaneng Finance	Total
<b>2011</b>				
Depreciation and amortization	11,867,076,419	33,016,559	—	11,900,092,978
Share of profits of associates	578,522,705	—	81,939,333	660,462,038
Interest expense	7,429,230,417	306,955,778	—	7,736,186,195
Income tax expense	983,883,560	—	—	983,883,560
<b>2010</b>				
Depreciation and amortization	10,304,630,348	25,581,615	—	10,330,211,963
Share of profits of associates	505,808,817	—	66,240,899	572,049,716
Interest expense	5,051,574,251	230,974,795	—	5,282,549,046
Income tax expense	913,095,748	—	—	913,095,748

Geographical information:

(a) External revenue generated from the following countries:

	2011	2010
– PRC	112,054,701,540	89,136,420,841
– Singapore	21,366,067,404	15,171,281,069
	133,420,768,944	104,307,701,910

(b) Non-current assets (excluding financial assets and deferred income tax assets) are located in the following countries:

	31 December 2011	31 December 2010
–PRC	193,236,270,199	169,317,868,777
–Singapore	23,618,372,322	22,070,397,525
	216,854,642,521	191,388,266,302

The information on the portion of external revenue of the Company and its subsidiaries which generated from sales to major customers of the Company and its subsidiaries which is equal to or more than 10% of external revenue is as follows:

	2011		2010	
	Amount	Proportion	Amount	Proportion
Jiangsu Electric Power Company	16,121,842,910	12.08 %	13,435,193,547	12.88 %
Shandong Power	15,151,313,330	11.36 %	12,486,064,907	11.97 %





## 7. RELATED PARTY RELATIONSHIPS AND TRANSACTIONS

## (1) Information of the parent company

## (a) General information of the parent company

Name of entity	Place of registration	Business nature and scope of operations	Type of enterprise	Legal representative
Huaneng Group	Beijing coal, minerals, railways, transportation, petrochemical, energy-saving facilities, steel, timber and related industries	Investments in power stations,	State-owned enterprise	Cao Peixi
HIPDC	Beijing operations of power plants and development, investments and operations of other export-oriented enterprises	Investments, construction and stock limited liability company	Sino-foreign equity joint	Cao Peixi

The ultimate parent company of the Company is Huaneng Group.

## (b) Registered capital of the parent company and respective changes

Name of entity	Currency	31 December 2010	31 December 2011
Huaneng Group	RMB	20,000,000,000	20,000,000,000
HIPDC	USD	450,000,000	450,000,000

## (c) Shareholding or equity interest held by parties that control/are controlled by the Company and respective changes

Name of entity	31 December 2010		Current year additions		31 December 2011	
	Amount	%	Amount	%	Amount	%
Huaneng Group*	2,088,001,203	14.86	143,620,000	1.02	2,231,621,203	15.88
HIPDC	5,066,662,118	36.05	—	—	5,066,662,118	36.05

\* A wholly-owned subsidiary of Huaneng Group registered in Hong Kong holds approximately 3.70% of the Company's H share. A wholly-owned subsidiary of Huaneng Group registered in PRC holds approximately 1.11% of the Company's A shares.

## (2) Information of subsidiaries

Please refer to Note 4 for the nature and related information of the subsidiaries.



## (3) Information of the jointly controlled entities and associates

Names of entities	Type of entity	Place of registration	Legal representative	Business nature and scope of operations	Registered capital	Organization code
<b>Jointly controlled entity</b>						
Time Shipping	Limited liability company	Shanghai	Liu Guoyue	International and domestic sea transportation	RMB1,200,000,000	70310029-4
Jiangsu Nantong Power Generation Co., Ltd	Limited liability company	Nantong, Jiangsu operation and management of power plant	Fei Yue	Development, investment, construction,	RMB1,560,000,000	58297013-4
<b>Associates</b>						
Rizhao Power Company	Limited liability company	Rizhao, Shandong	Ge Zuoguo	Power Generation	RMB1,245,587,900	61407218-0
SEG	Limited liability company	Shenzhen, Guangdong energy, new energy and energy construction project, etc.	Gao Zimin	Development, production and sale of regular	RMB230,971,224	19218918-5
Shenzhen Energy Management Corporation*	Limited liability company	Shenzhen, Guangdong	Gao Zimin	Management of energy projects	RMB724,584,330	58564929-3
Hanfeng Power Company	Limited liability company	Handan, Hebei	Lin Gang	Power Generation	RMB1,975,000,000	60116707-6
Lime Company	Limited liability company	Chongqing materials, chemical engineering product	Sun Lida	Lime production and sale, construction	RMB50,000,000	20359815-3
Huaneng Finance	Limited liability company	Beijing deposit services, lending, finance lease arrangements, notes discounting and entrusted	Yang Meiru	Provision for financial service including fund	RMB5,000,000,000	10000805-0

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

		loans and investment arrangement within Huaneng Group				
Sichuan Hydropower	Limited liability company	Chengdu, Sichuan operation and management of hydropower	Zhang Wei	Development, investment, construction,	RMB1,469,800,000	76234868-7
SEC	Limited liability company	Shenzhen, Guangdong	Gao Zimin	Energy and investment in related industries	RMB2,202,495,332	19224115-8
Yangmei Huaneng Company	Limited liability company	Taiyuan, Shanxi management services of coal and power generation projects	Ren Fuyao	Investment, development, consulting and	RMB1,000,000,000	68024177-1
Shidaowan Nuclear Power	Limited liability company	Rongcheng, Shandong water reactor power plant project	Zhang Tinke	Preparation for construction of pressurized	RMB1,000,000,000	69685560-4
Bianhai Railway	Limited liability company	Yingkou, Liaoning materials supplies, agency service, logistics and storage at coastal industrial base in Yingkou, Liaoning	Zhao Wei	Railway construction, freight transportation,	RMB389,000,000	69619910-9
Shenbei Cogeneration	Limited liability company	Shenyang, Liaoning construction and operation of power plants	Du Daming	Production and sales of electricity and heat,	RMB70,000,000	78872578-6
Shanxi Luan Group Zuoquan Wulihou Coal Co., Ltd.	Limited liability company	Jinzhong, Shanxi	Wang Jianqiang	Coal production and sales	RMB6,452,910	11282189-0
Hainan Nuclear Power Co.,Ltd(“Hainan Nuclear Power”)	Limited liability company	Changjiang, Hainan power plants, production and	Sun Yungen	Construction and operation of nuclear	RMB673,076,000	68116851-0

		sales of electricity				
Huaneng Jinling Combined Cycle Co-generation Co., Ltd. ("Jinling CCGT")	Limited liability company	Nanjing, Jiangsu power generation and related projects	Li Shuqing	Construction, operation and management of	RMB375,000,000	58507905-9
Huaneng (Tianjin) Coal Gasification Power Generation Co., Ltd. ("Tianjin Coal Gasification Power")	Limited liability company	Tianjin installation, heat supply	Su wenbin	Power generation, facilities	RMB533,176,000	68185745-5

## (4) Information of other related parties

Names of related parties	Nature of relationship
Huaneng Property (was known as Huaneng Building Construction and Management Co., Ltd)	A subsidiary of Huaneng Group
Xi'an Thermal and its subsidiaries	Subsidiaries of Huaneng Group
HEC and its subsidiaries	Subsidiaries of Huaneng Group
Hulunbeier Energy	A subsidiary of Huaneng Group
Huaneng New Energy Industrial Holding Limited Company ("Huaneng New Energy")	A subsidiary of Huaneng Group
Huaneng Group Technology Innovation Center	A subsidiary of Huaneng Group
Huaneng Heilongjiang Power Generation Co., Ltd. ("Heilongjiang Power")	A subsidiary of Huaneng Group
Hainan Power	A subsidiary of Huaneng Group
Suzhou Thermoelectric Power	A subsidiary of Huaneng Group
Ruijin Power	A subsidiary of HIPDC
Wuhan Power	A subsidiary of Huaneng Group
Huating Coal and Power	A subsidiary of Huaneng Group
Alltrust Insurance	A subsidiary of Huaneng Group
Inner Mongolia Power	A subsidiary of Huaneng Group
North United Power	A subsidiary of Huaneng Group
Hebei Huaneng Industrial Development Co., Ltd. ("Hebei Huaneng Industrial")	A subsidiary of Huaneng Group
Huaneng Jinan Huangtai Power Generation Co., Ltd. ("Huangtai Power")	A subsidiary of Huaneng Group
Huaneng Guicheng Trust	A subsidiary of Huaneng Group
Tibet Power	A subsidiary of Huaneng Group
Huaneng Group Fuel Company	A subsidiary of Huaneng Group
Yantai Power	A subsidiary of Huaneng Group
Huaneng Chaohu Power Generation Co., Ltd("Chaohu Power")	A subsidiary of Huaneng Group
Dongying Ner Energy	A subsidiary of Huaneng Group
Shaanxi Qinling Power	A subsidiary of Huaneng Group
Clean Energy Research Institute	A subsidiary of Huaneng Group
Huaneng Jilin Power Generation Co., Ltd. ("Huaneng Jilin Company")	A subsidiary of Huaneng Group
Huaneng Shandong Power Limited Company	A subsidiary of Huaneng Group
Huaneng Hongkong	A subsidiary of Huaneng Group

(5) Related party transactions

(a) Related party transactions

Related party	The type of related party transactions	The nature of related party transactions	2011 Amount	2010 Amount
HIPDC	Service on transmission and transformer facilities	Service fees expenses on transmission and transformer facilities	140,771,050	140,771,050
	Rental service on land use rights	Rental charge on land use rights of Huaneng Nanjing Power Plant	1,334,186	1,334,186
Huaneng Group	Rental fees	Rental charge on office building	450,000	9,266,667
	Entrusted loans	Interest expense on long-term loans	36,219,965	34,674,375
	Service charge	Training service	37,000	—
Huaneng Finance	Long-term loans	Interest expense on long-term loans	11,234,850	11,355,350
	Long-term loans	Drawdown of long-term loans	—	—
	Short-term loans	Interest expense on short-term loans	51,668,201	17,714,160
HEC and its subsidiaries	Short-term loans	Drawdown of short-term loans	4,115,000,000	605,000,000
	Service charge	Service fee relating to coal storage yard	—	116,629,725
Time Shipping*	Coal purchase	Purchase of coal and transportation service	404,257,446	1,879,157,013
	Equipment purchase	Purchase of equipments and products	204,206,590	596,233,651
	Coal purchase	Purchase of coal	93,289,887	—
Xi'an Thermal and its subsidiaries	Service charge	Transportation service	1,618,547,754	—
	Technology services	Information and technology supporting service	151,241,349	207,779,439
	Equipment purchase	Purchase of equipments and products	47,499,454	101,482,828
Rizhao Power Company	Short-term loans	Drawdown of short-term loans	70,000,000	—
	Short-term loans	Interest expense on short-term loans	2,196,507	—
	Coal sales	Sales of Coal	524,979,329	119,756,705
	Coal purchase	Purchase of coal	2,119,429,848	2,079,342,214
	Material purchase	Purchase of materials	44,083,987	49,512,789
	Electricity purchase	Purchase of electricity	4,822,265	4,443,201
	Electricity sales	Sales of electricity	2,743,386	—
	Rental fees		13,337,332	—



		Rental charge on lease of certain property, plant and equipment		
Huaneng New Energy	Long-term loans	Interest expense on long-term loans	—	3,922,034
	CDM agency fee	Consulting and registration fee	200,000	700,000
Huaneng Guicheng Trust	Short-term loan	Drawdown of short-term loans	4,500,000,000	3,180,000,000
	Short-term loan	Interest expense on short-term loans	246,746,602	55,150,037
Hulunbeier Energy	Coal purchase	Purchase of coal	676,183,868	839,462,357
Lime Company	Lime purchase	Purchase of lime	112,157,032	104,636,321
Huaneng Group Innovation Center	Technology services	Information and technology supporting service	27,750,000	47,210,000
Huaneng Property	Rental fees	Rental charge on office building	96,484,597	65,294,631
Hebei Huaneng Industrial Development	Coal purchase	Purchase of coal	—	8,184,551
Inner Mongolia Power	Coal purchase	Purchase of coal	—	68,666,186
North United Power	Coal purchase	Purchase of coal	196,430,220	21,755,466
Huating Coal and Power	Coal purchase	Purchase of coal	2,364,517,570	1,463,618,985
Heilongjiang Power	Service charge	Service fee relating to equipment purchase	—	520,000

Related party	The type of related party transactions	The nature of related party transactions	2011 Amount	2010 Amount
		Power generation quota		
Huangtai Power	Quota purchase	purchase	—	7,684,716
Hainan Power	Coal sales	Sales of Coal	—	71,525,835
Suzhou Thermoelectric	Coal sales	Sales of Coal	70,338,141	90,593,042
Ruijin Power	Coal sales	Sales of Coal	238,296,637	681,371,853
Wuhan Power	Coal sales	Sales of Coal	144,843,878	34,048,504
Chaohu Power	Coal sales	Sales of Coal	24,675,051	—
Yantai Power	Coal sales	Sales of Coal	29,892,360	—
Alltrust Insurance	Property insurance	Insurance fees	158,937,477	138,208,029
Tibet Power	Assets purchase	Purchase of vehicles	—	2,117,704
		Labour charge relating to		
	Service charge	aid-Tibet project	190,234	876,631
Huaneng Group Fuel	Coal purchase	Purchase of coal	497,806,209	—
Dongying New Power	Fuel purchase	Sale of fuel	126,694	—
	Advance	Advance	2,942,120	—
	Capacity quota			
Shanxi Qinling Power	purchase	Purchase of capacity quota	244,000,000	—
		Drawdown of short-term		
Huaneng Clean Energy	Short-term loan	loans	100,000,000	—
		Interest expense on		
	Short-term loan	short-term loans	1,257,333	—
IGCC	Advance	Advance	1,309,763	—
Huaneng Jiling Company**	Transfer equity interest	Transfer equity interest	106,303,200	—
Jinling CCGT	Short-term loan	Lending of short-term loan	100,000,000	—

\* In December 2010, the Company acquired 50% equity interest of Shanghai Time Shipping from HEC. As a result, transaction between the Company and Shanghai Time Shipping for the year ended 31 December 2011 were disclosed separately instead of included in transactions between the Company and HEC for the year ended 31 December 2010.

\*\*On 29 June 2011, the Company entered into the Jilin Biological Power Interest Transfer Agreement with Huaneng Jilin Company and Huaneng Group, pursuant to which the Company agreed to transfer its 100% equity interest in Jilin Biological Power to Huaneng Jilin Company for a consideration of RMB106.3 million. As at 31 December 2011, such transfer has been completed, resulting a loss of RMB33,583,200.

The related party transactions of the Company and its subsidiaries adopt the negotiated contract price based on market conditions.

Please refer to Note 5(28) for details of long-term loans on-lent from Huaneng Group through Huaneng Finance to the Company and its subsidiaries.

Please refer to Note 5(28) for details of the long-term bank loans of the Company and its subsidiaries guaranteed by HIPDC and Huaneng Group.

Please refer to Note 5(29) for details of bonds payable guaranteed by HIPDC.

Please refer to Note 5(19) and 5(28) for details of short-term loans and long-term loans from Huaneng Finance, Huaneng Guicheng Trust, Xi'an Thermal and Huaneng Clean Energy to the Company and its subsidiaries.

(b)	Senior management' emolument		
		2011	2010
Senior management' emolument		8,305,156	8,618,376

(6)	Cash deposits in a related party		
		31 December 2011	31 December 2010
Current deposits in Huaneng Finance		2,272,798,538	1,774,737,704

As at 31 December 2011, the annual interest rates for these current deposits placed with Huaneng Finance ranged from 0.36% to 1.49% (31 December 2010: from 0.36% to 1.35%).

(7) Receivables from and payables to related parties

	31 December 2011		31 December 2010	
	Carrying amount	Percentage attributable to related balance	Carrying amount	Percentage attributable to related balance
<b>Dividend Payables</b>				
Payables from Sichuan Hydropower	120,118,393	100.00 %	—	—
<b>Other current assets</b>				
Receivables from Jinling CCGT	100,000,000	34.70 %	—	—
<b>Construction In Progress</b>				
Prepayments to Xi'an Thermal and its subsidiaries	150,000	—	5,050,700	0.02 %
Prepayments to Alltrust Insurance	—	—	1,398,635	0.01 %
Construction materials Prepayments to HEC and its subsidiaries	147,778,743	8.37 %	112,912,521	1.88 %
Prepayments to Xi'an Thermal and its subsidiaries	4,110,550	0.23 %	5,895,250	0.10 %
Advances from customer Advances from Ruijin Power	—	—	33,930,621	24.64 %
<b>Interest payables</b>				
Interest payables on loans from Huaneng Finance	2,962,057	0.43 %	1,497,651	0.26 %
Interest payables on loans from Huaneng Group	1,445,486	0.21 %	1,425,521	0.25 %
Interest payables on loans from Xi'an Thermal	147,327	0.02 %	—	—
Interest payables on loans from Huaneng Guicheng Trust	8,473,333	1.23 %	4,513,905	0.78 %
Interest payables on loans from Huaneng Clean Energy	182,222	0.03 %	—	—
<b>Dividend Payables</b>				
Payables to Huaneng Hongkong	35,637,100	21.26 %	—	—
<b>Other current liabilities</b>				
Payables to Huaneng Innovation Centre	24,550,000	0.23 %	40,000,000	0.74 %
Payables to Xi'an Thermal and its subsidiaries	1,936,839	0.02 %	—	—



Please refer to Notes 5(6), 5(7), 5(21) and 5(25) for the balance of prepayments, other receivables, accounts payables and other payables with related parties.

As at 31 December 2011, except for the receivables from Jinling CCGT with interest, all other receivables and payables with related parties above were unsecured, no guarantee and interest free.

In addition, please refer to Notes 5(19) and (28) for loans borrowed from related parties.

(8) Related party commitments

Related party commitments which were contracted but not recognized in balance sheet as at balance sheet date are as follows:

(a) Capital commitments

	31 December 2011	31 December 2010
Xi'an Thermal and its subsidiaries	91,906,290	77,895,110
HEC and its subsidiaries	159,167,862	207,571,018
	251,074,152	285,466,128

(b) Fuel purchase and transportation commitments

	31 December 2011	31 December 2010
Time Shipping	15,040,326	480,697,547
Inner Mongolia Power	—	65,320,261
North United Power	5,958,633	62,406,104
Hulunbeier Energy	1,545,872,405	17,974,056
HEC and its subsidiaries	50,518,653	891,749,214
Huaneng Group Fuel Company	5,776,745	—
Huating Coal	618,572,142	—
	2,241,738,904	1,518,147,182

(c) Operation lease commitments

	31 December 2011	31 December 2010
HIPDC	49,364,882	114,391,755
Huaneng Property	61,251,323	21,764,877
	110,616,205	136,156,632

## 8. CONTINGENT LIABILITY

Item	31 December 2011	
	The Company and its subsidiaries	The Company
Guarantees on the long-term bank loans of TPG	—	14,609,961,914

Guarantees on the long-term bank loans above had no significant financial impact on the operations of the Company.

## 9. CONTINGENT LIABILITY

As at 31 December 2011, Luoyuanwan Harbour, a subsidiary of the Company was involved in a pending lawsuit. Luoyuanwan Harbour entered into an assets transfer agreement with a consideration of RMB96 million in prior year, pursuant to which Luoyuanwan Harbour has paid RMB76.20 million. Due to disputes on the fulfilment of the agreement by the counterparty, the remaining consideration was not paid by 31 December 2011. The counterparty filed a lawsuit in October 2011 claiming the default by Luoyuanwan Harbour and a compensation approximated to RMB37.33 million. Luoyuanwan Harbour filed a counterclaim in December 2011 claiming a compensation of RMB57.82 million for the default of counterparty, which was accepted by the court. There had been no further progress on this pending lawsuit as at the date of these financial statements being approved for publication. As at 31 December 2011, the remaining consideration of RMB19.80 million was accrued according to the original contract, management considered no additional liability be required as at 31 December 2011. Meanwhile, the compensation claimed on the counterparty was not recognised in these financial statements as there in no final decision made by the court.

## 10. COMMITMENTS

## (1) Capital commitments

Expenditure on construction projects which mainly relate to the construction of new power projects and renovation projects which were contracted but not recognized in Balance Sheet as at 31 December 2011 amounted to approximately RMB18.355 billion (31 December 2010: RMB23.894 billion).

## (2) Operating lease commitments

The Company entered into various operating lease arrangements for land and buildings. Total non-cancellable future minimum lease payments for these operating leases are as follows:

	31 December 2011	31 December 2010
Land and buildings		
Within 1 year	72,873,813	14,566,044
1-2 years	32,098,951	15,013,015
2-3 years	29,148,917	19,563,052
Over 3 years	1,140,806,302	827,883,526

1,274,927,983 877,025,637



In addition, in accordance with a 30-year operating lease agreement signed by Huaneng Dezhou Power Plant (“Dezhou Power Plant”) and Shandong Land Bureau for the land occupied by Dezhou Power Plant Phases I and II in June 1994, annual rental amounted to approximately RMB30 million effective from June 1994 and is subject to revision at the end of the fifth year from the contract date. Thereafter, the annual rental is subject to revision once every three years. The increment for each rental revision is restricted to no more than 30% of the annual rental amount of prior year.

(3) Fuel purchase commitments

As at 31 December 2011, commitments related to coal purchase contracts of the Company and its subsidiaries amounted to approximately RMB16,106 million (31 December 2010: RMB13,107 million).

The Company and its subsidiaries have signed a series of long-term fuel supply arrangement. There are minimum purchase volume and termination terms. These arrangements include:

	Period	Purchase volume	2011 Expected unit price RMB	Purchase volume	2010 Expected unit price RMB
PetroChina Company Limited	2011 – 2023	486.9 million M3/year	1.63/M3	486.9 million M3/year	1.63/M3
Other suppliers	2011 – 2013	175.1 BBtu*/day	100,000/BBtu	175.1 BBtu/day	100,000/BBtu
	2014	90.0 BBtu/day	(i)	82.5 BBtu/day	(i)
	2015 – 2023	72.4 BBtu/day	(i)	64.9 BBtu/day	(i)
	2024 – 2028	49.9BBtu/day	(i)	42.4 BBtu/day	(i)

\* BBtu: Billion British Thermal Unit

(i) No unit cost information available for daily purchase quantities of 64.9BBtu and 64.9BBtu and 42.4BBtu during respective period categories of 2014; 2015 – 2023; and 2024 – 2028.

(4) Fulfillment of prior year commitments

The commitments at 31 December 2010 were fulfilled by the Company and its subsidiaries as announced.

## 11. EVENTS AFTER THE BALANCE SHEET DATE

## (1) Profit appropriation after the balance sheet date

	Amount
Dividends planned to appropriate	702,769,172

Proposed dividends of RMB702,769,172 to all shareholders, according to the Board of Directors Resolution on 20 March 2012, are not recognized as a liability in this financial report (Note 5(34)).

## (2) Issuance of non-public debt financing instrument after the balance sheet date

The Company issued unsecured short-term bonds of RMB5 billion with annual interest rate of 5.24% on 5 January 2012. Such bonds are issued at par, and will mature in 3 years.

## 12. BUSINESS COMBINATION

Please refer to Notes 4(3).

## 13. FINANCIAL INSTRUMENTS AND RISKS

Risk management, including the management on the financial risks, is carried out under the instructions of the Strategic Committee of Board of Directors and the Risk Management Team. The Company works out general principles for overall management as well as management policies covering specific areas. In considering the importance of risks, the Company identifies and evaluates risks at head office and individual power plant level, and requires analysis and proper communication for the information collected periodically.

SinoSing Power and its subsidiaries are subject to financial risks that are different from the entities operating within the PRC. They have a series of controls in place to maintain the cost of risks occurring and the cost of managing the risks at an acceptable level. Management continually monitors the risk management process to ensure that an appropriate balance between risk and control is achieved. SinoSing Power and its subsidiaries have their written policies and financial authorization limits in place they are reviewed periodically. These financial authorization limits seek to mitigate and eliminate operational risks by setting approval thresholds required for entering into contractual obligations and investments.

## (1) Market risk

## (a) Foreign exchange risk

Foreign exchange risk of the entities operating within the PRC primarily arises from loans denominated in foreign currencies of the Company and its subsidiaries. SinoSing Power and its subsidiaries are exposed to foreign exchange risk on accounts payable and other payables that are denominated primarily in US\$, a currency other than Singapore dollar (“S\$”), their functional currency. Please refer to Notes 5(21), (28) for details. The Company and its subsidiaries manage exchange risk through closely monitoring interest and exchange market.

As at 31 December 2011, if RMB had weakened/strengthened by 5% (2010: 5%) against US\$ and 3% (2010: 3%) against € with all other variables constant, exchange gain of the Company and its subsidiaries would have been RMB243 million (2010: RMB312 million) and RMB21 million (2010: RMB25 million) lower/higher, respectively. The ranges of such sensitivity disclosed above were based on the observation on the historical trend of related exchange rates during the previous year under analysis.

As at 31 December 2011, if S\$ had weakened/strengthened by 10% (2010: 10%) against US\$ with all other variables constant, exchange gain of the Company and its subsidiaries would have been RMB44 million (2010: RMB121 million) lower/higher, respectively. The ranges of such sensitivity disclosed above were based on the management's experience and forecast.

SinoSing Power and its subsidiaries also exposed to foreign exchange risk on fuel purchases that is denominated primarily in US\$. They use forward exchange contracts to hedge almost all of its estimated foreign exchange exposure in respect of forecast fuel purchases over the following three months. As at 31 December 2011, they entered into foreign currency contracts with notional amounts of RMB191.04 million (2010: RMB67.47 million) to hedge its financial liabilities exposure in US Dollar. Please refer to Note 5(3) for details.

(b)

Price risk

The available-for-sale financial assets of the Company and its subsidiaries are exposed to equity security price risk.

Detailed information relating to the available-for-sale financial assets are disclosed in Note 5(9). Being a strategic investment in nature, the Company has a supervisor in the supervisory committee of the investee and exercises influence in safeguarding the interest. The Company also closely monitors the pricing trends in the open market in determining their long-term strategic stakeholding decisions.

As at 31 December 2011, the Company and its subsidiaries are exposed to equity security price risk arising from the investments classified as financial assets at fair value through profit or loss. These securities are listed in Hong Kong. To manage the risk, the Company and its subsidiaries closely monitors the market prices of these securities. If prices of the trading securities had increased/decreased by 10% with all other variables constant, the gain/(loss) on fair value changes would have been higher/lower by RMB9.62 million respectively.

The Company and its subsidiaries exposed to fuel price risk on fuel purchases. In particular, SinoSing Power and its subsidiaries use fuel oil swap to hedge against such a risk and designate them as cash flow hedges. Please refer to Note 5(3) for details.

(c)

Cash flow interest rate risk

The interest rate risk of the Company and its subsidiaries primarily arises from long-term loans. Loans borrowed at variable rates expose the Company and its subsidiaries to cash flow interest rate risk. The exposures of these risks are disclosed in Note 5(28) to the financial statements. The Company and its subsidiaries have entered into interest rate swap agreements with banks to hedge against a portion of cash flow interest rate risk.

As at 31 December 2011, if interest rates on RMB-denominated borrowings had been 50 basis points (2010: 50 basis points) higher/lower with all other variables held constant, interest expense for the year would have been RMB500 million (2010: RMB334 million) higher/lower. If interest rates on US\$-denominated borrowings had been 50 basis points (2010: 50 basis points) higher/lower with all other variables held constant, interest expense for the year would have been RMB11 million (2010: RMB14 million) higher/lower. If interest rates on S\$-denominated borrowings had been 100 basis points (2010: 100 basis points) higher/lower with all other variables held constant, interest expense for the year would have been RMB73 million (2010: RMB89 million) higher/lower. The ranges of such sensitivity disclosed above were based on the observation on the historical trend of related interest rates during the previous year under analysis.

The Company has entered into a floating-to-fixed interest rate swap agreement to hedge against cash flow interest rate risk of a loan. According to the interest rate swap agreement, the Company agrees with the counterparty to settle the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amounts quarterly until 2019. In the current year, Tuas Power Generation Pte Ltd. (“TPG”) also entered into a number of floating-to-fixed interest rate swap agreements to hedge against cash flow interest rate risk of a loan. According to these interest rate swap agreements, TPG agrees with the counterparty to settle the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amount semi-annually until 2020. Please refer to Note 5(3) for details.

(2)

Credit risk

Credit risk arises from bank deposits, credit exposures to customers, other receivables, other non-current assets and loans to subsidiaries. The maximum exposures of bank deposits, accounts and other receivables are disclosed in Notes 5(1), (4), (5) and (7) to the financial statements, respectively while maximum exposures of loans to subsidiaries are presented on balance sheets.

Bank deposits are placed with reputable banks and financial institutions which are regulated, including which a significant portion is deposited with a non-bank financial institution which is a related party of the Company. The Company has a director in the Board of this non-bank financial institution and exercises influence. Corresponding maximum exposures of these bank deposits are disclosed in Note 7(6) to the financial statements.

Most of the power plants of the Company and its subsidiaries operating within PRC sell electricity generated to their sole customers, the power grid companies of their respective provinces or regions where the power plants operate. These power plants communicate with their individual grid companies periodically and believe that adequate provision for doubtful accounts have been made in the financial statements.

Singapore subsidiaries derive revenue mainly from sale of electricity to the National Electricity Market of Singapore operated by Energy Market Company Pte Ltd., which is not expected to have high credit risk. They also derive revenue mainly from retailing electricity to consumers with monthly consumption of more than 10,000kWh. These customers engage in a wide spectrum of manufacturing and commercial activities in a variety of industries. They hold cash deposits with RMB164.56 million (31 December 2010: 141.06 million) and guarantees from

creditworthy financial institutions to secure substantial obligations of the customers.

The concentrations of accounts receivable are disclosed in Note 5(5).

Regarding balances with subsidiaries, the Company and its subsidiaries can obtain the financial statements of all subsidiaries and assess the financial performance and cash flows of those subsidiaries periodically to manage the credit risk of loans.

(3) Liquidity risk

Liquidity risk management is to primarily ensure the ability of the Company and its subsidiaries to meet its liabilities as and when they are fall due. The liquidity reserve comprises the undrawn borrowing facility and cash and cash equivalents available as at each month end in meeting its liabilities.

The Company and its subsidiaries maintained flexibility in funding by cash generated by their operating activities and availability of committed credit facilities.

Financial liabilities due within 12 months are presented as the current liabilities in the balance sheets. The repayment schedules of the long-term loans and long-term bonds and cash flows of derivative financial liabilities are disclosed in Notes 5(28), (29) and (3), respectively.

(4) Fair value estimation

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 – Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3 – Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

## (a) Fair value measurements

The following table presents the assets and liabilities of the Company and its subsidiaries that are measured at fair value at 31 December 2011.

	The Company and its subsidiaries			Total
	Level 1	Level 2	Level 3	
<b>Assets</b>				
<b>Financial assets at fair value through profit or loss</b>				
– Trading derivatives (Note 5(3))	—	226,046	—	226,046
– Trading equity instruments (Note 5(2))	96,153,714	—	—	96,153,714
<b>Derivatives used for hedging (Note 5(3))</b>				
	—	163,617,384	—	163,617,384
<b>Available-for-sale financial assets</b>				
– Equity securities (Note 5(9))	1,638,080,010	—	—	1,638,080,010
<b>Total assets</b>	<b>1,734,233,724</b>	<b>163,843,430</b>	<b>—</b>	<b>1,898,077,154</b>
<b>Liabilities</b>				
<b>Financial liabilities at fair value through profit or loss</b>				
– Trading derivatives (Note 5(3))	—	142,428	—	142,428
<b>Derivatives used for hedging (Note 5(3))</b>				
	—	613,605,304	—	613,605,304
<b>Total liabilities</b>	<b>—</b>	<b>613,747,732</b>	<b>—</b>	<b>613,747,732</b>

The following table presents the assets and liabilities of the Company and its subsidiaries that are measured at fair value at 31 December 2010

	The Company and its subsidiaries			Total
	Level 1	Level 2	Level 3	
<b>Assets</b>				
<b>Financial assets at fair value through profit or loss</b>				
–Trading derivatives (Note 5(3))	—	3,809,826	—	3,809,826
Derivatives used for hedging (Note 5(3))	—	220,300,713	—	220,300,713
<b>Available-for-sale financial assets</b>				
–Equity securities (Note 5(9))	1,949,727,308	—	—	1,949,727,308
<b>Total assets</b>	<b>1,949,727,308</b>	<b>224,110,539</b>	<b>—</b>	<b>2,173,837,847</b>
<b>Liabilities</b>				
<b>Financial liabilities at fair value through profit or loss</b>				
– Trading derivatives (Note 5(3))	—	2,396,547	—	2,396,547
Derivatives used for hedging (Note 5(3))	—	180,077,976	—	180,077,976
<b>Total liabilities</b>	<b>—</b>	<b>182,474,523</b>	<b>—</b>	<b>182,474,523</b>

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Company and its subsidiaries is the current bid price. These instruments are included in level 1. Instruments included in level 1 comprise equity investment in Yangtze Power classified as available for sale, and Beijing Jingneng Clean Energy as held for trading.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

• The forward exchange contracts and fuel oil swaps are both valued using quoted market prices or dealer quotes for similar instruments.

• The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.

Instruments included in level 2 comprise forward exchange contracts, fuel oil swaps and interest rate swap.

(b) Fair value disclosures

The carrying value less provision for doubtful accounts of accounts receivable, other receivables and assets, accounts payable, other payables, short-term loan and other current liabilities, are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Company and its subsidiaries for similar financial instruments.

The estimated fair value of long-term loans (including current maturities) and long-term bonds (including current maturities) was approximately RMB93.67 billion and approximately RMB18.95 billion as at 31 December 2011 (2010: RMB78.81 billion and approximately RMB14.73 billion), respectively. The aggregate book value of these liabilities was approximately RMB93.99 billion and RMB18.85 billion as at 31 December 2011 (2010: RMB78.97 billion and RMB13.83 billion), respectively.

14. ASSETS AND LIABILITIES MEASURED AT FAIR VALUE

	31 December 2010	Gain/(Loss)from changes in fair value	Accumulated changes in fair value recognized in equity	Provision for impa riment	31 December 2011
Financial assets –					
Derivative financial assets	224,110,539	(3,590,885 )	—	—	163,843,430
Held for trading financial assets	—	605,042	—	—	96,153,714
Available-for-sale financial assets	1,949,727,308	—	(311,647,298)	—	1,638,080,010
Subtotal	2,173,837,847	(2,985,843 )	(311,647,298)	—	1,898,077,154
Financial liabilities –					
Derivative financial liabilities	182,474,523	(2,258,575 )	—	—	613,747,732



## 15. FINANCIAL ASSETS AND LIABILITIES IN FOREIGN CURRENCY

	31 December 2010	Gain/(Loss)from changes in fair value	Accumulated changes in fair value recognized in equity	Provision for impai rment	31 December 2011
<b>Financial assets –</b>					
Derivative financial assets	224,110,539	(3,590,885 )	—	—	163,843,430
Held for trading financial assets	—	605,042	—	—	96,153,714
loans and receivables	1,367,368,670	—	—	—	2,245,182,981
<b>Subtotal</b>	<b>1,591,479,209</b>	<b>(2,985,843 )</b>	<b>—</b>	<b>—</b>	<b>2,505,180,125</b>
<b>Financial liabilities –</b>					
Derivative financial liabilities	182,474,523	(2,258,575 )	—	—	613,747,732
loans and payables	23,713,024,160	—	—	—	23,040,115,326
<b>Subtotal</b>	<b>23,895,498,683</b>	<b>(2,258,575 )</b>	<b>—</b>	<b>—</b>	<b>23,653,863,058</b>

## 16. NOTES TO THE COMPANY ONLY FINANCIAL STATEMENTS

## (1) Accounts receivable

	31 December 2011	31 December 2010
Accounts receivable	6,542,467,342	5,186,802,524
Less: Provision for doubtful accounts	—	—
	6,542,467,342	5,186,802,524

## (a) The ageing analysis of accounts receivable is as follows:

	31 December 2011	31 December 2010
Within 1 year	6,502,461,219	5,186,802,524
1-2 years	40,006,123	—
	6,542,467,342	5,186,802,524

(b) As at 31 December 2011, the individually significant (over 10% of accounts receivable balance) accounts receivable of the Company totaled RMB4,404,059,500 (31 December 2010: RMB3,450,881,291), representing 67.31% (31 December 2010: 66.53%) of total accounts receivable. There was no bad debt provision made on these accounts receivable based on the assessment as at 31 December 2011 (31 December 2010: Nil).



(c) There was no accounts receivable written off during 2011 (2010: Nil).

(d) As at 31 December 2011, there was no accounts receivable from shareholders who held 5% or more of the equity interest in the Company (31 December 2010: Nil).

(e) As at 31 December 2011, the five largest accounts receivable of the Company is analyzed as follows:

	Relationship	Amount	Ageing	Percentage
Zhejiang Electric Power Corporation	Non-related party	1,126,714,049	Within 1 year	17.22%
Shandong Power	Non-related party	978,044,378	Within 1 year	14.95%
Guangdong Grid Company	Non-related party	944,203,144	Within 1 year	14.43%
Liaoning Electric Power Corporation	Non-related party	698,093,785	Within 1 year	10.67%
Fujian Electric Power Company	Non-related party	657,004,144	Within 1 year	10.04%
		4,404,059,500		67.31%

(f) As at 31 December 2011, there was no accounts receivable from related party in the Company (31 December 2010: Nil).

(g) As at 31 December 2011, accounts receivable (within one year and no provision) of the Company approximately RMB2,008,938,857 (2010: RMB1,513,050,207) was secured to a bank as collateral against a short-term loan of RMB1,840,610,961 (2010: RMB1,389,449,751).

(2) Other receivables

	31 December 2011	31 December 2010
Receivable from Administration Center of Housing Fund for sales of staff quarters	14,984,890	14,984,890
Staff advances	7,538,626	6,476,822
Services fees from subsidiaries and prepayments to projects	120,913,261	75,760,037
Prepayments for investment	—	436,440,000
Receivables from subsidiaries for repairs and maintenance services rendered	—	11,121,050
Receivables from subsidiaries for fuel and materials	278,204,607	225,081,621
Receivables from subsidiaries for interests and prepayments for subsidiaries	299,788,011	164,921,273
Others	370,413,935	307,308,175
Subtotal	1,091,843,330	1,242,093,868
Less: Provision for doubtful accounts	(17,812,130 )	(17,812,730 )

1,074,031,200 1,224,281,138

302

---

(a) The ageing analysis of other receivable is as follows:

	31 December 2011	31 December 2010
Within 1 year	489,983,528	783,566,189
1-2 years	252,445,943	309,409,090
2-3 years	292,804,260	97,570,498
3-4 years	4,848,542	250,898
4-5 years	435,473	11,406,022
Over 5 years	51,325,584	39,891,171
	1,091,843,330	1,242,093,868

(b) As at 31 December 2011, the individually significant (over 10% of other receivables balance) other receivables of the Company amounted to RMB510,692,924 (31 December 2010: RMB636,122,894), representing 46.77% (31 December 2010: 51.21%) of the total other receivables. There was no bad debt provision made on these other receivables based on the assessment as at 31 December 2011 (31 December 2010: Nil).

(c) As at 31 December 2011, the provision for doubtful other receivables which were individually insignificant but tested for impairment on an individual basis as follows:

	Amount	Provision for doubtful accounts	Percentage	
Dalian Development Zone, Trust and Investment Corporation	4,700,000	4,700,000	100.00	%
Hebei Convention and Exhibition Center	5,000,000	5,000,000	100.00	%
Heshun Company	1,000,000	1,000,000	100.00	%
Xiangtan Branch of China Construction Bank	1,157,313	1,074,612	92.85	%
Huaxing Company	2,576,874	2,576,874	100.00	%
Others	10,855,919	3,460,644	31.88	%
	25,290,106	17,812,130		

\*The Company and its subsidiaries have provided for this receivable based on the operating and financial situation of local customers.

(d) There was no other receivable written off during 2011 (2010: Nil).

(e) As at 31 December 2011, there was no other receivable from shareholders who held 5% or more of the equity interest in the Company (31 December 2010: Nil).

(f) As at 31 December 2011, the five largest other receivables of the Company are as follows:

	Relationship	Amount	Ageing	Percentage
Xindian II Power Company	A subsidiary of the Company	278,204,607	Within three years	25.48%
Shidongkou Power Company	A subsidiary of the Company	232,488,317	Within two years	21.29%
Haimen Port	A subsidiary of the Company	67,299,694	Within one years	6.16%
Weihai Power	A subsidiary of the Company	43,720,746	Within one years	4.00%
Shandong Jining Huaning Industrial Limited Company	Non related party	34,055,391	Within one years	3.12%
		655,768,755		60.05%

(g) There are no other receivables of the Company and its subsidiaries to related party (31 December 2010: There are no other receivables of the Company and its subsidiaries to related party in addition to Rizhao Power Company).

(3) Long-term equity investments

	31 December 2011	31 December 2010
Subsidiaries (a)	38,000,024,441	26,247,174,851
A jointly controlled entity	1,084,072,861	1,058,000,000
Associates		
– Quoted prices	1,800,696,607	—
– Quoted prices not available	10,219,862,653	10,620,451,730
Other long-term equity investments	708,890,133	269,890,133
	51,813,546,695	38,195,516,714
Less: Impairment provision for long-term equity investments	(623,068,110 )	(214,940,210 )
	51,190,478,585	37,980,576,504

## (a) Long-term equity investments in subsidiaries

	Accounting Method	The initial investment cost	31 December 2010	Addition of current year	31 December 2011	Percentage of equity interest	Percentage of voting rights	Pro	P
Weihai Power Company	Cost Method	828,241,793	718,241,793	110,000,000	828,241,793	60 %	60 %	—	—
Taicang Power Company	Cost Method	474,896,560	474,896,560	—	474,896,560	75 %	75 %	—	—
Huaiyin Power Company	Cost Method	760,884,637	760,884,637	—	760,884,637	100 %	100 %	(208,	—
Huaiyin II Power Company	Cost Method	592,403,600	592,403,600	—	592,403,600	63.64%	63.64%	—	—
Yushe Power Company	Cost Method	374,449,895	374,449,895	—	374,449,895	60 %	60 %	—	—
Qinbei Power Company	Cost Method	1,169,725,722	1,169,725,722	—	1,169,725,722	60 %	60 %	—	—
Xindian II Power Company	Cost Method	442,320,000	442,320,000	—	442,320,000	95 %	95 %	—	—
Taicang II Power Company	Cost Method	603,110,000	603,110,000	—	603,110,000	75 %	75 %	—	—
Yueyang Power Company	Cost Method	762,484,838	682,984,838	79,500,000	762,484,838	55 %	55 %	—	—
Luohuang Power Company	Cost Method	1,281,418,249	1,281,418,249	—	1,281,418,249	60 %	60 %	—	—
Shanghai Combined Cycle Power Company	Cost Method	489,790,000	489,790,000	—	489,790,000	70 %	70 %	—	—
Pingliang Power Company	Cost Method	946,317,154	946,317,154	—	946,317,154	65 %	65 %	—	—
Jinling Power Company	Cost Method	1,288,640,502	1,288,640,502	—	1,288,640,502	60 %	60 %	—	—
Fuel Company	Cost Method	200,000,000	200,000,000	—	200,000,000	100 %	100 %	—	—
Sinosing Shidongkou Power Company	Cost Method	9,809,294,179	7,841,267,424	1,968,026,755	9,809,294,179	100 %	100 %	—	—
Daditaihong	Cost Method	495,000,000	495,000,000	—	495,000,000	50 %	50 %	—	—
	Cost Method	206,142,000	192,142,000	14,000,000	206,142,000	100 %	100 %	—	—

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 6-K

Nantong Power Company	Cost Method	546,000,000	546,000,000	—	546,000,000	70	%	70	%	—
Yingkou Port	Cost Method	360,117,500	360,117,500	—	360,117,500	50	%	50	%	—
Xiangqi Hydropower	Cost Method	258,000,000	180,000,000	78,000,000	258,000,000	100	%	100	%	—
Qidong Wind Power	Cost Method	214,724,837	173,284,837	41,440,000	214,724,837	65	%	65	%	—
Beijing Co-generation	Cost Method	860,156,953	776,926,953	83,230,000	860,156,953	41	%	66	%	—
Yangliuqing Power Company	Cost Method	798,935,936	798,935,936	—	798,935,936	55	%	55	%	—
Yingkou Cogeneration	Cost Method	844,030,000	830,000,000	14,030,000	844,030,000	100	%	100	%	—
Zhuozhou Liyuan	Cost Method	5,000,000	5,000,000	—	5,000,000	100	%	100	%	—
Zuoquan Coal-fired Power Company	Cost Method	767,996,200	520,786,200	247,210,000	767,996,200	80	%	80	%	—
Kangbao Wind Power	Cost Method	370,000,000	343,720,000	26,280,000	370,000,000	100	%	100	%	—
Jiuquan Wind Power	Cost Method	2,750,035,286	1,853,357,551	896,677,735	2,750,035,286	100	%	100	%	—
Zhanhua Cogeneration	Cost Method	408,127,900	408,127,900	—	408,127,900	100	%	100	%	(408,127,900)
Qingdao Port	Cost Method	455,963,800	455,963,800	—	455,963,800	100	%	100	%	—
Hualu Sea Transportation	Cost Method	155,895,400	155,895,400	—	155,895,400	53	%	53	%	—
Jilin Biological*	Cost Method	—	139,886,400	(139,886,400 )	—	100	%	100	%	—
Rudong Wind Power	Cost Method	22,950,000	22,950,000	—	22,950,000	90	%	90	%	—
Haimen Port	Cost Method	38,000,000	10,000,000	28,000,000	38,000,000	100	%	100	%	—
Wafangdian Wind Power	Cost Method	92,630,000	62,630,000	30,000,000	92,630,000	100	%	100	%	—
Changtu Wind Power	Cost Method	58,605,000	50,000,000	8,605,000	58,605,000	100	%	100	%	—
Diandong Energy	Cost Method	4,654,146,000	—	4,654,146,000	4,654,146,000	100	%	100	%	—
Diandong Yuwang	Cost Method	1,705,203,200	—	1,705,203,200	1,705,203,200	100	%	100	%	—
Suzihe	Cost Method	50,000,000	—	50,000,000	50,000,000	100	%	100	%	—
Luoyuanwan Harbour	Cost Method	1,145,479,500	—	1,145,479,500	1,145,479,500	100	%	100	%	—
		118,293,800	—	118,293,800	118,293,800	58.3	%	58.3	%	—



Luoyuanwan Pier	Cost Method									
Ludao Pier	Cost Method	284,614,000	—	284,614,000	284,614,000	100 %	100 %	—		
Taicang Port	Cost Method	83,000,000	—	83,000,000	83,000,000	100 %	100 %	—		
Enshi Hydropower	Cost Method	227,000,000	—	227,000,000	227,000,000	100 %	100 %	—		
		26,247,174,851		11,752,849,590	38,000,024,441					(616)

\* The Company sold out 100% equity of Jilin Biological in 2011 (Note 7(5)).

## (4) Operating revenue and operating cost

	2011		2010	
	Revenue	Cost	Revenue	Cost
Principal operations	58,994,935,342	53,506,022,128	52,625,005,734	46,869,893,235
Other operations	371,825,633	284,518,933	253,509,760	92,201,353
Total	59,366,760,975	53,790,541,061	52,878,515,494	46,962,094,588

The principal operations of the Company are mainly sales of power and heat.

Details of the principal operating revenue and cost categorized by products are as follows:

	2011		2010	
	Principal operating revenue	Principal operating cost	Principal operating revenue	Principal operating cost
Power and heat	58,994,935,342	53,506,022,128	52,625,005,734	46,869,893,235

The principal operating revenue of the Company was all sales of power and was occurred in China.

Other operating revenue and cost are as follows:

	2011		2010	
	Other operating revenue	Other operating cost	Other operating revenue	Other operating cost
Sales of materials and steam	8,884,120	3,679,256	42,214,421	39,367,773
Others	362,941,513	280,839,677	211,295,339	52,833,580
Total	371,825,633	284,518,933	253,509,760	92,201,353

For the year ended 31 December 2011, the principal operating revenue from the five largest customers of the Company amounted to RMB40,478,256,355 (2010: RMB38,217,611,098), representing 68.18% (2010: 72.27%) of the total principal operating revenue. Details of operating revenue are as follows.

	Operating revenue	Percentage in total operating revenue
Zhejiang Electric Power Corporation	10,075,554,041	16.96 %
Shandong Power	9,569,847,145	16.12 %
Guangdong Grid Company	9,169,988,726	15.45 %
Liaoning Electric Power Corporation	5,851,309,111	9.86 %

Fuzhou Electric Power Corporation	5,811,557,332	9.79	%
	40,478,256,355	68.18	%

306

---

(5)

## Investment income

	2011	2010
Gains from available-for-sale financial assets	65,881,205	63,577,786
Shares of net profit of investees accounted for under equity method (a)	658,911,688	570,036,402
Dividends declared by investees accounted for under cost method (b)	385,858,126	376,626,930
Sale of subsidiaries	(33,583,200 )	—
	1,077,067,819	1,010,241,118

## (a) Investment income from long-term equity investment under equity method

In 2011, Investees from which investment income of the Company account for more than 5% of the total profit, or investees accounting for the top five of the total profit of the Company and its subsidiaries are listed as follows:

	2011	2010
SEG, Shenzhen Energy Management Corporation and SEC	322,748,447	339,247,814
Sichuan Hydropower Company	296,201,591	273,813,997
Huaneng Finance	81,939,333	66,240,899
Time Shipping	76,036,099	—
Rizhao Power Company	(42,572,404 )	(60,484,737 )
	734,353,066	618,817,973

## (b) Investment income from long-term equity investment under cost method

In 2011, Investees from which investment income of the Company account for more than 5% of the total profit, or investees accounting for the top five of the total profit of the Company and its subsidiaries are listed as follows:

	2011	2010
Jixing Energy	99,000,000	—
Taicang II Power Company	70,859,359	136,033,920
Jinling Power	60,800,000	51,943,080
Beijing Cogeneration	58,444,803	74,000,900
Luohuang Power Company	36,000,000	—
	325,104,162	261,977,900

The difference of investment income of current year is mainly due to the charges of the investee's business performance.

## (6) Other comprehensive income

	2011	2010
Available-for-sale financial assets		
– (Losses)/Gains in current period	(311,647,298)	(344,271,532)
Less: Income tax impact	77,911,824	86,067,882
<b>Subtotal</b>	<b>(233,735,474)</b>	<b>(258,203,650)</b>
Shares in investees' other comprehensive income under equity method	(49,825,334 )	(41,787,118 )
Less: Income tax impact	4,898,186	5,959,389
<b>Subtotal</b>	<b>(44,927,148 )</b>	<b>(35,827,729 )</b>
Hedging instruments of cash flow hedge	(194,390,187)	(198,656,283)
Add: Transfer from other comprehensive income recorded to the income statements in current period	74,215,064	76,912,159
Less: Income tax impact	30,043,781	30,436,031
<b>Subtotal</b>	<b>(90,131,342 )</b>	<b>(91,308,093 )</b>
<b>Total</b>	<b>(368,793,964)</b>	<b>(385,339,472)</b>

## (7) Supplementary information on cash flow statement

## (a) Reconciliation from net profit to cash flows from operating activities

	2011	2010
Net profit	851,541,687	2,379,696,297
Add: (Decrease in)/provision for assets impairment	408,127,300	(50,542 )
Depreciation of fixed assets	5,170,592,087	5,196,679,872
Amortization of intangible assets	59,000,854	54,817,813
Amortization of long-term deferred expenses	6,193,700	2,884,876
Losses on disposal of fixed assets and intangible assets	(35,906,750 )	37,628,531
Financial expenses	3,555,877,672	2,691,425,324
Investment income	(1,110,651,019)	(1,010,241,118)
Amortization of deferred income	(162,721,167 )	(155,847,274 )
Decrease/(Increase) in deferred income tax assets	43,319,424	(278,924,861 )
Increase in deferred income tax liabilities	107,955,605	116,503,914
Increase in inventories	(326,752,085 )	(669,061,013 )
Increase in operating receivable items	(1,734,826,543)	(20,667,519 )
Increase in operating payable items	2,021,207,039	784,624,671
<b>Net cash flows generated from operating activities</b>	<b>8,852,957,804</b>	<b>9,129,468,971</b>



## (b) Change in cash and cash equivalents

	2011	2010
Cash at end of the year	2,503,183,158	4,943,416,847
Less: Cash at beginning of the year	(4,943,416,847)	(1,276,282,336)
Net increase/(decrease) in cash	(2,440,233,689)	3,667,134,511

## (c) Cash and cash equivalents

	31 December 2011	31 December 2010
Cash—		
Cash on hand	549,661	827,689
Cash in bank	2,572,815,667	5,018,764,271
Subtotal	2,573,365,328	5,019,591,960
Less: Restricted cash*	(70,182,170 )	(76,175,113 )
Cash and cash equivalents at end of the year	2,503,183,158	4,943,416,847

\* Restricted cash is mainly letter of credit deposit.

Supplemental Information to the Financial Statements  
FOR THE YEAR ENDED 31 DECEMBER 2011  
(All amounts are stated in RMB Yuan unless otherwise stated)

## 1. DETAILS FOR NON-RECURRING ITEMS

	2011	2010
Net gain/(loss) from disposal of non-current assets	6,235,379	32,118,807
Government grants recorded in the profit and loss	1,138,371,275	437,898,340
The gain on fair value change of held-for-trading financial assets and liabilities (excluding effective hedging instruments related to operating activities of the Company) and disposal of held-for- trading financial assets and liabilities and available-for-sale financial assets	11,434,238	8,286,421
Reversal of provision for doubtful accounts receivable individually tested for impairments	19,824,705	2,756,378
Non-operating incomes and expenses besides items above (Note 1)	64,269,579	(6,329,249 )
Other items recorded in the profit and loss in accordance with the definition of non-recurring items (Note 2)	(418,532,839 )	—
	821,602,337	474,730,697
Impact of tax	(236,218,940 )	(53,094,366 )
Impact of minority interests (after Tax)	(164,254,990 )	(100,487,059)
	421,128,407	321,149,272

Note 1: In 2011, non-operating incomes besides items above primarily include the written-off payable aged over three years.

Note 2: In 2011, other items recorded in the profit and loss in accordance with the definition of non-recurring items primarily include impairment of goodwill of Zhanhua Cogeneration, impairment of fixed assets of Huaiyin Power Company due to the shutting-down of certain units, and investment loss on the disposal of Jilin Biological Power.

Basis of preparing breakdown of non-recurring items

In accordance with “Interpretation on Information Disclosures of Listed Companies No.1 – Non-recurring Items [2008]” promulgated by China Securities Regulatory Commission, non-recurring items refer to those transactions or events which do not directly relate to business operations or those which relate to business operations but will distort the appropriate judgment made by the user of financial statements on the operating performance and profitability of the Company due to their special and non-recurring nature.



## 2. FINANCIAL STATEMENTS RECONCILIATION

The financial statements, which are prepared by the Company and its subsidiaries in conformity with the Accounting Standards for Business Enterprises (“PRC GAAP”), differ in certain respects from that of IFRS. Major impact of adjustments for IFRS, on the net consolidated profit and net assets of the Company, are summarized as follows:

	Net Profit		Net Assets	
	2011	2010	31 December 2011	31 December 2010
Under PRC GAAP	1,268,245,238	3,544,304,422	50,075,263,660	52,891,269,202
Impact of IFRS adjustments:				
Effect of reversal of the recorded amounts received in advance of previous years (a)	—	10,418,208	(819,478,392 )	(819,478,392 )
Amortization of the difference in the recognition of housing benefits of previous years (b)	(3,103,920 )	(17,233,504 )	(133,455,272 )	(130,351,352 )
Difference on depreciation related to borrowing costs capitalized in previous years (c)	(30,139,156 )	(30,139,156 )	344,270,291	374,409,447
Differences in accounting treatment on business combinations under common control (d)	—	—	3,574,683,853	3,574,683,853
Difference in depreciation and amortization of assets acquired in business combinations under common control (d)	(297,589,012 )	(417,700,329 )	(1,652,485,803 )	(1,354,896,791 )
Applicable deferred income tax impact of the GAAP differences above (e)	133,504,842	73,370,584	188,127,020	54,622,178
Others	14,506,232	22,370,884	(103,771,022 )	(132,733,257 )
Profit attributable to minority interests on the adjustments above	95,087,220	162,592,976	(590,225,869 )	(668,392,193 )
Under IFRS	1,180,511,444	3,347,984,085	50,882,928,466	53,789,132,695

(a) Effect of recording the amounts received in advance of previous years

In accordance with the tariff setting mechanism applicable to certain power plants of the Company in previous years, certain power plants of the Company receive payments in advance in the previous years (calculated at 1% of the original cost of fixed assets) as the major repair and maintenance cost of these power plants. Such receipts in advance are recognized as liabilities under IFRS and are recognized as revenue when the repairs and maintenance is performed and the liabilities are extinguished. In accordance with PRC GAAP, when preparing the financial statements, revenue is computed based on actual power sold and the tariff currently set by the State, no such amounts are recorded.

(b) Difference in the recognition of housing benefits to the employees of the Company and its subsidiaries in previous years

The Company and its subsidiaries once provided staff quarters to the employees of the Company and its subsidiaries and sold such staff quarters to the employees of the Company and its subsidiaries at preferential prices set by the local housing reform office. Difference between cost of the staff quarters and proceeds from the employees represented the housing losses, and was borne by the Company and its subsidiaries.

Under Previous Accounting Standards and Accounting System (“Previous PRC GAAP”), in accordance with the relevant regulations issued by the Ministry of Finance, such housing losses incurred by the Company and its subsidiaries are fully charged to non-operating expenses in previous years. Under IFRS, such housing losses incurred by the Company and its subsidiaries are recognized on a straight-line basis over the estimated remaining average service lives of the employees.

(c) Effect of depreciation on the capitalization of borrowing costs in previous years

In previous years, under Previous PRC GAAP, the scope of capitalization of borrowing costs was limited to specific borrowings, and thus, borrowing costs arising from general borrowings were not capitalized. In accordance with IFRS, the Company and its subsidiaries capitalized borrowing on general borrowing used for the purpose of obtaining qualifying assets in addition to the capitalization of borrowing costs on specific borrowings. From 1 January 2007 onwards, the Company and its subsidiaries adopted PRC GAAP No. 17 prospectively, the current adjustments represent the related depreciation on capitalized borrowing costs included in the cost of related assets under IFRS in previous years.

(d) Differences in accounting treatment on business combinations under common control

Huaneng Group is the parent company of HIPDC, which in turn is also the ultimate parent of the Company. The Company carried out a series of acquisitions from Huaneng Group and HIPDC in previous years. As the acquired power companies and plants and the Company were under common control of Huaneng Group before and after the acquisitions, such acquisitions are regarded as business combinations under common control.

In accordance with PRC GAAP, under common control business combination, the assets and liabilities acquired in business combinations are measured at the carrying amounts of the acquirees on the acquisition date. The difference between carrying amounts of the net assets acquired and the consideration paid is adjusted to equity account of the acquirer. The operating results for all periods presented are retrospectively restated as if the current structure and operations resulting from the acquisition had been in existence since the beginning of the earliest year presented, with financial data of previously separate entities consolidated. The cash consideration paid by the Company is treated as an equity transaction in the year of acquisition.

For the business combination occurred prior to 1 January 2007, in accordance with Previous PRC GAAP, when equity interests acquired is less than 100%, the assets and liabilities of the acquirees are measured at their carrying amounts. The excess of consideration over the proportionate share of the carrying amounts of the net assets acquired was recorded as equity investment difference and amortized on a straight-line basis for not more than 10 years.

When acquiring the entire equity, the entire assets and liabilities are accounted for in a method similar to purchase accounting. Goodwill arising from such transactions is amortized over the estimated useful lives on a straight-line basis. On 1 January 2007, in accordance with PRC GAAP, the unamortized equity investment differences and goodwill arising from business combinations under common control were written off against undistributed profits.

Under IFRS, the Company and its subsidiaries adopted the purchase method to account for the acquisitions above. The assets and liabilities acquired in acquisitions were recorded at fair value by the acquirer. The excess of acquisition cost over the proportionate share of fair value of net identifiable assets acquired was recorded as goodwill. Goodwill is not amortized but is tested annually for impairment and carried at cost less accumulated impairment losses. The operating results of the acquirees are consolidated in the operating results of the Company and its subsidiaries from the acquisition dates onwards.

As mentioned above, the differences in accounting treatment under PRC GAAP and IFRS on business combinations under common control affect both equity and profit. Meanwhile, due to different measurement basis of the assets acquired, depreciation and amortization in the period subsequent to the acquisition will be affected which will also affect the equity and profit or loss upon subsequent disposals of such investments.

(e) Deferred income tax impact on GAAP differences

This represents related deferred income tax impact on the GAAP differences above where applicable.

3. RETURN ON NET ASSETS AND EARNINGS PER SHARE

	Weighted average return on net assets (%)		Earnings per share (RMB/Share)			
			Basic earnings per share		Diluted earnings per share	
	2011	2010	2011	2010	2011	2010
Net profit attributable to shareholders of the Company	2.47	8.53	0.09	0.29	0.09	0.29
Net profit attributable to shareholders of the Company (excluding non-recurring items)	1.65	7.76	0.06	0.27	0.06	0.27

#### 4. EXPLANATION OF THE VARIANCES AND REASONS OF PRINCIPLE FINANCIAL STATEMENT ACCOUNTS

Comparing the consolidated balance sheet of 31 December 2011 and 31 December 2010, and the consolidated income statement for the year ended 31 December 2011 and 2010, the items with significant variances are as below:

	31 December 2011	31 December 2010	Variance Amount	%
Accounts Receivables (1)	14,814,481,187	10,272,593,414	4,541,887,773	44.21 %
Other receivables (2)	1,124,369,060	1,602,901,561	(478,532,501 )	-29.85 %
Inventories (3)	7,525,620,585	5,190,435,156	2,335,185,429	44.99 %
Current portion of non-current assets (4)	22,060,607	101,332,688	(79,272,081 )	-78.23 %
Available for sale financial assets (5)	1,638,080,010	1,949,727,308	(311,647,298 )	-15.98 %
Derivative financial assets				
–Non-current portion (6)	16,388,824	91,478,179	(75,089,355 )	-82.08 %
Fixed assets (7)	154,808,020,444	123,653,446,684	31,154,573,760	25.20 %
Fixed assets pending for disposal (8)	152,812,410	86,995,876	65,816,534	75.65 %
Construction in progress (9)	22,165,329,147	26,243,063,527	(4,077,734,380 )	-15.54 %
Construction materials (10)	1,766,051,584	6,014,979,607	(4,248,928,023 )	-70.64 %
Intangible assets (11)	10,207,157,254	7,507,217,342	2,699,939,912	35.96 %
Goodwill (12)	13,204,814,510	11,955,539,690	1,249,274,820	10.45 %
Other non-current assets (13)	361,220,844	3,942,073,515	(3,580,852,671 )	-90.84 %
Notes payables (14)	13,448,478	75,351,966	(61,903,488 )	-82.15 %
Accounts payables (15)	9,109,088,804	5,339,792,472	3,769,296,332	70.59 %
Tax payables (16)	(994,750,037 )	(2,017,347,239 )	1,022,597,202	-50.69 %
Interest payables (17)	687,427,070	577,022,852	110,404,218	19.13 %
Other current liabilities (18)	10,607,357,125	5,439,065,424	5,168,291,701	95.02 %
Long term loans (19)	79,844,871,588	65,184,902,502	14,659,969,086	22.49 %
Derivative financial liabilities				
–Non-current portion (20)	578,198,363	95,862,772	482,335,591	503.15 %
Bonds payables (21)	17,854,919,373	13,831,150,101	4,023,769,272	29.09 %

	For the year ended 31 December		Variance Amount		%
	2011	2010			
Operating revenues (22)	133,420,768,944	104,307,701,910	29,113,067,034	27.91	%
Operating costs (23)	(121,816,767,862)	(92,818,451,828)	(28,998,316,034)	31.24	%
Financial expenses (24)	(7,493,529,355 )	(5,105,559,276 )	(2,387,970,079 )	46.77	%
Assets Impairment loss (25)	(365,124,935 )	(29,271,676 )	(335,853,259 )	1147.37	%
Gain/(Loss) from changes in fair value (26)	(727,268 )	11,850,976	(12,578,244 )	-106.14	%
Investment income (27)	803,921,549	632,062,946	171,858,603	27.19	%
Non-operating income (28)	1,377,797,055	564,992,494	812,804,561	143.86	%
Non-operating expenses (29)	(168,920,821 )	(93,777,590 )	(75,143,231 )	80.13	%
Net profit attributable to shareholders of the Company (30)	1,268,245,238	3,544,304,422	(2,276,059,184 )	-64.22	%
Net profit attributable to Minority interest (31)	96,014,021	136,023,739	(40,009,718 )	-29.41	%
	For the year ended 31 December		Variance Amount		%
	2011	2010			
Net cash flows from operating activities (32)	20,949,154,990	18,066,724,784	2,882,430,206	15.95	%
Net cash flows from investing activities (33)	(21,664,830,571)	(26,980,538,244)	5,315,707,673	-19.70	%
Net cash flows from financing activities (34)	69,647,874	13,063,323,718	-12,993,675,844	-99.47	%

- (1) The balance of accounts receivables of the Company and its subsidiaries increased by 44.21% comparing with last year end, mainly due to the expansion of operations and the increase of tariff increase.
- (2) The balance of other receivables of the Company and its subsidiaries decreased by 29.85% comparing with last year end, mainly due to the amounts recorded in investment from prepaid considerations.
- (3) The balance of inventories of the Company and its subsidiaries increased by 44.99% comparing with last year end, mainly due to the expansion of operations and the increase of fuel.
- (4) The balance of current portion of non-current assets of the Company and its subsidiaries decreased by 78.23% comparing with last year end, mainly due to the decrease in finance leasing receivable of SinoSing Power.
- (5) The balance of available for sale financial assets of the Company and its subsidiaries decreased by 15.98% comparing with last year end, mainly due to the deflation of the share price of Yangtze Power.
- (6) The balance of derivative financial assets (non-current portion) of the Company and its subsidiaries decreased by 82.08% comparing with last year end, mainly due to the decrease in value of fuel hedge instruments consequent to the deflation in fuel price and deflation of value of interest hedge instruments consequent to the lowered interest rate.
- (7) The balance of fixed assets of the Company and its subsidiaries increased by 25.20% comparing with last year end, mainly due to acquisitions and the completions of constructions.



- (8) The balance of fixed assets pending for disposal of the Company and its subsidiaries increased by 75.65% comparing with last year end, mainly due to the disposal of generation units and affiliated facilities shut down.
- (9) The balance of construction in progress of the Company and its subsidiaries decreased by 15.54% comparing with last year end, mainly due to the smaller scale of construction in progress.
- (10) The balance of construction materials of the Company and its subsidiaries decreased by 70.64% comparing with last year end, mainly due to the smaller scale of construction in progress.
- (11) The balance of intangible assets of the Company and its subsidiaries increased by 35.96% comparing with last year end, mainly due to the acquired land use rights, mining rights and territorial water use rights.
- (12) The balance of goodwill of the Company and its subsidiaries increased by 10.45% comparing with last year end, mainly due to the acquisition of Diandong Energy and mining rights-related assets.
- (13) The balance of other non-current assets of the Company and its subsidiaries decreased by 90.84% comparing with last year end, mainly due to the amounts recorded in investment from prepaid considerations.
- (14) The balance of notes payable of the Company and its subsidiaries decreased by 82.15% comparing with last year end, mainly due to the repayment of the notes payable that fell due.
- (15) Accounts payables of the Company and its subsidiaries increased by 70.59% comparing with last year end, mainly due to the expansion of operations.
- (16) Tax payable of the Company and its subsidiaries increased by 50.69% comparing with last year end, mainly due to the expansion of operations.
- (17) Interest payables of the Company and its subsidiaries increased by 19.13% comparing with last year end, mainly due to the expansion of operations and debts.
- (18) Other current liabilities of the Company and its subsidiaries increased by 95.02% comparing with last year end, mainly due to the issuance of short-term bonds.
- (19) Long-term loans of the Company and its subsidiaries increased by 22.49% comparing with last year end, mainly due to the expansion of operations.
- (20) Derivative financial liabilities (non-current portion) of the Company and its subsidiaries increased by 503.15%, mainly due to the deflation of value of interest hedge instruments consequent to the lowered interest rate.
- (21) Bonds payable of the Company and its subsidiaries increased by 29.09% comparing with last year end, mainly due to the issuance of non-public debt financing instrument.
- (22) Operating revenue of the Company and its subsidiaries increased by 27.91% comparing with last year, mainly due to expansion of operations.

- (23) Operating cost of the Company and its subsidiaries increased by 31.24% comparing with last year, mainly due to the rising fuel price, expansion of operations and increased generation volume.
- (24) Financial expenses of the Company and its subsidiaries increased by 46.77%, mainly due to the increased interest-bearing debts and RMB interest rates.
- (25) Assets impairment loss of the Company and its subsidiaries increased by 1147.37% comparing with last year, mainly due to the impairment provision of Zhanhua Cogeneration.
- (26) Gains from changes in fair value of the Company and its subsidiaries decreased by 106.14% comparing with last year, mainly due to changes in the fair value of the fuel hedging contracts of subsidiaries of the Company.
- (27) Investment incomes of the Company and its subsidiaries increased by 27.19% comparing with last year, mainly due to the increased investment incomes from investees.
- (28) Non-operating income of the Company and its subsidiaries increased by 143.86% comparing with last year, mainly due to the increase in subsidies and tax refund on purchase of domestically-manufactured equipments.
- (29) Non-operating expenses of the Company and its subsidiaries increased by 80.13% comparing with last year, mainly due to the decrease in losses on fixed assets disposals and natural disasters.
- (30) Net profit attributable to shareholders of the Company decreased by 64.22% comparing with last year, mainly due to lowered net profit resulting from fuel price inflation and interest rate rise.
- (31) Net profit attributable to Minority interests of the Company and its subsidiaries decreased by 29.41% comparing with last year, mainly due to lower profit this year.
- (32) Net cash flow generated from operating activities of the Company and its subsidiaries is RMB20,949.15 million with an increase by 15.95% comparing with last year, mainly due to the expansion of operations.
- (33) Net cash flow generated from investing activities of the Company and its subsidiaries is RMB21,664.8306 million with an increase by 19.70% comparing with last year, mainly due to the decrease in cash paid to acquire fixed assets and equity investments.
- (34) Net cash flow generated from financing activities of the Company and its subsidiaries is RMB69.6475 million with a decrease by 99.47%, mainly due to the increase of debts.



SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the under-signed, thereunto duly authorized.

HUANENG POWER INTERNATIONAL, INC.

By: /s/ Gu Biquan  
Name: Gu Biquan  
Title: Company Secretary

Date: April 24, 2012