

HUANENG POWER INTERNATIONAL INC

Form 20-F

April 16, 2015

HUANENG POWER INTERNATIONAL, INC.

Annual Report On Form 20-F
2014

As filed with the Securities and Exchange Commission on April 16, 2015

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

(Mark One)

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

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2014

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

For the transaction period from _____ to _____

Commission file number: 1-13314

HUANENG POWER INTERNATIONAL, INC.
(Exact name of Registrant as specified in its charter)

PEOPLE'S REPUBLIC OF CHINA
(Jurisdiction of incorporation or organization)

HUANENG BUILDING
6 FUXINGMENNEI STREET, XICHENG DISTRICT, BEIJING, PEOPLE'S REPUBLIC OF CHINA
(Address of principal executive offices)

Mr. Du Daming
HUANENG BUILDING,
6 FUXINGMENNEI STREET, XICHENG DISTRICT, BEIJING, PEOPLE'S REPUBLIC OF CHINA
Tel: +86 (10) 6322 6999 Fax: +86 (10) 6322 6888
(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of Each Class	Name of each exchange on which registered
American Depositary Shares Each Representing 40 Overseas Listed Shares	New York Stock Exchange
Overseas Listed Shares with Par Value of RMB1.00 Per Share	New York Stock Exchange*

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

NONE

(Title of Class)

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

NONE

(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

Domestic A Shares with Par Value of RMB1.00 Per Share	10,500,000,000
Overseas Listed Shares with Par Value of RMB1.00 Per Share	3,920,383,440

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes

No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes No

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer

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

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

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

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

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

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

Yes No

* Not for trading, but only in connection with the registration of American Depositary Shares

TABLE OF CONTENTS

PART I		1
ITEM 1	Identity of Directors, Senior Management and Advisers	1
ITEM 2	Offer Statistics and Expected Timetable	1
ITEM 3	Key Information	1
	A. Selected financial data	1
	B. Capitalization and indebtedness	3
	C. Reasons for the offer and use of proceeds	3
	D. Risk factors	3
ITEM 4	Information on the Company	10
	A. History and development of the Company	10
	B. Business overview	12
	C. Organizational structure	22
	D. Property, plants and equipment	23
ITEM 4A	Unresolved Staff Comments	45
ITEM 5	Operating and Financial Review and Prospects	45
	A. General	45
	B. Operating results	48
	C. Financial position	59
	D. Liquidity and cash resources	60
	E. Trend information	64
	F. Employee benefits	64
	G. Guarantees and pledges on loans and restricted assets	65
	H. Off-balance sheet arrangements	65
	I. Performance of significant investments and their prospects	66
	J. Tabular disclosure of contractual obligations and commercial commitments	66
	K. Sensitivity analysis to impairment test	67
	L. Business plan	67
ITEM 6	Directors, Senior Management and Employees	67
	A. Directors, members of the supervisory committee and senior management	67
	B. Compensation for Directors, Supervisors and Executive Officers	70
	C. Board practice	71
	D. Employees	72
	E. Share ownership	72
ITEM 7	Major Shareholders and Related Party Transactions	73
	A. Major shareholders	73
	B. Related party transactions	74
	C. Interests of experts and counsel	82
ITEM 8	Financial Information	82
	A. Consolidated statements and other financial information	82
	B. Significant changes	83
ITEM 9	The Offer and Listing	83
	A. Offer and listing details and markets	83
ITEM 10	Additional Information	84

A.	Share capital	84
B.	Memorandum and articles of association	84
C.	Material contracts	89
D.	Exchange controls	89
E.	Taxation	90
F.	Dividends and paying agents	94
G.	Statement by experts	95
H.	Documents on display	95
I.	Subsidiary information	95
ITEM 11	Quantitative and Qualitative Disclosures About Market Risk	95
ITEM 12	Description of Securities Other than Equity Securities	98
A.	Debt Securities	98
B.	Warrants and Rights	98
C.	Other Securities	98
D.	American Depositary Shares	98

PART II			100
	ITEM 13	Defaults, Dividend Arrearages and Delinquencies	100
	ITEM 14	Material Modifications to the Rights of Security Holders and Use of Proceeds	100
	ITEM 15	Controls and Procedures	100
	ITEM 16	Reserved	102
	ITEM 16A	Audit Committee Financial Expert	102
	ITEM 16B	Code of Ethics	102
	ITEM 16C	Principal Accountant Fees and Services	102
	ITEM 16D	Exemptions from the Listing Standards for Audit Committees	103
	ITEM 16E	Purchases of Equity Securities by the Issuer and Affiliated Purchasers	103
	ITEM 16F	Change in Registrant's Certifying Accountant	103
	ITEM 16G	Corporate Governance	103
	ITEM 16H	Mine Safety Disclosure	105
	ITEM 17	Financial Statements	105
	ITEM 18	Financial Statements	105
	ITEM 19	Exhibits	106

INTRODUCTION

We maintain our accounts in Renminbi Yuan (“Renminbi” or “RMB”), the lawful currency of the People’s Republic of China (the “PRC” or “China”). References herein to “US\$” or “U.S. dollars” are to United States Dollars, references to “HK\$” are to Hong Kong Dollars, and references to “S\$” are to Singapore Dollars. References to ADRs and ADSs are to American Depositary Receipts and American Depositary Shares, respectively. Translations of amounts from Renminbi to U.S. Dollars are solely for the convenience of the reader. Unless otherwise indicated, any translations from Renminbi to U.S. Dollars or from U.S. Dollars to Renminbi were translated at the average rate announced by the People’s Bank of China (the “PBOC Rate”) on December 31, 2014 of US\$1.00 to RMB6.1190. No representation is made that the Renminbi or U.S. Dollar amounts referred to herein could have been or could be converted into U.S. Dollars or Renminbi, as the case may be, at the PBOC Rate or at all.

References to “A Shares” are to common tradable shares issued to domestic shareholders.

References to the “central government” refer to the national government of the PRC and its various ministries, agencies and commissions.

References to the “Company”, “we”, “our” and “us” include, unless the context requires otherwise, Huaneng Power International, Inc. and the operations of our power plants and our construction projects.

References to “HIPDC” are to Huaneng International Power Development Corporation and, unless the context requires otherwise, include the operations of the Company prior to the formation of the Company on June 30, 1994.

References to “Huaneng Group” are to China Huaneng Group.

References to the “key contracts” refer to coal purchase contracts entered into between the Company and coal suppliers for the amount of coals at the annual national coal purchase conferences attended by, among others, representatives of power companies, coal suppliers and railway authorities. These conferences were coordinated and sponsored by National Development and Reform Commission (“NDRC”). The Company enjoys priority railway transportation services with respect to coal purchased under such contracts. Starting from 2008, NDRC ceased to coordinate the annual national coal purchase conferences. At the end of each year subsequent to 2008, the National Railway Administration (previously, the Ministry of Railways) will promulgate the railway transportation capacity plan for the next year. References to the “key contracts” for the year 2008 and thereafter refer to coal purchase contracts entered into between the Company and coal suppliers under the guidance of such railway transportation capacity plan, which, once confirmed by the National Railway Administration, secures the railway transportation capacity for the coal purchased thereunder. Starting from the beginning of 2013, key contracts were terminated pursuant to a notice issued by the PRC Government in December 2012.

References to “local governments” in the PRC are to governments at all administrative levels below the central government, including provincial governments, governments of municipalities directly under the central government, municipal and city governments, county governments and township governments.

References to “our power plants” are to the power plants that are wholly owned by the Company or to the power plants in which the Company owns majority equity interests.

References to the “PRC Government” include the central government and local governments.

References to “provinces” include provinces, autonomous regions and municipalities directly under the central government. References to “Singapore” are to the Republic of Singapore.

References to the “State Plan” refer to the plans devised and implemented by the PRC Government in relation to the economic and social development of the PRC.

References to “tons” are to metric tons.

Previously, the Overseas Listed Foreign Shares were also referred to as the “Class N Ordinary Shares” or “N Shares”. Since January 21, 1998, the date on which the Overseas Listed Foreign Shares were listed on The Stock Exchange of Hong Kong Limited by way of introduction, the Overseas Listed Foreign Shares have been also referred to as “H Shares”.

GLOSSARY

actual generation	The total amount of electricity generated by a power plant over a given period of time.
auxiliary power	Electricity consumed by a power plant in the course of generation.
availability factor	For any period, the ratio (expressed as a percentage) of a power plant's available hours to the total number of hours in such period.
available hours	For a power plant for any period, the total number of hours in such period less the total number of hours attributable to scheduled maintenance and planned overhauls as well as to forced outages, adjusted for partial capacity outage hours.
capacity factor	The ratio (expressed as a percentage) of the gross amount of electricity generated by a power plant in a given period to the product of (i) the number of hours in the given period multiplied by (ii) the power plant's installed capacity.
demand	For an integrated power system, the amount of power demanded by consumers of energy at any point in time.
dispatch	The schedule of production for all the generating units on a power system, generally varying from moment to moment to match production with power requirements. As a verb, to dispatch a plant means to direct the plant to operate.
GW	Gigawatt. One million kilowatts.
GWh	Gigawatt-hour. One million kilowatt-hours. GWh is typically used as a measure for the annual energy production of large power plants.
installed capacity	The manufacturers' rated power output of a generating unit or a power plant, usually denominated in MW.
kV	Kilovolt. One thousand volts.
kW	Kilowatt. One thousand watts.
kWh	Kilowatt-hour. The standard unit of energy used in the electric power industry. One kilowatt-hour is the amount of energy that would be produced by a generator producing one thousand watts for one hour.
MVA	Million volt-amperes. A unit of measure used to express the capacity of electrical transmission equipment such as transformers.
MW	Megawatt. One million watts. The installed capacity of power plants is generally expressed in MW.

MWh	Megawatt-hour. One thousand kilowatt-hours.
peak load	The maximum demand on a power plant or power system during a specific period of time.
planned generation	An annually determined target gross generation level for each of our operating power plants used as the basis for determining planned output.
total output	The actual amount of electricity sold by a power plant in a particular year, which equals total generation less auxiliary power.
transmission losses	Electric energy that is lost in transmission lines and therefore is unavailable for use.

PART I

ITEM 1 Identity of Directors, Senior Management and Advisers

Not applicable.

ITEM 2 Offer Statistics and Expected Timetable

Not applicable.

ITEM 3 Key Information

A. Selected financial data

Our consolidated balance sheet data as of December 31, 2014 and 2013 and the consolidated income statement and cash flow data for each of the years in the three-year period ended December 31, 2014 are derived from the historical financial statements included herein. Our consolidated balance sheet data as of December 31, 2012, 2011 and 2010 and consolidated income statement and cash flow data for each of the years in the two-year period ended December 31, 2011, are derived from the historical financial statements not included herein. The Selected Financial Data should be read in conjunction with the consolidated financial statements and “Item 5 Operating and Financial Review and Prospects”. The financial statements have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board. The Selected Financial Data may not be indicative of future earnings, cash flows or financial position.

	Year Ended December 31,				
	2010	2011	2012	2013	2014
RMB in thousands except per share data	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)
Consolidated Income Statement Data					
Operating revenue	104,318,120	133,420,769	133,966,659	133,832,875	125,406,855
Tax and levies on operations	(147,641)	(484,019)	(672,040)	(1,043,855)	(932,485)
Operating expenses	(95,541,488)	(124,189,148)	(116,337,679)	(108,677,981)	(99,199,728)
Profit from operations	8,628,991	8,747,602	16,956,940	24,111,039	25,274,642
Interest income	89,026	166,183	175,402	170,723	159,550
Financial expenses, net	(5,194,585)	(7,659,712)	(9,063,875)	(7,693,363)	(7,823,606)
Other investment income	60,013	93,460	187,131	224,908	80,580
Gain/ (Loss) on fair value changes of financial assets/ liabilities	11,851	(727)	(1,171)	(5,701)	42,538
Share of profits less losses of of associates and joint ventures	568,794	703,561	622,358	615,083	1,315,876
Profit before income tax expense	4,164,090	2,050,367	8,876,785	17,422,689	19,049,580
Income tax expense	(842,675)	(868,927)	(2,510,370)	(4,522,671)	(5,487,208)
Net profit	3,321,415	1,181,440	6,366,415	12,900,018	13,562,372
Attributable to:					
Equity holders of the Company	3,347,985	1,180,512	5,512,454	10,426,024	10,757,317
Non-controlling interests	(26,570)	928	853,961	2,473,994	2,805,055

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Basic earnings per share	0.28	0.08	0.39	0.74	0.76
Diluted earnings per share	0.28	0.08	0.39	0.74	0.76

1

As of December 31

RMB in thousands	2010 (RMB)	2011 (RMB)	2012 (RMB)	2013 (RMB)	2014 (RMB)
Consolidated Balance Sheet Data					
Current assets	31,556,149	36,417,338	36,086,261	34,186,911	37,865,284
Property, plant and equipment	155,224,597	177,968,001	177,013,627	181,415,181	188,379,057
Available-for-sale financial assets	2,223,814	2,301,167	3,052,822	3,111,164	4,333,377
Investments in associates and joint ventures	11,973,216	13,588,012	14,596,771	16,678,694	17,626,910
Land use rights and other non-current assets	9,541,540	8,820,722	9,316,455	9,593,252	10,636,352
Power generation license	4,105,518	3,904,056	4,084,506	3,837,169	3,720,959
Deferred income tax assets	672,475	526,399	532,387	652,358	884,274
Goodwill	12,640,904	13,890,179	14,417,543	12,758,031	11,725,555
Total assets	227,938,213	257,415,874	259,100,372	262,232,760	275,171,768
Current liabilities	(83,636,880)	(96,597,620)	(93,594,320)	(98,978,845)	(104,846,121)
Non-current liabilities	(81,875,861)	(101,260,501)	(99,545,710)	(88,060,941)	(85,542,941)
Total liabilities	(165,512,741)	(197,858,121)	(193,140,030)	(187,039,786)	(190,389,062)
Total equity	62,425,472	59,557,753	65,960,342	75,192,974	84,782,706

Year Ended December 31,

RMB in thousands except per share data	2010 (RMB)	2011 (RMB)	2012 (RMB)	2013 (RMB)	2014 (RMB)
--	---------------	---------------	---------------	---------------	---------------

Consolidated Cash Flow Data

Purchase of property, plant and equipment	(20,704,224)	(16,673,632)	(15,474,614)	(17,691,382)	(19,858,216)
Net cash provided by operating activities	18,066,724	20,949,155	26,928,082	40,239,429	33,320,067
Net cash used in investing activities	(26,980,538)	(21,664,831)	(15,309,604)	(19,054,250)	(19,470,813)
Net cash provided by / (used in) financing activities	13,063,323	69,648	(9,816,900)	(22,240,088)	(10,894,180)

Other Company Data

Dividend declared per share	0.20	0.05	0.21	0.38	0.38
Number of ordinary shares ('000)	14,055,383	14,055,383	14,055,383	14,055,383	14,420,383

B. Capitalization and indebtedness

Not applicable.

C. Reasons for the offer and use of proceeds

Not applicable.

D. Risk factors

Risks relating to our business and the PRC's power industry

Government regulation of on-grid power tariffs and other aspects of the power industry may adversely affect our business

Similar to electric power companies in other countries, we are subject to governmental and electric grid regulations in virtually all aspects of our operations, including the amount and timing of electricity generations, the setting of on-grid tariffs, the performance of scheduled maintenance, and the compliance with power grid control and dispatch directives as well as environment protection regulations. There can be no assurance that these regulations will not change in the future in a manner which could adversely affect our business.

The on-grid tariffs for our planned output are subject to a review and approval process involving the NDRC and the relevant provincial government. Since April 2001, the PRC Government has been implementing an on-grid tariff-setting mechanism based on the operating terms of power plants as well as the average costs of comparable power plants. Pursuant to the NDRC circular issued in June 2004, the on-grid tariffs for our newly built power generating units commencing operation from June 2004 have been set on the basis of the average cost of comparable units adding tax and reasonable return in the regional grid. Any future reductions in our tariffs, or our inability to raise tariffs (for example, to cover any increased costs we may have to incur) as a result of the new on-grid tariff-setting mechanism, may adversely affect our revenue and profit.

In addition, the PRC Government started a program in 1999 to effect power sales through competitive bidding in some of the provinces where we operate our power plants. The on-grid tariffs for power sold through competitive bidding are generally lower than the pre-approved on-grid tariffs for planned output. In the more recent few years, power sales through competitive bidding only accounted for a small portion of our overall power sales. Nevertheless, the PRC Government is seeking to expand the program. Any increased power sales through competitive bidding may reduce our on-grid tariffs and may adversely affect our revenue and profits.

Furthermore, the PRC Government started in 2009 to promote the practice of direct power purchase by large power end-users. Pursuant to the circular jointly issued by NDRC, the State Electricity Regulatory Commission ("SERC") and China National Energy Administration in June 2009, the direct power purchase price consists of direct transaction price, on-grid dispatch and distribution price and governmental levies and charges, in which the direct transaction price shall be freely determined through negotiation between the power generation company and the large power end-user. The price of direct power purchase shall be subject to the demand in the power market, and may increase due to power supply shortfall. Furthermore, the scale and mode of the transaction are also subject to the structure and level of development of local economy. In terms of power generation companies engaged in direct power purchase, direct power sales constitute a portion of the total power sales, thus affecting the on-grid power sales of the Company. In 2013, the PRC Government continued the reform in the area of direct power purchase by large power end-users. In July 2013, China National Energy Administration issued the Notice on Direct Purchases between Power End-users and Power Generation Companies, which officially implemented the direct purchases programs by large end-users.

Among the provinces where we operate our power plants, seven of them, namely Shanxi, Jiangsu, Henan, Hunan, Guangdong, Fujian, and Gansu, had started the direct purchase program in 2013, and four of them, namely Jiangxi, Yunnan, Hubei and Liaoning, are actively promoting the direct purchase pilot program. In 2014, direct purchase programs by large end-users were also implemented in Zhejiang and Anhui. Although the direct power purchase may act as an alternative channel for our power sales, there is uncertainty as to the effect of the practice of direct power purchase over our operating results.

The on-grid tariff-setting mechanism is evolving with the reforming of the PRC electric power industry. There is no assurance that it will not change in a manner which could adversely affect our business and results of operations. See “Item 4 Information of the Company – B. Business Overview – Pricing Policy”.

If our power plants receive less dispatching than planned generation, the power plants will sell less electricity than planned

Our profitability depends, in part, upon each of our power plants generating electricity at a level sufficient to meet or exceed the planned generation, which in turn will be subject to local demand for electric power and dispatching to the grids by the dispatch centers of the local grid companies.

The dispatch of electric power generated by a power plant is controlled by the dispatch center of the applicable grid companies pursuant to a dispatch agreement with us and to governmental dispatch regulations. In each of the markets we operate, we compete against other power plants for power sales. No assurance can be given that the dispatch centers will dispatch the full amount of the planned generation of our power plants. A reduction by the dispatch center in the amount of electric power dispatched relative to a power plant's planned generation could have an adverse effect on the profitability of our operations. However, we have not encountered any such event in the past.

In August 2007, the General Office of the State Council issued a notice, promoting the energy saving electricity dispatch policy, which provides dispatching priority to electricity generated from renewable resources over electricity generated from unrenewable resources. In October 2008, the SERC approved the trial implementation of the policy of energy saving electricity dispatch in certain pilot provinces. In 2013, the PRC Government continued promoting the policy of energy saving electricity dispatch. In 2014, the NDRC issued the Guidelines to Strengthen and Improve Operation and Management of Power Generations in an effort to further improve energy saving, emission reduction and resources allocation. We cannot assure that such implementation will not result in any decrease in the amount of the power dispatched by any of our power plants.

The power industry reform may affect our business

The PRC Government in 2002 announced and started to implement measures to further reform the power industry, with the ultimate goal of creating a more open and fair power market. As part of the reform, five power generation companies, including Huaneng Group, were created or restructured to take over all the power generation assets originally belonging to the State Power Corporation of China. In addition, two grid companies were created to take over the power transmission and distribution assets originally belonging to the State Power Corporation of China. An independent power supervisory commission, the SERC, was created to regulate the power industry. There might be further reforms, and it is uncertain how these reform measures and any further reforms will be implemented and impact our business.

In December 2012, the PRC Government issued a notice to further reform the coal pricing mechanism, which mandated (1) the termination of all key coal purchase contracts between power generation companies and coal suppliers, and the abolition of national guidance of the railway transportation capacity plan, and (2) the cancellation of the dual-track coal pricing system, effective from January 1, 2013. For a detailed discussion of the reform, see "Item 4 Information on the Company – B. Business overview – Pricing policy". There can be no assurance that such coal pricing reform will not adversely affect our results of operation. In 2013, the PRC Government continued the reform in power industry. In July 2013, China National Energy Administration issued the Notice on Direct Purchases between Power End-users and Power Generation Companies, which officially implemented the direct purchases programs by large end-users. On March 15, 2015, the Opinions of CPC Central Committee and State Council Regarding Further Deepening Reform of the Electricity System was released, according to which the reform will be focused and directed to orderly liberalize the tariff of the competitive markets other than electricity transmission and distribution, gradually allow investment from private investors in power distribution and selling businesses, consistently open the power generation market other than those for non-profit purpose or under regulation, push for independent and regulated operation of the parties involved in electricity transactions, continue the study of regional power grid construction and the transmission and distribution system suitable for China, further strengthen government regulations for enhanced power coordination and planning, and further improve safe and efficient operation of electricity and reliable power supply. These reforms will have a profound impact on the business models of power generation enterprises and may intensify the competition which may adversely affect our business.

We are effectively controlled by Huaneng Group and HIPDC, whose interests may differ from those of our other shareholders

Huaneng Group, directly or indirectly holds 14.87% of our total outstanding shares, and HIPDC directly holds 35.14% of our total outstanding shares. As Huaneng Group is HIPDC's parent company, they may exert effective control over us acting in concert. Their interests may sometimes conflict with those of our other minority shareholders. There is no assurance that Huaneng Group and HIPDC will always vote their shares, or direct the directors nominated by them to act in a way that will benefit our other minority shareholders.

Disruption in coal supply and its transportation as well as increase in coal price may adversely affect the normal operation of our power plants

A substantial majority of our power plants are fueled by coal. Prior to 2013, we obtained coal for our power plants through a combination of purchases pursuant to the key contracts and purchases in the open market. Starting from 2013, the NDRC no longer issues inter-provincial guidance of the railway transportation capacity plan and all key coal purchase contracts between power generation companies and coal suppliers were terminated. The coal price will be determined based on free negotiation between power companies and coal suppliers, and the amount of coal supply will be determined based on free negotiation between power companies and railway authorities, which increases the uncertainty of the coal supply and the coal price and may adversely affect our operations. To date, we have not experienced shutdowns or reduced electricity generation caused by inadequate coal supply or transportation services, but there can be no assurance that, in the event of national coal supply shortfalls, our operations will not be adversely affected.

In addition, our results of operations are sensitive to the fluctuation of coal price. In 2014, coal prices experienced significant decrease due to the supply over demand for coal as a result of excessive production capacities, soft economic growth in China, increasingly strict policies on environment protection, and the increased volume of electricity generated through hydropower and the use of ultra-high-voltage grid. After a marked drop during the first half of 2014, coal prices rose slightly during the second half of the year following implementation of a series of policies by the government to improve the financial conditions of coal producers. For example, during 2014, the Bohai-Rim Steam Coal Price Index (“BSPI”) decreased from RMB631/ton in the beginning to RMB528/ton at the end of June, and further dropped to RMB478/ton at the end of August, before rising to RMB525/ton at the end of December. By strengthening our cooperation with key domestic coal mines, and increasing the volume of coal purchased through annual contract arrangements and imported coal, we have been able to partially offset the impact of price fluctuation of domestic coals, and our standard unit coal price decreased by more than RMB 50/ton in 2014. However, there is no assurance that coal prices will not increase in the future, and if the price does increase, there is no assurance that we will be able to adjust our power tariff to pass on the increase in the coal price to our customers. Although the government has established a coal-electricity price linkage mechanism to allow power generation companies to increase their power tariffs to cope with the increase in the coal price, the implementation of the mechanism involves significant uncertainties. For a detailed discussion of the coal-electricity price linkage mechanism, see “Item 4 Information on the Company – B. Business overview – Pricing policy”.

Power plant development, acquisition and construction are a complex and time-consuming process, the delay of which may negatively affect the implementation of our growth strategy

We develop, construct, manage and operate large power plants. Our success depends upon our ability to secure all required PRC Government approvals, power sales and dispatch agreements, construction contracts, fuel supply and transportation and electricity transmission arrangements. Delay or failure to secure any of these could increase cost or delay or prevent commercial operation of the affected power plant. Although each of our power plants in operation and the power plants under construction received all required PRC Government approvals in a timely fashion, no assurances can be given that all the future projects will receive approvals in a timely fashion or at all. In addition, due to national policies and related regulations promoting environment-friendly energy, the approval requirements and procedures for thermal power plant are becoming increasingly stringent, which may negatively affect the approval process of our new projects and therefore negatively affect the implementation of our growth strategy.

We have generally acted as, and intend to continue to act as, the general contractor for the construction of our power plants. As with any major infrastructure construction effort, the construction of a power plant involves many risks, including shortages of equipment, material and labor, labor disturbances, accidents, inclement weather, unforeseen engineering, environmental, geological, delays and other problems and unanticipated cost increases, any of which could give rise to delays or cost overruns. Construction delays may result in loss of revenues. Failure to complete construction according to specifications may result in liabilities, decrease power plant efficiency, increase operating costs and reduce earnings. Although the construction of each of our power plants was completed on or ahead of schedule and within its budget, no assurance can be given that construction of future projects will be completed on schedule or within budget.

In addition, from time to time, we may acquire existing power plants from HIPDC, Huaneng Group or other parties. The timing and the likelihood of the consummation of any such acquisitions will depend, among other things, on our ability to obtain financing and relevant PRC Government approvals and to negotiate relevant agreements for terms acceptable to us.

Substantial capital is required for investing in or acquiring new power plants and failure to obtain capital on reasonable commercial terms will increase our finance cost and cause delay in our expansion plans

An important component of our growth strategy is to develop new power plants and acquire operating power plants and related development rights from HIPDC, Huaneng Group or other companies on commercially reasonable terms. Our ability to arrange financing and the cost of such financing depend on numerous factors, including general economic and capital market conditions, credit availability from banks or other lenders, investor confidence in us and the continued success of our power plants. Although we have not been materially affected by inflation in the past, there is no assurance that we would not be affected in the future. In 2014 the PBOC maintained the prudence and continuity of its monetary policies by moderate and timely adjustments with the focus towards generally consistent and structurally improved policy implementations. The consecutively lowered lending interest rates in November 2014 and February 2015 means that China's monetary policies will be liberalized and it is expected by the market that money supply will be more abundant than that in 2013. The domestic capital market is generally balanced and liberalization of interest rates is expected to accelerate. The interest bearing debts of the Company are mostly denominated in RMB. The interest rates applicable to existing RMB loan contracts will be adjusted from time to time in accordance with the adjustment of benchmark lending interest rates published by the PBOC, and the interest rates applicable to new RMB loan contracts will be determined based on the benchmark lending interest rates published by the PBOC. The change of the benchmark lending interest rates published by the PBOC will have direct impact on the borrowing costs of the Company. As a result, we may not be able to carry out our expansion plans due to the failure to obtain financing or increased financing costs. Furthermore, although we have historically been able to obtain financing on terms acceptable to us, there can be no assurance that financing for future power plant developments and acquisitions will be available on terms acceptable to us or, in the event of an equity offering, that such offering will not result in substantial dilution to existing shareholders.

Operation of power plants involves many risks and we may not have enough insurance to cover the economic losses if any of our power plants' ordinary operation is interrupted

The operation of power plants involves many risks and hazards, including breakdown, failure or substandard performance of equipment, improper installation or operation of equipment, labor disturbances, natural disasters, environmental hazards and industrial accidents. The occurrence of material operational problems, including but not limited to the above events, may adversely affect the profitability of a power plant.

Our power plants in the PRC currently maintain insurance coverage that is typical in the electric power industry in the PRC and in amounts that we believe to be adequate. Such insurance, however, may not provide adequate coverage in certain circumstances. In particular, in accordance with industry practice in the PRC, our power plants in the PRC do not generally maintain business interruption insurance, or any third party liability insurance other than that included in construction all-risks insurance or erection all-risks insurance to cover claims in respect of bodily injury or property or environment damage arising from accidents on our property or relating to our operation. Although each of our power plants has a good record of safe operation, there is no assurance that the afore-mentioned accidents will not occur in the future.

If the PRC Government adopts new and stricter environmental laws and additional capital expenditure is required for complying with such laws, the operation of our power plants may be adversely affected and we may be required to make more investment in compliance with these environmental laws

Most of our power plants, being coal-fired power plants, discharge pollutants into the environment. We are subject to central and local government environmental protection laws and regulations, which currently impose base-level discharge fees for various polluting substances and graduated schedules of fees for the discharge of waste substances. The amounts of discharge fees are determined by the local environmental protection authority based on the periodic inspection of the type and volume of pollution discharges. In addition, such environmental protection laws and regulations also set up the goal for the overall control on the discharge volume of key polluting substances. These laws and regulations impose fines for violations of laws, regulations or decrees and provide for the possible closure by the central government or local government of any power plant which fails to comply with orders requiring it to cease or cure certain activities causing environmental damage. In 2007, the PRC Government issued additional policies on discharge of polluting substances and on desulphurization for coal-fired generating units. Certain provinces have raised the rates of waste disposal fees since 2008. In 2012, the new and more stringent standards on discharge of polluting substances by thermal power plants promulgated by the PRC Government in 2011 came into effect, which also require newly commenced thermal power plants to equip all units with denitrification facilities and all existing thermal power plants to be modified with denitrification facilities equipped on all units by the end of 2015. In September 2013, the State Council issued the Air Pollution Prevention Action Plan, which sets higher anti-pollution standards. Local governments promulgated relevant local regulations, many of which set even more stringent standards. As of July 1, 2014, the new pollutants emission standards for coal-fired generating plants and dust emission standards in key regions came into effect. In September 2014, the NDRC, the Ministry of Environmental Protection and the National Energy Administration jointly issued the 2014-2020 Action Plans for Energy Saving, Emission Reduction and Renovation of Coal-fired Generation Units, imposing stricter requirements for efficient and clean development of coal-fired generating plants. Such stringent standards, together with the increase in the discharge fees, will result in the increases in the environmental protection expenditure and operating costs of power plants and may have adverse impact on our operating results.

We attach great importance to the environmental related matters of our existing power plants and our power plants under construction. We have implemented a system that is designed to control pollution caused by our power plants, including the establishment of an environmental protection office at each power plant, adoption of relevant control and evaluation procedures and the installation of certain pollution control equipment. We believe our environmental protection systems and facilities for the power plants are adequate for us to comply with applicable central government and local government environmental protection laws and regulations. However, the PRC Government may impose new, stricter laws and regulations on environmental protection, which may adversely affect our operations.

The PRC is a party to the Framework Convention on Climate Change (“Climate Change Convention”), which is intended to limit or capture emissions of “greenhouse” gases, such as carbon dioxide. Ceilings on such emissions could limit the production of electricity from fossil fuels, particularly coal, or increase the costs of such production. At

present, ceilings on the emissions of “greenhouse” gases have not been assigned to developing countries under the Climate Change Convention. Therefore, the Climate Change Convention would not have a major effect on us in the short term because the PRC as a developing country is not obligated to reduce its emissions of “greenhouse” gases at present, and the PRC Government has not adopted relevant control standards and policies. If the PRC were to agree to such ceilings, or otherwise reduce its reliance on coal-fired power plants, our business prospects could be adversely affected. In addition, pilot carbon emission trading programs have been conducted in certain regions and are expected to be gradually implemented throughout China. This may also adversely affect our business and financial prospects in the future.

Our business benefits from certain PRC Government tax incentives. Expiration of, or changes to, the incentives could adversely affect our operating results

Prior to January 1, 2008, according to the relevant income tax law, domestic enterprises were, in general, subject to statutory income tax of 33% (30% enterprise income tax and 3% local income tax). If these enterprises are located in certain specified locations or cities, or are specifically approved by State Administration of Taxation, a lower tax rate would be applied. Effective from January 1, 1999, in accordance with the practice notes on the PRC income tax laws applicable to foreign invested enterprises investing in energy and transportation infrastructure businesses, a reduced enterprise income tax rate of 15% (after the approval of State Administration of Taxation) was applicable across the country. We applied this rule to all of our wholly owned operating power plants after obtaining the approval of State Administration of Taxation. In addition, certain power plants were exempted from enterprise income tax for two years starting from the first profit-making year, after offsetting all tax losses carried forward from the previous years (at most of five years), followed by a 50% reduction of the applicable tax rate for the next three years. The statutory income tax was assessed individually based on each of their results of operations.

On March 16, 2007, the Enterprise Income Tax Law of PRC, or the New Enterprise Income Tax Law, was enacted, and became effective on January 1, 2008. The New Enterprise Income Tax Law imposes a uniform income tax rate of 25% for domestic enterprises and foreign invested enterprises. Therefore, our power plants subject to a 33% income tax rate prior to January 1, 2008 are subject to a lower tax rate of 25% starting on January 1, 2008. With regard to our power plants entitled to a reduced enterprise income tax rate of 15% prior to January 1, 2008, their effective tax rate gradually increased to 25% within a five-year transition period commencing on January 1, 2008. Accordingly, the effective tax rate of our wholly owned power plants has increased over time. In addition, although our power plants entitled to tax exemption and reduction under the income tax laws and regulations that are effective prior to the New Enterprise Income Tax Law will continue to enjoy such preferential treatments until the expiration of the same, newly established power plants will not be able to benefit from such tax incentives, unless they can satisfy specific qualifications, if any, provided by then effective laws and regulations on preferential tax treatment.

The increase of applicable income tax rate and elimination of the preferential tax treatment with regard to certain of our power plants may adversely affect our financial condition and results of operations. Moreover, our historical operating results may not be indicative of our operating results for future periods as a result of the expiration of the tax benefits currently available to us.

In addition, according to the New Enterprise Income Tax Law and its implementation rules, any dividends derived from the distributable profits accumulated from January 1, 2008 and paid to the shareholders who are non-resident enterprises in the PRC will be subject to the PRC withholding tax at the rate of 10%. The withholding tax will be exempted if such dividends are derived from the distributable profits accumulated before January 1, 2008. Under a notice issued by the State Administration of Taxation of the PRC on November 6, 2008, we are required to withhold PRC income tax at the rate of 10% on annual dividends paid for 2008 and later years payable to our H Share investors who are non-resident enterprises.

Fluctuations in exchange rates could have an adverse effect on our results of operations and your investment

As a power producer operating mainly in China, we collect most of our revenues in Renminbi and have to convert Renminbi into foreign currencies to (i) repay some of our borrowings which are denominated in foreign currencies, (ii) purchase foreign made equipment and parts for repairs and maintenance, (iii) purchase fuel from overseas suppliers, and (iv) pay out dividend to our overseas shareholders.

The value of the Renminbi against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in China's political and economic conditions. The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the PBOC. On July 21, 2005, the PRC government introduced a floating exchange rate system to allow the value of Renminbi to fluctuate within a regulated band based on market supply and demand and by reference to a basket of foreign currencies. Renminbi appreciated by more than 20% against the U.S. dollar between July 2005 and July 2008. Between July 2008 and June 2010, this appreciation halted and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. On June 19, 2010, the PBOC decided to further promote the reform of the Renminbi exchange rate formation mechanism, and improve the flexibility of Renminbi exchange rate. Since June 2010, Renminbi has regained steady appreciation against the U.S. dollar, which was reversed by slight depreciation of Renminbi against the U.S. dollar at the turn to and early 2014. On March 15, 2014, the PBOC announced to further widen Renminbi's daily trading band against U.S. dollar from 1% to 2% on either side of the daily reference rate, allowing for greater fluctuations of the exchange rate. However, it is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future. There remains significant international pressure on the PRC Government to further liberalize its currency policy, which could result in further fluctuations in the value of the Renminbi against the U.S. dollar. However, there is no assurance that there will not be a devaluation of Renminbi in the future. If there is such devaluation, our debt servicing cost will increase and the return to our overseas investors

may decrease.

Our revenues from SinoSing Power Pte. Ltd. (“SinoSing Power”) and its subsidiaries are collected in Singapore dollars. However, commencing from 2008, the operating results of SinoSing Power and its subsidiaries were consolidated into our financial statements, which use Renminbi as the presentation currency. As a result, we are exposed to foreign exchange fluctuations between Renminbi and the Singapore dollar. Appreciation of Renminbi against the Singapore dollar may cause a foreign exchange loss upon conversion of SinoSing Power and its subsidiaries’ operating results denominated in Singapore dollars into Renminbi, which may have adverse impact on our operation results.

The audit report included in this annual report is prepared by an auditor who is not inspected by the Public Company Accounting Oversight Board and, as such, you are deprived of the benefits of such inspection

Auditors of companies that are registered with the U.S. Securities and Exchange Commission and traded publicly in the United States, including our independent registered public accounting firm, must be registered with the U.S. Public Company Accounting Oversight Board (United States) (the “PCAOB”) and are required by the laws of the United States to undergo regular inspections by the PCAOB to assess their compliance with the laws of the United States and professional standards. Because we have substantial operations within the People’s Republic of China and the PCAOB is currently unable to conduct inspections of the work of our auditors as it relates to those operations without the approval of the Chinese authorities, our auditor’s work related to our operations in China is not currently inspected by the PCAOB. In May 2013, PCAOB announced that it had entered into a Memorandum of Understanding on Enforcement Cooperation with the China Securities Regulatory Commission (“CSRC”) and the PRC Ministry of Finance, which establishes a cooperative framework between the parties for the production and exchange of audit documents relevant to investigations undertaken by PCAOB, the CSRC or the PRC Ministry of Finance in the United States and the PRC, respectively. PCAOB continues to be in discussions with the CSRC and the PRC Ministry of Finance to permit joint inspections in the PRC of audit firms that are registered with PCAOB and audit Chinese companies that trade on U.S. exchanges.

This lack of PCAOB inspections of audit work performed in China prevents the PCAOB from regularly evaluating audit work of any auditors that was performed in China including that performed by our auditors. As a result, investors may be deprived of the full benefits of PCAOB inspections. Investors may lose confidence in our reported financial information and procedures and the quality of our financial statements.

The Chinese member firm of the KPMG network, of which our independent registered public accounting firm is also a member, may be temporarily suspended from practicing before the SEC. If a delay in completion of our audit process occurs as a result, we could be unable to timely file certain reports with the SEC, which may lead to the delisting of our stock

On January 22, 2014, Judge Cameron Elliot, an SEC administrative law judge, issued an initial decision suspending the Chinese member firms of the “Big Four” accounting firms, including KPMG network, from, among other things, practicing before the SEC for six months. In February 2014, the initial decision was appealed. While under appeal and in February 2015, the Chinese member firms of “Big Four” accounting firms reached a settlement with the SEC. As part of the settlement, each of the Chinese member firms of “Big Four” accounting firms agreed to settlement terms that include a censure; undertakings to make a payment to the SEC; procedures and undertakings as to future requests for documents by the US SEC; and possible additional proceedings and remedies should those undertakings not be adhered to.

Our independent registered public accounting firm currently relies on the Chinese member firm of the KPMG network for assistance in completing the audit work associated with our operations in China. If the settlement terms are not adhered to, Chinese member firms of “Big Four” accounting firms may be suspended from practicing before the SEC which could in turn delay the timely filing of our financial statements with the SEC. In addition, it could be difficult for us to timely identify and engage another qualified independent auditor. A delinquency in our filings with the SEC may result in NYSE initiating delisting procedures, which could adversely harm our reputation and have other material adverse effects on our overall growth and prospect.

Forward-looking information may prove inaccurate

This document contains certain forward-looking statements and information relating to us that are based on the beliefs of our management as well as assumptions made by and information currently available to our management. When used in this document, the words “anticipate,” “believe,” “estimate,” “expect,” “going forward” and similar expressions, as they relate to us or our management, are intended to identify forward-looking statement. Such statements reflect the current views of our management with respect to future events and are subject to certain risks, uncertainties and assumptions, including the risk factors described in this document. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. We do not intend to update these forward-looking statements.

There can be no assurance that we will not be passive foreign investment company, or PFIC, for United States federal income tax purposes for any taxable year, which could subject United States investors in the ADSs or our H shares to significant adverse United States income tax consequences.

We will be a “passive foreign investment company,” or “PFIC,” if, in the case of any particular taxable year, either (a) 75% or more of our gross income for such year consists of certain types of “passive” income or (b) 50% or more of the average quarterly value of our assets (as determined on the basis of fair market value) during such year produce or are held for the production of passive income (the “asset test”). For United States federal income tax purposes, and based upon our current and expected income and assets, we do not presently expect to be a PFIC for the current taxable year or the foreseeable future.

While we do not expect to become a PFIC, because the value of our assets for purposes of the asset test may be determined by reference to the market price of the ADSs, fluctuations in the market price of the ADSs may cause us to become a PFIC for the current or subsequent taxable years. The determination of whether we will be or become a PFIC will also depend, in part, on the composition of our income and assets. Under circumstances where we determine not to deploy significant amounts of cash for active purposes, our risk of being a PFIC may substantially increase. Because there are uncertainties in the application of the relevant rules and PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that we will not be a PFIC for the current taxable year or any future taxable year.

If we are a PFIC in any taxable year, a U.S. holder (as defined in “Item 10. Additional Information—E. Taxation—United States federal income tax considerations”) may incur significantly increased United States income tax on gain recognized on the sale or other disposition of the ADSs or H shares and on the receipt of distributions on the ADSs or H shares to the extent such gain or distribution is treated as an “excess distribution” under the United States federal income tax rules and such holders may be subject to burdensome reporting requirements. Further, if we are a PFIC for any year during which a U.S. holder holds the ADSs or our H shares, we generally will continue to be treated as a PFIC for all succeeding years during which such U.S. holder holds the ADSs or our H shares. For more information see “Item 10. Additional Information—E. Taxation—Passive Foreign Investment Company Considerations.”

Risks relating to doing business in the PRC

China's economic, political and social conditions as well as government policies could significantly affect our business

As of December 31, 2014, the majority of our business, assets and operations are located in China. The economy of China differs from the economies of most developed countries in many respects, including government involvement, control of foreign exchange, and allocation of resources.

The economy of China has been transitioning from a planned economy to a more market-oriented economy. After multiple years of strenuous and sustained economic restructuring reforms, China has become a leading player in the global economy and a major contributing force to the economic revival and growth worldwide. The PRC Government has implemented economic reform measures emphasizing utilization of market forces in the development of the economy of China and a higher level of autonomy for the private sector. Some of these measures will benefit the overall economy of China, but may have a negative effect on us for a short term. For example, our operating results and financial condition may be adversely affected by changes in taxation, changes in power tariff for our power plants, changes in the usage and costs of State-controlled transportation services, and changes in State policies affecting the power industry.

Interpretation of PRC laws and regulations involves significant uncertainties

The PRC legal system is based on written statutes and their interpretation by the Supreme People's Court. Prior court decisions may be cited for reference but have limited value as precedents.

We are subject to certain PRC regulations governing PRC companies that are listed overseas. These regulations contain certain provisions that are required to be included in the articles of association of these PRC companies and are intended to regulate the internal affairs of these companies. The PRC regulatory agencies are intensifying their efforts to protect interests of shareholders. We are listed in three exchanges. Given that each exchange and jurisdiction has different rules for shareholder protection, it is our policy to adopt the strictest standards of these listing rules. Some of these standards are incorporated in our articles of association and bylaws with the view to providing most protection for the interests of our shareholders.

Risks relating to our operations in Singapore

Our operations in Singapore are subject to a number of risks, including, among others, risks relating to electricity pricing, dispatching, fuel supply, project development, capital expenditure, environmental regulations, government policies, and Singapore's economic, political and social conditions. Any of these risks could materially and adversely affect our business, prospects, financial condition and results of operations.

Fluctuation in demand and intensified competition may adversely affect Tuas Power's business and results of operations.

Our operations in Singapore depend on market demand and are subject to competition. Overall power system demand grew by more than 3% in 2014 over 2013. The future growth is highly dependent on sustained recovery in the Singapore and global economies. The liberalization of Singapore's power market and the further deregulation of its power industry have resulted in more intense competition among the power generation companies in Singapore. Tuas Power Group, or Tuas Power, one of our wholly owned business units, is one of the three largest power generation companies in Singapore. If Tuas Power is unable to compete successfully against other power generation companies in Singapore, its business, prospects, financial condition and results of operations may be adversely affected. Existing incumbents, including Tuas Power Generation Pte Ltd ("TPG"), and new entrants have embarked on repowering and

new-build capacities in line with the planned development of Singapore's first Liquefied Natural Gas ("LNG") Regasification Terminal. At the end of 2014, 2,000MW of new gas-fired generating capacity using LNG were competing in the Singapore market. Another 400MW of new capacity is under construction and is expected to come online before the end of the next year.

Following the introduction of LNG into the Singapore Market and the additional generating capacities facilitated by the Energy Market Authority's (the "EMA") LNG Vesting Scheme, the electricity market has turned from a gas-constrained market in the last few years to one that is oversupplied. This is expected to have negative impact on prices until the excess capacity is absorbed by increase in demand.

TP Utilities Pte Ltd ("TPU"), an entity in Tuas Power Group, sells utilities, such as steam, industrial water and demineralized water to industrial customers for their direct consumption. The timing for those potential investors to site their premises is uncertain due to economic situations. The demand of the utilities by these customers may vary as well. Therefore, it is necessary for TPU to understand the customers' demand and timing to arrive at a demand projection. The facilities will be developed in stages and/or in modules to provide sufficient capacity matching the demand. Customers are required to pay minimum capacity payment charges to mitigate the demand risk.

Regulatory changes of the vesting regime in Singapore could expose Tuas Power to electricity price volatility and adversely affect its business and results of operations

Tuas Power derives its revenue mainly from sale of electricity to the National Electricity Market of Singapore (the “NEMS”) through a bidding process and vesting contracts under which a significant portion of power sales is predetermined by the EMA. The vesting contract regime in Singapore is targeted at mitigation of market power in the wholesale electricity spot market. The regime achieves this objective by assigning a quantity of vesting contracts to generating companies, thereby limiting their incentives to exercise whatever level of market power they may possess. Vesting contracts are a form of bilateral contract imposed/vested on the major power generation companies in Singapore. Vesting contract price is set by the EMA, which is Singapore’s power market regulator. Vesting contract price is set at the long run marginal cost of the most efficient base-loaded technology plant employed in Singapore and is reviewed every two years. On a quarterly basis, the EMA allows for the vesting contract price to be adjusted to account for inflation and changes in fuel prices. Such a mechanism helps protect the profit margins of the power generating companies in the Singapore market, such as Tuas Power, to a large degree. The quantity of each power generation company’s capacity reserved for vesting contracts depends on the proportion of such power generation company’s capacity to the total capacity in the NEMS system. The contract quantity and price are recalculated every three months. For the period from January 1, 2014 to December 31, 2014, power sold through vesting contracts represented approximately 42% of Tuas Power’s total power sold. As an important governmental policy in Singapore’s power market, vesting contracts may continue as long as the EMA considers that high market concentration persists and that power generation companies may potentially exercise their market power. The biennial review carried out in 2014 saw a phased reduction of vesting contract levels over a two-year period from an immediate level of 30% for first half 2015 and 25% for second half 2015 before lowering to 20% for 2016.

The fuel cost of Tuas Power is exposed to volatility of international fuel price and foreign currency risk

The fuel for Tuas Power consists of natural gas, coal, biomass, fuel oil and diesel oil. Since the procurement price of natural gas is closely linked to oil price and the procurement price of coal and biomass is linked to a coal index, the fuel cost of Tuas Power is exposed to the volatility of international oil and coal prices. In addition, the commitments for the purchase of fuel are denominated in U.S. dollars, which further exposes Tuas Power to foreign currency risk. Any increase in fuel price and/or appreciation of the U.S. dollar against the Singapore dollar will translate into an increase in fuel cost for Tuas Power. Part of this increase can be passed through electricity sale contracts and utilities sale contracts, while fuel and foreign exchange hedging strategies done appropriately will mitigate the impact of such increase. No assurance can be given that such increase will not adversely affect results of its operation. Tuas Power is highly dependent upon the import of gas via pipelines from Indonesia. Any disruption of such supply would impact the normal operation of Tuas Power significantly. This risk has been mitigated through Tuas Power’s contract to buy LNG for its incremental needs, although there is no assurance that, in the event of fuel supply shortfall, Tuas Power’s operations will not be adversely affected.

ITEM 4

Information on the Company

A. History and development of the Company

Our legal and commercial name is Huaneng Power International, Inc. Our head office is at Huaneng Building, 6 Fuxingmennei Street, Xicheng District, Beijing, People’s Republic of China and our telephone number is (8610) 63226999. We were established in June 1994 as a company limited by shares organized under the laws of the People’s Republic of China.

On April 19, 2006, we carried out the reform to convert all non-tradable domestic shares to tradable domestic shares. According to the reform plan, Huaneng Group and HIPDC offered three shares to each holder of A Shares for every

ten shares held by them. The total number of shares offered in connection with the reform was 150,000,000 shares. As a result, all non-tradable domestic shares were permitted to be listed on the stock exchange for trading with certain selling restrictions. The period of selling restrictions is sixty months for the non-tradable shares held by Huaneng Group and HIPDC, and one year for most non-tradable shares held by others starting from April 19, 2006. All such selling restrictions were released by April 19, 2011. The reform did not affect the rights of shareholders of our overseas listed foreign shares.

In 2010, we increased our share capital through non-public issuances of new shares, including A shares and H shares. With the approval from shareholders and relevant PRC governmental authorities, we were authorized to issue (i) not exceeding 1,500 million new A shares by way of placement to not more than 10 designated investors including Huaneng Group, which would subscribe for no more than 500 million new A shares, and (ii) no more than 500 million new H Shares to China Hua Neng Hong Kong Company Limited (“Hua Neng HK”). On December 23, 2010, we completed the non-public issuance of 1,500 million new A shares (ordinary shares with a par value of RMB1 per share) to 10 designated investors, including Huaneng Group, at the issuance price of RMB5.57 per share. The shares subscribed by Huaneng Group are subject to a lock-up period of 36 months, and the shares subscribed by other designated investors are subject to a lock-up period of 12 months. On December 28, 2010, we completed the placement of 500 million H shares (ordinary shares with a par value of RMB1 per share) to Hua Neng HK at the subscription price of HK\$4.73 per share. On November 13, 2014, we issued a total of 365 million H Shares to nine placees, at an issue price of HK\$8.60 per share. After these non-public issuances, we have a total share capital of approximately 14.42 billion shares.

On December 31, 2009, we entered into an equity transfer contract with Shandong Electric Power Corporation (“Shandong Power”) and Shandong Luneng Development Group Company Limited (“Luneng Development”) to acquire various interests and preliminary stage projects in nine entities. As of December 31, 2011, the operating results of all the nine entities were consolidated into ours.

On January 4, 2011, we entered into an equity transfer agreement relating to the acquisition of Fushun Suzihe Hydropower Development Company Limited (“Fushun Suzihe Hydropower”) with its existing shareholders, pursuant to which we agreed to acquire the entire equity interest in Fushun Suzihe Hydropower with an aggregate consideration of RMB50 million. Fushun Suzihe Hydropower has a planned hydropower capacity of 37.5 MW (3 x 12.5 MW). In September 2012, unit I of Suzihe Hydropower passed trial run.

On June 29, 2011, we entered into an equity transfer agreement relating to the transfer of Huaneng Jilin Biological Power Generation Limited Company (“Jilin Biological”) with Huaneng Jilin Power Generation Co., Ltd. and Huaneng Group, pursuant to which we agreed to transfer the entire equity interest in Jilin Biological with an aggregate consideration of approximately RMB106 million.

On August 9, 2011, we entered into a capital increase agreement with China Huaneng Finance Limited Liability Company (“Huaneng Finance”), pursuant to which we subscribed for its own part of the newly increased registered capital of Huaneng Finance for a consideration of RMB600 million. The equity interest held by us in Huaneng Finance remains unchanged, representing 20% of the equity interests of Huaneng Finance.

On October 25, 2011, we entered into a capital increase agreement with Huaneng Group, GreenGen Co., Ltd. (“GreenGen”) and Tianjin Jinneng Investment Company (“Tianjin Jinneng”), pursuant to which our Company made a capital contribution of RMB264 million to the registered capital of Huaneng (Tianjin) Coal Gasification Power Generation Co., Ltd., which was jointly funded by GreenGen and Tianjin Jinneng immediately prior to the capital increase. We hold 35.97% of the equity interests in Coal Gasification Co after the completion of the capital increase.

On January 11, 2013, we entered into an equity transfer agreement with Huaneng Group, pursuant to which we agreed to acquire a 50% interest in China Huaneng Group Fuel Co., Ltd. (“Fuel Company”) from Huaneng Group for a consideration of approximately RMB108 million. On the same day, we entered into a capital increase agreement with Huaneng Group and the Fuel Company, pursuant to which we agreed to make a capital injection of RMB1.4 billion into the Fuel Company after the completion of the acquisition.

As resolved at the 2010 annual general meeting held on May 17, 2011, our Company has been given a mandate to apply to the competent authority for a quota of the non-public issuance of debt financing instruments with a principal amount not exceeding RMB10 billion within 12 months from the date of obtaining an approval at the general meeting (to be issued within such period on a rolling basis). On September 8, 2011, we received the approval from the competent authority. On November 7, 2011, we completed the issuance of the first tranche of non-public issuance of debt financing instruments in the amount of RMB5 billion with a maturity period of 5 years, a unit face value of RMB100 and an interest rate of 5.74%. On January 5, 2012, we completed the issuance of the second tranche of the non-public issuance of debt financing instruments in the amount of RMB5 billion with a maturity period of 3 years, a unit face value of RMB100 and an interest rate of 5.24%. On June 4, 2013, we completed the issuance of the third tranche of non-public issuance of debt financing instruments in the amount of RMB5 billion with a maturity period of 3 years and an interest rate of 4.82%.

As resolved at the 2010 Annual General Meeting on May 17, 2011, our Company has been given a mandate to issue one or multiple tranches of financing instruments of RMB-denominated debt instruments of a principal amount up to RMB5 billion in or outside PRC within 12 months from the date of approval at the general meeting. On April 19, 2012, we received an approval regarding the issuance of RMB-denominated debt instruments in Hong Kong in the

sum of RMB5 billion issued by the NDRC, approving our Company to issue the RMB-denominated debt instruments in Hong Kong in an aggregate amount of up to RMB5 billion, with an effective period of one year from the date of approval. On January 30, 2013, our Company and the managers entered into a subscription agreement in relation to the proposed issuance of RMB1.5 billion bonds due 2016 with an interest rate of 3.85% (“RMB Bonds”). The RMB Bonds are listed and traded on the Hong Kong Stock Exchange effective from February 5, 2013.

As resolved at the 2012 annual general meeting on June 19, 2013, our Company has been given a mandate to issue one or more tranches of super short-term notes within the PRC in a principal amount not exceeding RMB30 billion on a rolling basis within 24 months of approval by the general shareholders’ meeting. On August 22, September 10 and November 3, 2014, we issued super short-term notes in three installments at principal amount of RMB2 billion, RMB3 billion and RMB3 billion and with nominal annual interest rate of 4.63%, 4.63% and 4.00%, respectively. All these series of notes were denominated in RMB, issued at par value, and would mature in 270 days from issuance.

As resolved at the 2012 annual general meeting on June 19, 2013, our Company has been given a mandate to issue one or more tranches of short-term notes in the PRC in a principal amount not exceeding RMB 15 billion on a rolling basis within 24 months of approval by the general shareholders’ meeting. On April 25 and November 14, 2014, we issued unsecured short-term bonds in two installments each at principal amount of RMB5 billion with nominal annual interest rate of 4.90% and 3.98%, respectively. Each of the bonds was denominated in RMB, issued at par value, and would mature in 365 days from issuance.

As resolved at the 2012 annual general meeting held on June 19, 2013, our Company has been given a mandate to issue non-public debt financing instruments in the PRC in a principal amount of not exceeding RMB10 billion within 24 months from the date of obtaining an approval at the general meeting. On July 11, 2014, we issued mid-term notes at principal amount of RMB4 billion with nominal annual interest rate of 5.30%. The notes were denominated in RMB, issued at par value, and would mature in five years from issuance.

As resolved at the second meeting of the 8th session of the board of the Company on October 13, 2014 and adopted at the third extraordinary general meeting of the Company, we entered into the Huaneng Group Interests Transfer Agreement with Huaneng Group, and the HIPDC Interests Transfer Agreement and the Chaohu Power Interests Transfer Agreement with HIPDC. Pursuant to these transfer agreements, we will acquire from Huaneng Group 91.8% interests of Hainan Power, 75% interests of Wuhan Power,

53.45% interests of Suzhou Thermal Power, 97% interests of Dalongtan Hydropower and 100% interests of Hualiangting Hydropower at a total price of RMB7,337,647,400, and acquire from HIPDC 60% interests of Chaohu Power, 100% interests of Ruijin Power, 100% interests of Anyuan Power, 100% interests of Jingmen Thermal Power and 100% interest of Yingcheng Thermal Power Interests at a total price of RMB1,938,178,900. In January, 2015, we have paid 50% of the total price to Huaneng Group and HIPDC pursuant to these transfer agreements. We are still in the process of reviewing the financial information of these newly acquired entities as of the acquisition date.

See “Item 5 Operating and Financial Review and Prospects – Liquidity and Cash Resources” for a description of our principal capital expenditures since the beginning of the last three financial years.

B. Business overview

We are one of the China’s largest independent power producers. As of March 31, 2015, we had controlling generating capacity of 78,693MW, and a total generating capacity of 70,736MW on an equity basis.

Operations in China

We are engaged in developing, constructing, operating and managing power plants throughout China. Our domestic power plants are located in 21 provinces, provincial-level municipalities and autonomous regions. We also have a wholly owned power company in Singapore.

In 2014, the Company overcame difficulties posed by the decline in the growth rate of power generation, actively responded to new trends and changes in the power market, and made new progress in various aspects, including power generation, energy saving, emission reduction, project development and capital management. Meanwhile, the Company managed to fulfill the duties of providing sufficient, reliable and green energy to the society.

In 2014, new generating units with a total installed capacity of 3,629 MW were put into operation. In 2014, our total domestic power generation from all operating power plants on a consolidated basis amounted to 294.388 billion kWh, representing a 7.27% decrease from 2013. The annual average utilization hours of our generating units reached 4,572 hours. Our fuel cost per unit of power sold by domestic power plants decreased by 7.96% from the previous year to RMB201.19 per MWh.

We believe our significant capability in the development and construction of power projects, as exemplified in the completion of our projects under construction ahead of schedule, and our experience gained in the successful acquisitions of power assets in recent years will enable us to take full advantage of the opportunities presented in China’s power market.

With respect to the acquisition or development of any project, we will consider, among other factors, changes in power market conditions, and adhere to prudent commercial principles in the evaluation of the feasibility of the project. In addition to business development strategies, we will continue to work on our profit enhancement through relentlessly strengthening cost control, especially in respect of fuel costs and construction costs, so as to hedge against fluctuations in fuel price and increase competitiveness in the power market.

Operations in Singapore

Tuas Power, one of our wholly owned business units, operates in Singapore and is engaged in the business of generation, wholesale and retail of power and other relating utilities. Tuas Power is comprised of Tuas Power Ltd (“TPL”), the investment holding company, and seven subsidiaries. Among those subsidiaries, TPG is the electricity generation company that owns 100% of Tuas Power Supply Pte Ltd (“TPS”), which is the retail arm of TPG. Separately,

TPU, a wholly owned subsidiary of TPL is engaged in the business of production and supply of utilities to industrial customers at Tembusu, Jurong Island in Singapore, as well as the generation of electricity dispatched to the electricity wholesale market. The commercial operation of Phase IIA of the coal-biomass fired cogeneration plant commenced operations in June 2014, which provided a timely response to the increased steam demand from customers with electricity output dispatched to the electricity wholesale market. We have consolidated Tuas Power's results of operations since March 2008. The total assets and revenue of Singapore operations represented approximately 11% and 11%, respectively, of our total assets and revenue as of and for the year ended December 31, 2014. In 2014, the power generated by Tuas Power in Singapore accounted for 21.80% of the total power generated in Singapore, representing an increase of 1.17 percentage points from 2013.

Development of power plants

The process of identifying potential sites for power plants, obtaining government approvals, completing construction and commencing commercial operations is usually lengthy. However, because of our significant experience in developing and constructing power plants, we have been able to identify promising power plant projects and to obtain all required PRC Government approvals in a timely manner.

Opportunity identification and feasibility study

We initially identify an area in which additional electric power is needed by determining its existing installed capacity and projected demand for electric power. The initial assessment of a proposed power plant involves a preliminary feasibility study. The feasibility study examines the proposed power plant's land use requirements, access to a power grid, fuel supply arrangements,

availability of water, local requirements for permits and licenses and the ability of potential customers to afford the proposed power tariff. To determine projected demand, factors such as economic growth, population growth and industrial expansion are used. To gauge the expected supply of electricity, the capacities of existing plants and plants under construction or development are studied.

Approval process

Prior to July 2004, any project proposal and supporting documents for new power plants had to first be submitted to the NDRC for approval and then be submitted to the State Council. In July 2004, the State Council of the PRC reformed the fixed asset investment regulatory system in China. Under the new system, new projects in the electric power industry that do not use government funds will no longer be subject to the examination and approval procedure. Instead, they will only be subject to a confirmation and registration process. Coal-fired projects will be subject to confirmation by the NDRC. Wind power projects with installed capacity of 50 MW or above shall be subject to confirmation and registration with the relevant department of the central government, while wind power projects with installed capacity lower than 50 MW shall be subject to confirmation and registration with relevant local government departments. Wind power projects confirmed by local government departments at provincial level shall also be filed with the NDRC and China National Energy Administration.

Joint venture power projects are subject to additional governmental approvals. Approval by Ministry of Commerce is also required when foreign investment is involved.

In January 2007, the Office of the National Energy Leading Group and the NDRC, with the approval of the State Council, jointly issued the opinions to accelerate shutdowns of small coal-fired generating units. Power generation companies are encouraged to close small coal-fired generating units and replace them with newly built large units, and their new projects may be granted priority in the confirmation and registration process on the basis of their proactive implementation of the opinions.

Permits and contracts

In developing a new power plant, we and third parties are required to obtain permits before commencement of the project. Such permits include operating licenses and similar approvals related to plant site, land use, construction, and environment. To encourage the cooperation and support of the local governments of the localities of the power plants, it has been and will be our policy to seek investment in such power plants by the relevant local governments.

Power plant construction

We have generally acted as the general contractor for the construction of our power plants. Equipment procurement and installation, site preparation and civil works are subcontracted to domestic and foreign subcontractors through a competitive bidding process. All of our power plants were completed on or ahead of schedule, enabling certain units to enter service and begin generating income earlier than the estimated in-service date.

Import duties

China's general import-tariff level has been declining since China acceded to the WTO in November 2001. China's average import-tariff rate was reduced annually from 15.3% in 2001 to 9.9% in 2005 and 2006. Starting from January 1, 2007, the average import-tariff rate was further reduced to 9.8%. In general, China's accession to WTO continues to bring its import-tariff to a level consistent with the average level of all other WTO members. Under the relevant PRC laws and regulations, foreign invested enterprises ("FIE"), will be entitled to import duty exemption in respect of self-use imported equipment and raw materials for investment projects that fall into the encouraged category under the

Catalogue for the Guidance of Foreign Investment Industries (the “Catalogue”). Pursuant to the current Catalogue, effective on January 30, 2012, construction and operation of power stations using integrated gasification combined cycle, circulating fluidized bed with a generating capacity of 300MW or above, pressurized fluidized bed combustor with a generating capacity of 100MW or above and other clean combustion technologies belong to the category of encouraged projects. Therefore, all of our construction projects that meet the conditions for encouraged projects under the current catalogue are eligible for import-duty exemption for imported generating units.

Pursuant to the Interim Rules to Promote Structural Adjustment of Industries issued in December 2005 and Guidance Catalogue for Structural Adjustment of Industries effective on June 1, 2011, our power plants construction projects with independent legal person status belonging to an encouraged category of investments are eligible for exemption from import duty and related value-added tax with regard to the imported equipments used in such projects, subject to the approval of the relevant government authorities.

Plant start-up and operation

We have historically operated and intend to continue to operate our power plants. Our power plants have established management structures based on modern management techniques. We select the superintendent for a new power plant from the senior management of our operating plants early in the construction phase of the new plant, invest in the training of operational personnel, adopt management techniques that improve efficiency and structure our plant bonus program to reward efficient and cost-effective operation of the plant in order to ensure the safety, stability and high availability factor of each power plant. Our senior management meets several times a year with the superintendents of the power plants as a group, fostering a team approach to operations, and conducts annual plant performance reviews with the appropriate superintendent, during which opportunities to enhance the power plant’s performance and profitability are evaluated.

After a coal-fired generating unit is constructed, the contractor tests its installation and systems. Following such tests, the contractor puts the unit through a continuous 168-hour trial run at full load. After successfully passing the continuous 168-hour test and obtaining approval from the local governments, the unit may commence its commercial operation. Trial run of a wind power project consists of two phases: (i) trial run of single wind power generating unit and (ii) trial run of the entire wind power project as a whole. After successfully passing the trial run, the wind power project may commence its commercial operation.

Development of Power Plants in Singapore

The Singapore electricity industry had traditionally been vertically integrated and owned by the government. Since 1995, steps have been taken to liberalize the power industry, including the incorporation of the Public Utilities Board (“PUB”) in 1995, establishment of Singapore Electricity Pool (“SEP”) in 1998, formation of Energy Market Authority (“EMA”) in 2001, and the evolution of the SEP into the New Electricity Market of Singapore (“NEMS”) in 2003. The EMA is a statutory body responsible for the economic, technical and competition regulation of the gas and electricity industry in Singapore. In carrying out its functions as the regulator of the power sector, EMA is empowered under the Electricity Act to issue and enforce licenses, codes of practices and performance standards. Energy Market Company Pte Ltd. (the “EMC”) is the market company licensed to operate the wholesale market, or the NEMS.

In Singapore, a company is required to hold a generation license issued by the EMA if it generates electricity by means of one or more generating units with capacity of 10 MW or above. If connected to the power grid, the generating unit(s) must be registered with the EMC and will have to compete with other power generation companies to secure dispatch in the NEMS.

To ensure adequate electricity supply in Singapore, the EMA targets a minimum reserve margin (the excess of generating capacity over peak electricity demand) of 30% based on a loss of load probability (a measure of the probability that a system demand will exceed capacity during a given period, often expressed as the estimated number of days over a year) of three days per year. The 30% required reserve margin is to cater for scheduled maintenance as well as forced outages of generating units in the system. If the reserve margin falls below the required 30% due to demand growth and/or plant retirements, it would be an indication that new generation investments in generation units are needed to maintain system security.

The EMA intends to keep the increase and decrease in generating capacity commercially driven as far as practicable. As a precaution against the risk of insufficient generating capacity in the system to maintain system security, the EMA has planned to put in place a capacity assurance scheme to incentivize new generation planting in case new generating capacity that is required to maintain system security is not forthcoming from the market. EMA has not provided any update to the proposed scheme but given the current oversupply of capacity, it is not anticipated that the scheme will be put into place anytime soon.

By most measures of market power, the Singapore market is highly concentrated, as the three largest power generation companies account for approximately 70% of total power capacity. It is therefore unlikely that the EMA will allow the three largest power generation companies to increase their licensed capacity and these generation companies will have to rely on the optimization of their existing capacity within license capacities to improve efficiency and forestall any new entrant.

New entrants as well as existing competitors have invested in new generating capacity or repowering of existing plants to take advantage of the LNG Vesting Scheme. This will impact the market negatively as these new capacities compete for market share as well as to avoid the take-or-pay penalties arising out of an oversupplied market.

We are in the process of developing the Tembusu Multi-Utilities Complex (the “TMUC”) in Singapore. The TMUC is expected to consist of a co-generation plant, a desalination plant and a wastewater treatment facility, with a total installed capacity of 165 MW. The complex will be developed in multiple phases in order to meet customers’ demand. Phase 1 consists of 1 x 450 t/h coal-biomass co-fired circulated fluidized bed boiler, 2 x 200 t/h diesel/natural gas fired boilers and 1 x 101MW steam turbine-generator, and other components of the plant. Phase 2A consists of 1 x 450 t/h coal-biomass co-fired circulated fluidized bed boiler, 1 x 200 t/h diesel/natural gas fired boiler and 1 x 32MW steam turbine-generator, and other components of plant. Phase 1 and Phase IIA commenced commercial operations in March 2013 and June 2014 respectively. TPL owns 100% equity interest in this project.

Pricing policy

Pricing policy in China

Prior to April 2001, the on-grid tariffs for our planned output were designed to enable us to recover all operating and debt servicing costs and to earn a fixed rate of return. Since April 2001, however, the PRC Government has gradually implemented a new on-grid tariff-setting mechanism based on the operating terms of power plants as well as the average costs of comparable power plants.

On July 3, 2003, the State Council approved the tariff reform plan and made it clear that the long-term objective of the reform is to establish a standardized and transparent tariff-setting mechanism.

Pursuant to the NDRC circular issued in June 2004, on-grid tariffs for newly built power generating units commencing operation from June 2004 should be set on the basis of the average cost of comparable units adding tax and reasonable return in the regional grid. It provides challenges and incentives for power generation companies to control costs for building new generating units.

On March 28, 2005, the NDRC issued the Interim Measures on Regulation of On-grid Tariff, the Interim Measures on Regulation of Transmission and Distribution Tariff, and the Interim Measures on Regulation of End-user Tariff, or collectively the "Interim Measures", to provide guidance for the reform of tariff-setting mechanism in the transition period. Under the Interim Measures, tariff is classified into on-grid tariff, transmission and distribution tariff and end-user tariff. Transmission and distribution tariff will be instituted by the government. End-user tariff will be based on on-grid tariff and transmission and distribution tariff. The government is responsible for regulating and supervising power tariffs based on the principles of promoting efficiency, encouraging investment and improving affordability.

In December 2004, the NDRC proposed and the State Council approved the establishment of a linkage mechanism between coal and power prices, pursuant to which, the NDRC may adjust power tariffs if the change of the average coal price reaches 5% within a period of six months compared with the preceding same period. The change in a period, if less than 5%, will be carried forward to the future periods until the accumulated amounts reach 5%. With a goal to encourage power generation companies to reduce cost and improve efficiency, only around 70% of coal price increases will be allowed to pass to end-users through an increase of power tariffs, and power generation companies will bear the remaining 30%. In May 2005, the NDRC activated the coal-electricity price linkage mechanism for the first time to increase on-grid tariffs and end-user tariffs in the northeastern region, central region, eastern region, northwestern region and southern region. We accordingly increased the on-grid tariffs of our power plants in the northeastern region, central region, eastern region and northwestern region on May 1, 2005 and in the southern region on July 15, 2005. In June 2006, the coal-electricity price linkage mechanism was reactivated by the NDRC to increase on-grid tariffs and end-user tariffs in the northeastern region, central region, eastern region, northwestern region and southern region. We accordingly increased the on-grid tariffs of most of our power plants in the same regions on June 30, 2006.

In May 2007, NDRC and the State Environment Protection Administration jointly promulgated Interim Administrative Measures on Electricity Price of Coal-fired Generating Units installed with Desulphurization Facilities and the Operations of Such Facilities, which provided that a premium for desulphurization may be charged on the price of the electricity generated by generating units installed with desulphurization facilities on and from the date on which such desulphurization facilities are tested and accepted by a relevant environment protection regulator. Such pricing policy is also applicable to the old generating units which are installed with desulphurization facilities. The new measures are more stringent on the regulation of the coal-fired power plants with desulphurization facilities, setting forth the categories under which the price including a desulphurization premium will be offset or otherwise penalized based on the ratio of utilization of the relevant desulphurization facilities on an annual basis. As of December 31, 2013, all of our existing coal-fired generating units have installed and operated the desulphurization facilities and enjoyed the desulphurization premium.

In June 2008, NDRC issued Notice of Raising the Power Tariff, pursuant to which, the power tariff in provincial grids nationwide was increased by an average of RMB0.025 per kWh. In August 2008, NDRC issued Notice of Raising the On-grid Tariffs of the Thermal Power Plants, pursuant to which, the on-grid tariff of thermal power plants, including plants fueled by coal, oil, gas and co-generation, was increased by an average of RMB0.02 per kWh.

On February 25, 2009, NDRC, SERC and China National Energy Administration jointly promulgated the Notice regarding Cleaning up the Concessional Tariff Scheme, pursuant to which, (i) the concessional tariff scheme at the local level is banned, and (ii) certain measures, such as direct purchase by large end-users and adopting peak and off-peak power pricing policy, will be carried out to reduce enterprises' power cost. In addition, the notice emphasizes the supervision and inspection over the setting of power tariffs. On October 11, 2009, in order to promote a fair market condition and the optimization of electric power resources, NDRC, SERC and China National Energy Administration jointly promulgated the Circular on Regulating the Administration of Electric Power Transaction Tariff to regulate the tariff-setting mechanism for the on-grid tariff, transmission and distribution tariff and end-user tariff and clean up the local preferential power tariffs provided to high energy consumption companies. Pursuant to a

notice issued by NDRC, with effect from November 20, 2009, certain adjustments on the on-grids tariffs have been made in various regions of China in order to resolve the inconsistencies in tariffs, rationalize the tariff structure and promote the development of renewable energy.

In 2010, the PRC Government started to implement the direct power purchase policy. As of December 31, 2013, some of the provinces where we operate power plants are approved by the NDRC to implement the direct power purchase by large power end-users. In addition, during 2010 SERC issued several circulars and notices to regulate the trans-provincial and interregional transaction of power and/or power generation right, in which the power purchase price shall be freely determined by negotiation through market pricing mechanism. In December 2012, SERC issued another circular to further regulate the trans-provincial and interregional transaction of power and/or power generation right.

In May 2011, NDRC issued a notice, increasing the on-grid tariffs of thermal power plants to partially compensate the increased costs incurred by thermal power plants resulting from increases in coal prices. Different adjustments on tariffs were made in different provinces. In November 2011, PRC Government made further nationwide adjustments on power tariffs, including an average of RMB0.026 per kWh increase in on-grid tariff for thermal power plants. In December 2012, NDRC issued a notice, which provided that, from January 1, 2013, NDRC would provide a RMB0.008 per kWh denitrification premium for all coal-fired generating units equipped with denitrification facilities that are inspected and accepted by authorized national or provincial authority.

In March 2012, the PRC Government issued a notice, which mandated the confirmation method for the power generation projects, subsidy standards and fund appropriation standards relating to the application for subsidy for renewable energy power price of power generation projects. In December 2012, the PRC Government issued the Notice on the Guidelines of Enhancing the Reform of Marketization of Coal Used for Power Generation to further reform the coal pricing mechanism. Effective January 1, 2013, all key coal purchase contracts between power generation companies and coal suppliers were terminated and contracts are directly negotiated between power generation companies and coal suppliers without the interference of local governments. According to the notice, the NDRC will no longer issue inter-provincial guidance on the railway transportation capacity plan. In addition, the dual-track coal pricing system, which included the government regulated mandatory annual contract pricing and spot market prices for the remaining coal production output of each coal supplier, was abolished due to the narrowing gap between the government regulated coal contract price and the spot market price. Pursuant to the notice, future coal contract prices will be determined by the market and freely negotiated between power generation companies and coal suppliers. Furthermore, the coal-electricity price linkage mechanism will continue to be implemented and constantly improved. Once the coal price fluctuates for more than 5% on an annual basis, on-grid tariff would be adjusted accordingly. The notice also mandates that power generation companies absorb 10% of the coal price fluctuations as compared to 30% prior to 2013. Given the narrow gap between the key contract coal price and the spot market price, the overall on-grid tariff was not adjusted.

In September 2013, NDRC issued the Notice on the Adjustment of Power Tariff for Power Generation Companies and Related Matters, pursuant to which the on-grid tariffs for coal-fired generating units were lowered, by a national average of RMB0.013 per kWh, and the on-grid tariff for gas turbine power plants were slightly increased. The Notice also increased the power tariff for power-generating companies that are equipped with denitrification facilities and dust-removal facilities.

In March 2014, the NDRC and the Ministry of Environmental Protection jointly issued the Measures to Monitor the Operation of Environmental Protection Tariffs and Facilities Regarding Coal-fired Generating Units, under which the standard on-grid electricity tariff incorporating environmental protection element will no longer be applicable to coal-fired generating units unless the coal-fired power generating enterprise has completed renovation for environmental protection acceptable after testing. In August 2014, the NDRC issue the Notice to Further Resolve Conflicts Regarding Environmental Protection Tariff, under which the standard on-grid tariff for coal-fired power generating units is lowered with the view to resolve the environmental protection tariffs conflicts such as denitrification and dedusting of coal-fired power generation enterprises, and setting the tariff subsidy for denitrification and dedusting at RMB0.01/kWh and RMB0.002/kWh, respectively. In December 2014, the NDRC issued the Notice Regarding Adjusting Standard On-grid Tariff for Onshore Wind Powers, under which the standard on-grid tariff for each of Class I, Class II and Class III wind powers is lowered by RMB0.02, and the tariff for Class IV wind power remain unchanged at RMB0.61/kWh. In December 2014, the NDRC issued the Notice Regarding Certain issues of On-grid Tariff of Natural Gas Powers, defining the principles to formulate and modify the tariff of electricity generated by natural gas, aiming to regulate on-grid tariff administration and used facilitate healthy and orderly growth of natural gas power generating sector in China.

In terms of power tariff for wind power projects, pursuant to the applicable policies and regulations, the PRC is categorized into four wind-resource zones, and the onshore wind power projects approved after August 1, 2009 and in the same zone are subject to the same standard on-grid tariff applicable to that zone. In addition, the power grid companies are generally required to purchase all of the electricity generated by wind power generating units.

Pricing Policy in Singapore

Pricing Policy of Electricity in Singapore

All licensed power plants in Singapore sell their plant output into the NEMS under a half-hourly competitive bidding process, during which a clearing price is determined based on the projected system demand. All successful bids/power plants that are cleared in each half hour will be dispatched automatically by control signals from the Power System Operator, a division of the EMA, and in turn will receive the cleared price as determined earlier. The cleared price paid to the power plants is the nodal price at their point of injection, and the Market Clearing Engine, the computer software that creates dispatch schedules and determines market clearing prices, automatically produces a different price at each node on the network.

As there is no certainty in the price or the dispatch levels for any power plants, operators of power plants may enter into short- or long-term financial arrangements with other counterparties or their own subsidiary company involved in the electricity retail market (to end consumers of electricity) to secure stability in their revenue stream and manage the commercial risks associated with operations in a competitive market.

In addition, the major power generation companies, including Tuas Power, are obliged to hold vesting contracts. Vesting contracts are a form of bilateral contract imposed/vested on the generation companies who had been licensed by the EMA before the establishment of NEMS. Market Support Services Licensee is the counterparty to all of the vesting contracts, and the vesting contracts are settled between the parties through the EMC's settlement system. The quantity of each power generation company's capacity covered by vesting contracts depends on the proportion of its capacity to total capacity in the NEMS system. Vesting contract price is set by the EMA at the long-run marginal cost and is adjusted by the EMA on a periodic basis for changes in the long-run marginal cost and on a quarterly basis for inflation and changes in fuel prices. Such mechanism helps protect the profit margins of the power generation companies in the Singapore market to a large degree. The contract quantity and price are currently recalculated every three

months. The existing Vesting Contract Scheme has been reduced to an intermediate level of 30% of system demand in first half of 2015 and 25% in second half of 2015, before lowering to 20% in 2016 (from 40% in 2014). This translates into increased exposure to a more volatile pool price. The authority is further considering introducing a demand response scheme to be implemented in 2015 where loads can choose to participate in peak load shaving and share in part of the consumer surplus. An Electricity Futures Market is also being contemplated. Going forward, we intend to monitor and evaluate the impact of such market on our business.

The gross pool design adopted in NEMS means all quantity sold by retailers to contestable consumers (currently defined as customers with average monthly usage more than of 4,000kWh) has to be in turn purchased from the pool. The retailers pay for their electricity purchases at the Uniform Singapore Energy Price, which is a weighted average of nodal prices and is determined on a half-hourly basis in the NEMS.

Pricing Policy of Utilities in Singapore

Utilities supply to industrial customers is based on long-term contracts. The pricing of utilities has both fixed and variable components.

Power sales

Each of our power plants has entered into a written agreement with the local grid companies for the sales of its power output. Generally, the agreement has a fixed term of one year and provides that the annual utilization hours of the power plant will be determined with reference to the average annual utilization hours of the similar generating units connected to the same grid.

In 2003, SERC and the State Administration of Commerce and Industry jointly promulgated a model contract form (the “Model Contract Form”) for use by power grid companies and power generation companies in connection with electricity sale and purchase transactions. The Model Contract Form contains provisions on the parties’ rights and obligations, amount of electricity subject to purchase, payment method and liabilities for breach of contract, etc. We believe that the publication of the Model Contract Form has facilitated the negotiation and execution of electricity purchase contracts between power grid companies and power generation companies in a fair, transparent and efficient manner. In 2014, a majority of the agreements entered into between our power plants and the local grid companies were based on the Model Contract Form.

Power sales through competitive bidding are one of the targets of PRC power market reform. The PRC Government started in 1999 to experiment with a program to effect power sales through competitive bidding in some provinces, and has been gradually expanding the program with a view to creating a market-oriented electric power industry. Pursuant to the opinions regarding promotion of electric power system reform in the period of “The Eleventh Five-Year Plan” adopted by the State Council in November 2006, the SERC has sped up the reform to establish an electric power market suitable to China’s circumstances. Furthermore, the PRC Government started in 2009 to experiment with a program for direct power purchase by large power end-users, and has promulgated relevant rules governing the price and method of direct power purchase transactions as well as the market entrance and exit mechanism. In accordance with the above policies, we are conducting research on the program for direct power purchases by large power end-users. In July 2013, China National Energy Administration issued the Notice on Direct Purchases between Power End-users and Power Generation Companies, which officially implemented the direct purchases programs by large end-users. Among the provinces where we operate our power plants, seven of them, namely Shanxi, Jiangsu, Henan, Hunan, Guangdong, Fujian, and Gansu, started the direct purchase program in 2013, and four of them, namely Jiangxi, Yunnan, Hubei and Liaoning, are actively promoting the direct purchase pilot program. In 2014, the programs were also implemented in Zhejiang and Anhui.

Establishing regional power markets and increasing the use of the bidding method are the general trend in China's power market reform, which is conducive to creating a competition environment that is fair, transparent and equitable. Power sales through a bidding process have been tested, to a small degree, in the power market in the Northeastern region and Eastern region. However, as of December 31, 2014, the use of the bidding method in power sales had not been substantively implemented yet.

In 2008, with the purpose of improving energy usage efficiency, the government implemented an optimized-dispatch electricity policy in Henan Province, Sichuan Province, Jiangsu Province, Guangdong Province and Guizhou Province on a pilot basis, as a result of which, the utilization hours of low energy consumption and low pollution generating units have been improved. We believe that our large generating units with high efficiency and low emission in Henan, Jiangsu and Guangdong provinces are competitive in the market.

The following table sets forth the average power tariff (RMB/MWh) of electric power sold by our power plants in China, for each of the five years ended December 31 through 2014 and the approved power tariff for 2015.

	Year Ended December 31,					
	2010 Average Tariff(1)	2011 Average Tariff(1)	2012 Average Tariff(1)	2013 Average Tariff(1)	2014 Average Tariff(1)	2015 Approved Tariff(1)
Liaoning Province						
Dalian Power Plant	375.44	382.84	409.18	407.89	394.50	402.40
Dandong Power Plant						
Yingkou Power Plant	376.61	383.08	405.73	401.09	393.06	402.40
Yingkou Co-generation	387.78	394.82	409.35	406.85	399.33	402.40
Wafangdian Wind Power	386.29	391.92	397.59	396.96	399.21	402.40
Changtu Taiping Wind Power	—	610.00	610.82	632.85	609.68	610.00
Suzihe Hydropower	—	—	610.00	605.30	602.82	610.00
—	—	—	364.25	330.00	330.00	330.00
Inner Mongolia Autonomous Region						
Huade Wind Power	510.00	528.45	520.00	520.00	520.00	510.00
Hebei Province						
Shang'an Power Plant	378.59	408.20	434.63	431.15	429.39	—
Phase I	—	—	—	—	—	426.90
Phase II	—	—	—	—	—	435.50
Phase III	—	—	—	—	—	421.40
Kangbao Wind Power	—	—	536.72	534.47	538.84	540.00
Gansu Province						
Pingliang Power Plant	275.91	306.36	336.12	332.16	322.72	326.90
Jiuquan Wind Power	—	—	520.60	520.60	520.60	520.60
Anbei Third Wind Power	—	—	—	—	540.00	540.00
Beijing Municipality						
Beijing Co-generation	474.21	481.35	494.00	529.47	514.72	501.50
Beijing Co-generation CCGT	—	—	—	468.79	882.33	714.90
Tianjin Municipality						
Yangliuqing Co-generation	407.08	414.23	438.03	483.73	434.28	457.70
Lingang Co-generation CCGT	—	—	—	—	—	—
Shanxi Province						
Yushe Power Plant	333.36	363.66	396.56	393.37	391.22	386.20
Zuoquan Power Plant	—	—	383.25	389.83	382.01	375.20
Shandong Province						
Dezhou Power Plant	417.68	443.20	468.90	464.89	463.36	463.40
Jining Power Plant						
Phases I, II	398.11	—	—	—	—	—
Phases III	411.16	418.76	451.40	446.14	437.55	438.00
Co-generation	401.90	423.82	459.40	457.23	448.94	432.00
Xindian Power Plant	405.67	426.77	453.75	453.35	448.55	444.30
Weihai Power Plant	456.31	435.32	461.89	474.38	461.18	502.00
Rizhao Power Plant Phase II	397.60	420.06	446.90	446.38	441.59	437.60
Zhanhua Co-generation	397.40	419.76	450.55	446.56	434.71	427.60

	Year Ended December 31					
	2010 Average Tariff(1)	2011 Average Tariff(1)	2012 Average Tariff(1)	2013 Average Tariff(1)	2014 Average Tariff(1)	2015 Approved Tariff(1)
Henan Province						
Qinbei Power Plant	379.68	412.75	441.43	437.01	435.42	417.10
Jiangsu Province						
Nantong Power Plant	409.06	425.97	441.25	435.69	436.00	429.00
Nanjing Power Plant	414.19	442.54	442.17	436.35	463.50	429.00
Taicang CCGT						
Phase I	415.37	424.09	430.43	432.81	419.19	432.00
Phase II	414.13	429.44	443.88	427.58	395.38	432.00
Huaiyin Power Plant						
Phase II	443.17	438.72	458.25	449.87	438.98	429.00
Phase III	443.17	438.72	458.25	449.87	438.98	429.00
Jinling Power Plant						
CCGT(2)	568.00	587.53	581.35	585.53	606.21	606.00
Coal-fired	430.00	417.99	427.34	428.38	408.24	429.00
CCGT Co-generation(2)	—	—	—	635.42	690.00	690.00
Qidong Wind Power						
Phases I	487.70	519.08	487.70	487.75	486.88	487.70
Phases II	—	—	610.00	610.03	609.35	610.00
Rudong Wind Power	—	—	—	610.00	610.00	610.00
Shanghai Municipality						
Shidongkou I	435.52	441.11	457.18	453.27	438.21	447.10
Shidongkou II	416.36	422.25	442.13	442.00	437.54	432.10
Shanghai CCGT(1)	415.32	445.00	457.11	486.74	551.48	554.00
Shidongkou Power	445.70	457.20	463.85	462.02	449.92	457.30
Chongqing Municipality						
Luohuang Power Plant						
Phases I, II	373.30	409.95	448.95	448.57	439.56	436.30
Phase III	388.30	411.91	448.95	448.57	440.90	436.30
Liangjiang CCGT	—	—	—	—	—	—
Zhejiang Province						
Yuhuan Power Plant	459.86	462.49	491.37	484.79	468.71	456.00
Tongxiang CCGT(2)	—	—	—	—	895.42	904.00
Changxing Power Plant	519.39	—	—	—	431.03	456.00
Hunan Province						
Yueyang Power Plant						
Phase I	433.09	467.74	506.75	504.31	496.56	492.00
Phase II	439.92	467.74	506.75	499.63	495.90	492.00
Phase III	—	461.98	507.03	508.31	494.20	492.00
Xiangqi Hydropower	—	—	390.00	390.00	410.00	410.00
Subaoding Wind Power	—	—	—	—	494.00	610.00
Hubei Province						
Enshi Maweigou Hydropower	—	437.03	360.00	356.96	366.59	360.00
Jiangxi Province						
Jinggangshan Power Plant						
Phase I	427.56	448.30	490.70	481.54	474.79	459.50

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Phase II	408.51	446.55	482.19	483.46	467.29	453.50
Jianggongling Wind Power	—	—	—	—	610.00	610.00
Fujian Province						
Fuzhou Power Plant	413.22	—	—	—	—	—
Phase I	—	426.56	455.89	446.22	445.43	443.40
Phase II	—	440.86	455.68	461.38	460.33	458.40
Phase III	—	415.49	435.93	430.33	431.75	435.90
Guangdong Province						
Shantou Power Plant						
Phase I	540.70	546.51	565.78	562.12	553.85	542.51
Phase II	496.20	501.76	521.31	520.71	509.35	500.00
Haimen	496.33	498.77	529.06	514.30	503.18	500.00
Haimen Power	—	—	—	—	479.55	500.00
Yunnan Province						
Diandong Energy	—	345.43	359.58	371.30	401.59	370.60
Diandong Yuwang	—	345.31	361.70	377.41	395.96	370.60
Wenbishan Wind Power	—	—	—	—	610.00	610.00

Notes:

- (1) The tariff of Shanghai CCGT is on-grid settlement price without capacity subsidy income.
- (2) The tariff of Jinling CCGT, Jinling Co-generation CCGT and Tongxiang CCGT is on-grid settlement price without generation right transfer income.

Power sales in Singapore

According to the latest available update from EMA, the total licensed capacity in commercial operation as of first half 2014 in Singapore was 12,521MW. In 2014, the peak demand for electricity was 6,849MW against 2013's 6,613MW. The power market in Singapore is competitive, and power generation companies compete to sell their power output into NEMS through a bidding process with hedging via vesting contracts and retail sales. For the year ended December 31, 2014, power sold through vesting contracts represented approximately 40% of total system demand. The existing Vesting Contract Scheme will roll back to 25% of total system demand by end of 2015. The decrease in allocated Vesting Contract volumes will have to be made up through increased retail sales, or otherwise, be translated into increased exposure to more volatile pool prices.

The volatility in the sales price of the revenue associated with the sale of electricity in the NEMS is effectively managed via vesting contracts and direct retail sales which is carried out through a Tuas Power's subsidiary. The effective tariffs Tuas Power received for its electricity output is thus largely dependent on the vesting contract prices and volumes as well as prices secured under retail sales. The gas-fired combined cycle units of Tuas Power enjoy advantages in the competitive bidding of the pool market given their relatively low cost and high efficiency. For the period from January 1, 2014 to December 31, 2014, power sold through vesting contracts and retail sales represented approximately all of Tuas Power's total power sold for the same period.

Utility sales in Singapore

With the commercial operation of the Phase I in March 2013 and the Phase IIA in June 2014, TMUC sold 1,824,638 MT of steam to customers in 2014, an increase of 54.4% as compared to 1,181,380 MT in 2013.

Fuel supply arrangements

In 2014, the majority of our power plants were fueled by coal, gas and oil.

Coal

Our coal supply for our coal-fired power plants is mainly obtained from numerous coal producers in Shanxi Province, Inner Mongolia Autonomous Region and Gansu Province. We also obtain coal from overseas suppliers.

For past years, as part of its efforts to make a transition from a comprehensive planned economy to a "socialist market economy", the PRC has experimented with a variety of methods of setting coal prices. In 1996, the government allowed coal prices to fluctuate within a range around a reference price for coal allocated under the State Plan to be used in electricity generation, and set maximum allowable prices in various coal-producing areas for coal used in electricity generation.

From 2002 to 2003, there was no longer an official State Plan for coal supplies, but the government continued to coordinate the coal prices at the annual national coal purchase conferences attended by, among others, representatives of each of power companies, coal suppliers, and the railway authorities and sponsored and coordinated by NDRC. Power companies obtain allocations for coal on a plant-by-plant basis. Each of the power plants then signs supply contracts with the coal suppliers, and with the railway and shipping companies for the amount of coal and transportation allocated to them. From 2004 to 2008, although such annual coal purchase conferences continue to be held, only key contracts are negotiated and executed at such conferences. Starting from 2009, in furtherance of the coal purchase reform, NDRC ceased to coordinate annual coal purchase conference and took measures to reduce government's involvement in the coal supply negotiation. NDRC will no longer make allocation of coal supply to power companies, but instead will consolidate and publish overall framework for the coal demand and supply. The

price and amount of coal supply will be determined based on the free negotiation between power companies, coal suppliers, and the railway authorities.

In 2010, the average coal price increased significantly. We purchased 114.82 million tons of coal and consumed 113.23 million tons of coal. Of our total coal purchases, 52.50% was purchased under the key contracts and the remainder was purchased in the open market. The coal purchase price for our Company, including transportation costs and miscellaneous expenses, averaged approximately RMB605.04 per ton. Our average unit fuel cost in 2010 increased by 14.72% from that in 2009.

In 2011, the average coal price increased significantly. We purchased 144.72 million tons of coal and consumed 144.07 million tons of coal. In 2011, we adjusted the thresholds of key contracts in accordance with the NDRC's catalogue and criteria. Of our total coal purchases, 26.13% was purchased under the key contracts and the remainder was purchased in the open market. The coal purchase price for our Company, including transportation costs and miscellaneous expenses, averaged approximately RMB637.22 per ton. Our average unit fuel cost in 2011 increased by 9.24% from that in 2010.

In 2012, the average coal price decreased significantly. We purchased 133.47 million tons of coal and consumed 133.93 million tons of coal. Of our total coal purchases, 28.1% was purchased under the key contracts and the remainder was purchased in the open market. The coal purchase price for our Company, including transportation costs and miscellaneous expenses, averaged approximately RMB598.27 per ton. Our average unit fuel cost in 2012 decreased by 7.6% from that in 2011.

In December 2012, the PRC Government issued a notice to further reform coal price, which mandated (1) the termination of all key coal purchase contracts between power generation companies and coal suppliers under the guidance of railway transportation capacity plan, and (2) the termination of the dual pricing system for coal pricing, from the beginning of 2013.

In 2013, as a result of the termination of the key contracts, coal prices in PRC fluctuated wildly. The Bohai-Rim Steam Coal Price Index (“BSPI”) decreased from RMB633 per ton in the beginning of 2013 to RMB530 per ton in early October 2013, and increased again to RMB631 per ton by the end of 2013. The coal purchase price for our Company, including transportation costs and miscellaneous expenses, averaged approximately RMB531.37 per ton. Our average unit fuel cost in 2013 decreased by 12.5% from that in 2012

In 2014, the average coal purchase price decreased significantly while the quality of the purchased coals saw marked improvement. We purchased 120.7 million tons of coal and consumed a total of 134.9 million tons of coal. Of our total coal purchases, 52% was purchased under annual contracting arrangements, and the remainder was purchased in the open market. The coal purchase price for our Company, including transportation costs and miscellaneous expenses, averaged approximately RMB494.86 per ton in 2014. Our average unit fuel cost in 2014 decreased by 7.96% from that in 2013.

Singapore’s Tuas Power used coal as primary fuel for its TMUC’s cogeneration plants. Coal is procured from coal producers in Indonesia via two long-term coal supply contracts with 10 years and 15 years term respectively. The prices are indexed to the Global Coal Newcastle Index.

Gas

Currently, the Company has seven Combined Cycle Gas Turbine Power Plants (“CCGT”) in China, including:

1. Huaneng Shanghai Combined Cycle Gas Turbine Power Plant (“Shanghai CCGT”) with gas supply transported through the pipeline of “West-East Gas Transport Project”;
2. Huaneng Jinling Combined Cycle Gas Turbine Power Plant (“Jinling CCGT”) with gas supply transported through the pipeline of “West-East Gas Transport Project”;
3. Huaneng Jinling Combined Cycle Gas Turbine Co-generation Power Plant (“Jinling CCGT Co-generation”) with gas supply transported through the pipeline of “West-East Gas Transport Project”;
4. The gas co-generation expansion project of Beijing Co-generation Power Plant (“Beijing Co-generation CCGT”) with gas supply transported through the pipeline of “Shaanxi-Gansu-Ningxia Transport Project”;
5. Huaneng Tongxiang Combined Cycle Gas Turbine Power Plant (“Tongxiang CCGT”), with gas supply transported through the pipeline of “West-East Gas Transport Project”;
6. Huaneng Chongqing Liangjiang Combined Cycle Gas Turbine Power Plant (“Liangjiang CCGT”) with gas supply transported through the pipeline of “West-East Gas Transport Project”; and
7. Huaneng Tianjin Lingang Combined Cycle Gas Turbine Co-generation Power Plant (“Lingang CCGT Co-generation”) with gas supply transported through the pipeline of “Shaanxi – Gansu – Ningxia Transport Project”.

Also, the Tuas Power in Singapore has five gas-fired combined cycle generating units and three gas-fired backup boilers. The piped gas for Tuas Power is provided by Pavilion Gas Pte Ltd and Sembcorp Gas Pte Ltd., whereas LNG is provided by BG Singapore Gas Marketing Pte Ltd.

Oil

Tuas Power maintains operation of one 600 MW oil-fired steam generating unit. The oil supply for Tuas Power is purchased from the open market. With the increased competition from new gas-fired CCPs, fuel oil consumption is expected to be marginal at best and therefore future purchases, if any, will be on a spot basis. Diesel, as backup fuel for oil-fired unites, is also purchased on a spot basis.

Repairs and maintenance

Each of our power plants has a timetable for routine maintenance, regular inspections and repairs. Such timetables and the procedures for the repairs and maintenance of generating units comply with the relevant regulations promulgated by the former Ministry of Electricity Power.

Pursuant to our procedures, generating units are currently operating on a cycle of four to six years. In each cycle, there are four different levels of maintenance:

- (i) regular checks and routine maintenance are carried out throughout the period during which generating unit is in operation;
- (ii) a small-scale servicing is performed every year, which takes approximately 20 days;
- (iii) a medium-scale check-up is carried out between the two overhauls, the length of which depends on the actual condition of the generating unit at the time of the check-up and the inspections and improvements to be carried out; and
- (iv) a full-scale overhaul is conducted at the end of each operating cycle, which takes approximately 60 days.

C. Organizational structure

We are 35.14% owned by HIPDC, which in turn is a subsidiary of Huaneng Group. Huaneng Group was established in 1988 with the approval of the State Council. Huaneng Group also holds a 14.87% equity interest in us besides HIPDC. In 2002, Huaneng Group was restructured as one of the five independent power generation group companies to take over the power generation assets originally belonging to the State Power Corporation of China. Huaneng Group has a registered capital of RMB20 billion and is controlled and managed by the central government. Huaneng Group is principally engaged in development, investment, construction, operation and management of power plants; organizing the generation and sale of power (and heat); and the development, investment, construction, production and sale of products in relation to energy, transportation, new energy and environmental protection industries.

HIPDC was established in 1985 as a joint venture with 67.75% of its equity interests directly owned by Huaneng Group. HIPDC is engaged in developing, investing, operating and constructing power plants in China. Some of the power plants currently owned and operated by us were originally built and later transferred to us by HIPDC. Both Huaneng Group and HIPDC have agreed to give us preferential rights in the power development business and power assets transfers. See “Item 7.A. Major shareholders” for details.

The following organizational chart sets forth the organizational structure of HIPDC and us as of March 31, 2015:

Notes:

- (1) Huaneng Group indirectly holds 100% equity interests in Pro-Power Investment Limited through its wholly owned subsidiary, China Hua Neng Hong Kong Company Limited, and Pro-Power Investment Limited in turn holds 5% equity interests in HIPDC. As a result, Huaneng Group indirectly holds additional 5% equity interests in HIPDC.
- (2) Of the 14.87% equity interest, 10.78% was directly held by Huaneng Group, 3.27% was held by Huaneng Group through its wholly owned subsidiary, China Hua Neng Hong Kong Company Limited, 0.04% was held by Huaneng Group through its wholly owned subsidiary, Huaneng Capital Services Company Limited, and the remaining approximately 0.77% was held by Huaneng Group through its subsidiary, China Huaneng Finance

Corporation Limited.

For a detailed discussion of the Company's subsidiaries, see Note 9 to the Financial Statements.

D. Property, plants and equipment

The following table presents certain summary information on our power plants as of March 31, 2015.

Plant or Expansion (Names as defined below)		Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
Liaoning Province						
Dalian Power Plant	Phase I	Unit I: Sep. 1988	2 x 350	100%	700	Coal
		Unit II: Dec. 1988				
	Phase II	Unit III: Jan. 1999	2 x 350	100%	700	Coal
		Unit IV: Jan. 1999				
Dandong Power Plant		Unit I: Jan. 1999	2 x 350	100%	700	Coal
		Unit II: Jan. 1999				
Yingkou Power Plant	Phase I	Unit I: Jan. 1996	2 x 320	100%	640	Coal
		Unit II: Dec. 1996				
	Phase II	Unit III: Aug. 2007	2 x 600	100%	1,200	Coal
		Unit IV: Oct. 2007				
Yingkou Co-generation		Unit I: Dec. 2009	2 x 330	100%	660	Coal
		Unit II: Dec. 2009				
Wafangdian Wind Power		24 turbines: Jun. 2011	48	100%	48	Wind
Changtu Taiping Wind Power		33 turbines: Nov. 2012	49.5	100%	49.5	Wind
Changtu Laocheng Wind Power		24 turbines: Oct. 2014	48	100%	48	Wind
Suzihe Hydropower		Unit I: Aug. 2012	1 x 12.5	100%	12.5	Hydro
		Unit II: Jun. 2012	1 x 12.5	100%	12.5	Hydro
		Unit III: Jun. 2012	1 x 12.5	100%	12.5	Hydro
Inner Mongolia Autonomous Region						
Huade Wind Power	Phase I	33 turbines: Dec. 2009	49.5	100%	49.5	Wind
	Phase II	33 turbines: Jun. 2011	49.5	100%	49.5	Wind
Hebei Province						
Shang' an Power Plant	Phase I	Unit I: Aug. 1990	2 x 350	100%	700	Coal
		Unit II: Dec. 1990				
	Phase II	Unit III: Oct. 1997	2 x 300	100%	600	Coal
		Unit IV: Oct. 1997				
	Phase III	Unit V: Jul. 2008	2 x 600	100%	1,200	Coal
		Unit VI: Aug. 2008				
Kangbao Wind Power	Phase I	33 turbines: Jan. 2011	49.5	100%	49.5	Wind
Gansu Province						

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Pingliang Power Plant	Unit I: Sep. 2000	3 x 325	65%	633.75	Coal
	Unit II: Jun. 2001				
	Unit III: Jun. 2003				
	Unit IV: Nov. 2003	1 x 330	65%	214.5	Coal
	Unit V: Feb. 2010	2 x 600	65%	780	Coal
	Unit VI: March 2010				
Jiuquan Wind Power	326 turbines: Dec. 2011	501.5	100%	501.5	Wind
Anbei Third Wind Power	100 turbines: Dec. 2014	200	100%	200	Wind
Beijing Municipality Beijing Co-generation	Unit I: Jan. 1998	2 x 165	41%	135.3	Coal
	Unit II: Jan. 1998				
	Unit III: Dec. 1998	2 x 220	41%	180.4	Coal
	Unit IV: Jun. 1999				
	Unit V: Apr. 2004	1 x 75	41%	30.75	Coal
Beijing Co-generation CCGT	Unit I: Dec. 2011	2 x 306.9	41%	251.66	Gas
	Unit II: Dec. 2011				
	Unit III: Dec. 2011	1 x 309.6	41%	126.94	Gas

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Plant or Expansion (Names as defined below)		Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
Tianjin Municipality						
Yangliuqing Co-generation		Unit I: Dec. 1998	4 x 300	55%	660	Coal
		Unit II: Sep. 1999				
		Unit III: Dec. 2006				
		Unit IV: May 2007				
Lingang Co-generation CCGT		Unit I: Dec. 2014	1 x 463	100	463	Gas
Shanxi Province						
Yushe Power Plant	Phase I	Unit I: Jun. 1994	2 x 100	60%	120	Coal
		Unit III: Dec. 1994				
	Phase II	Unit IV: Oct. 2004	2 x 300	60%	360	Coal
		Unit II: Nov. 2004				
Zuoquan Power Plant		Unit I: Dec. 2011	2 x 673	80%	1,076.8	Coal
		Unit II: Jan. 2012				
Shandong Province						
Dezhou Power Plant	Phase I	Units I: 1992	1 x 330	100%	330	Coal
		Unit II: 1992	1 x 320	100%	320	Coal
	Phase II	Units III: Jun. 1994	1 x 300	100%	300	Coal
		Unit IV: May 1995	1 x 320	100%	320	Coal
	Phase III	Units V: Jun. 2002	2 x 700	100%	1,400	Coal
		Unit VI: Oct. 2002				
Jining Power Plant	Coal-fired	Unit V: Jul. 2003	2 x 135	100%	270	Coal
		Unit VI: Aug. 2003				
	Co-generation	Unit I: Nov. 2009	2 x 350	100%	700	Coal
		Unit II: Dec. 2009				
Xindian Power Plant	Phase III	Unit V: Sep 2006	2 x 300	95%	570	Coal
		Unit VI: Nov. 2006				
Weihai Power Plant	Phase II	Units III: Mar. 1998	2 x 320	60%	384	Coal
		Unit IV: Nov. 1998				

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

	Phase III	Unit V: Dec. 2012	2 x 680	60%	816	Coal
		Unit VI: Dec. 2012				
Rizhao Power Plant	Phase I	Unit I: Apr. 2000	2 x 350	44%	308	Coal
		Unit II: Apr. 2000				
	Phase II	Unit III: Dec. 2008	2 x 680	100%	1,360	Coal
		Unit IV: Dec. 2008				
Zhanhua Co-generation		Unit I: Jul. 2005	2 x 165	100%	330	Coal
		Unit II: Jul. 2005				
Henan Province						
Qinbei Power Plant	Phase I	Unit I: Nov. 2004	2 x 600	60%	720	Coal
		Unit II: Dec. 2004				
	Phase II	Unit III: Nov. 2007	2 x 600	60%	720	Coal
		Unit IV: Nov. 2007				
	Phase III	Unit V: Mar. 2012	2 x 1000	60%	1,200	Coal
		Unit VI: Feb. 2013				
Jiangsu Province						
Nantong Power Plant	Phase I	Unit I: Sep. 1989	2 x 352	100%	704	Coal
		Unit II: Mar. 1990				
	Phase II	Unit III: Jul. 1999	2 x 350	100%	700	Coal
		Unit IV: Oct. 1999				
	Phase III	Unit V: Jan. 2014	1 x 1050	35%	367.5	Coal
Nanjing Power Plant		Unit I: Mar. 1994	2 x 320	100%	640	Coal
		Unit II: Oct. 1994				
Taicang Power Plant	Phase I	Unit I: Dec. 1999	2 x 320	75%	480	Coal
		Unit II: Apr. 2000				
	Phase II	Unit III: Jan. 2006	2 x 630	75%	945	Coal
		Unit IV: Feb. 2006				

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Plant or Expansion (Names as defined below)		Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
Huaiyin Power Plant	Phase II	Unit III: Jan. 2005	2 x 330	63.64%	420	Coal
		Unit IV: Mar. 2005				
	Phase III	Unit V: May 2006	2 x 330	63.64%	420	Coal
		Unit VI: Sep. 2006				
Jinling Power Plant	CCGT	Unit I: Dec. 2006 Unit II: Mar. 2007	2 x 390	60%	468	Gas
	CCGT Cogeneration	Unit I: April. 2013 Unit II: May. 2013	2 x 191	51%	194.82	Gas
Jinling Coal-fired		Unit III: Dec. 2009	2 x 1,030	60%	1,236	Coal
		Unit IV: Aug. 2012				
Qidong Wind Power	Phase I	61 turbines: Mar. 2009	91.5	65%	59.5	Wind
	Phase II	25 turbines: Jan. 2011	50	65%	32.5	Wind
		22 turbines: Jun. 2012	44	65%	28.6	Wind
Rudong Wind Power		24 turbines: Nov. 2013	48	90%	24.48	Wind
Suzhou Co-generation		Unit I: Aug. 2006 Unit II: Oct. 2006	2 x 60	53.45%	64.14	Coal
Shanghai Municipality Shidongkou I		Unit I: Feb. 1988 Unit II: Dec. 1988 Unit III: Sep. 1989 Unit IV: May 1990	4 x 325	100%	1,300	Coal
Shidongkou II		Unit I: Jun. 1992 Unit II: Dec. 1992	2 x 600	100%	1,200	Coal
Shidongkou Power		Unit I: Oct. 2011 Unit II: Oct. 2011	2 x 660	50%	660	Coal
Shanghai CCGT		Unit I: May 2006 Unit II: Jun. 2006 Unit III: Jul. 2006	3 x 390	70%	819	Gas
Chongqing Municipality Luohuang Power Plant	Phase I	Unit I: Sep. 1991 Unit II: Feb. 1992	2 x 360	60%	432	Coal

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

	Phase II	Unit III: Dec. 1998	2 x 360	60%	432	Coal
		Unit IV: Dec. 1998				
	Phase III	Unit V: Dec. 2006	2 x 600	60%	720	Coal
		Unit VI: Jan. 2007				
Liangjiang CCGT		Unit I: Oct. 2014	2 x 467	100%	934	Gas
		Unit II: Dec. 2014				
Zhejiang Province						
Changxing Power Plant		Unit I: Dec. 2014	2 x 660	100%	1320	Coal
		Unit II: Dec. 2014				
Yuhuan Power Plant	Phase I	Unit I: Nov. 2006	2 x 1,000	100%	2,000	Coal
		Unit II: Dec. 2006				
	Phase II	Unit III: Nov. 2007	2 x 1,000	100%	2,000	Coal
		Unit IV: Nov. 2007				
Tongxiang CCGT		Unit I: Sep. 2014	1 x 258.4	95%	245.48	Gas
		Unit II: Sep. 2014	1 x 200	95%	190	Gas
Si'an Photovoltaic		Unit I: December 2014	5	100%	5	Solar
Hunan Province						
Yueyang Power Plant	Phase I	Unit I: Sep. 1991	2 x 362.5	55%	398.75	Coal
		Unit II: Dec. 1991				
	Phase II	Unit III: Mar. 2006	2 x 300	55%	330	Coal
		Unit IV: May 2006				
	Phase III	Unit V: Jan. 2011	2 x 600	55%	660	Coal
		Unit VI: Aug. 2012				
Xiangqi Hydropower		Unit I: Dec. 2011	4 x 20	100%	80	Hydro
		Unit II: May 2012				
		Unit III: Jul. 2012				
		Unit IV: Aug. 2012				
Subaoding Wind Power		40 turbines: Dec. 2014	80	100%	80	Wind

Plant or Expansion (Names as defined below)		Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
Hubei Province						
Enshi Maweigou Hydropower		Unit I: Dec. 2011	3 x 5	100%	15	Hydro
		Unit II: Dec. 2011				
		Unit III: Dec. 2011				
Dalongtan Hydropower		Unit I: May 2006	3 x 12	97%	34.92	Hydro
		Unit II: Aug. 2005				
		Unit III: Mar. 2006				
Wuhan Power Plant	Phase I	Unit I: Jun. 1993	2 x 300	75%	450	Coal
		Unit II: Jan. 1994				
	Phase II	Unit III: May 1997	2 x 330	75%	495	Coal
		Unit IV: Dec. 1997				
	Phase III	Unit V: Oct. 2006	2 x 600	75%	900	Coal
		Unit VI: Dec. 2006				
Jingmen Co-generation		Unit I: Nov. 2014	2 x 350	100%	700	Coal
		Unit II: Oct. 2014				
Yingcheng Co-generation		Unit II: Feb. 2015	1 x 350	100%	350	Coal
Jiangxi Province						
Jinggangshan Power Plant	Phase I	Unit I: Dec. 2000	2 x 300	100%	600	Coal
		Unit II: Aug. 2001				
	Phase II	Unit III: Nov. 2009	2 x 660	100%	1,320	Coal
		Unit IV: Dec. 2009				
Jianggongling Wind Power		24 turbines: Dec. 2014	48	100%	48	Wind
Ruijin Power Plant		Unit I: May 2008	2 x 350	100%	700	Coal
		Unit II: Aug. 2008				
Anhui Province						
Chaohu Power Plant		Unit I: May 2008	2 x 600	60%	720	Coal
		Unit II: Aug. 2008				
Hualiangting Hydropower	Phase I	Unit I: Oct. 1981	2 x 10	100%	20	Hydro
		Unit II: Nov. 1981				
	Phase II	Unit III: Nov. 1987	2 x 10	100%	20	Hydro

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

		Unit IV: Nov. 1987				
Fujian Province						
Fuzhou Power Plant	Phase I	Unit I: Sep. 1988	2 x 350	100%	700	Coal
		Unit II: Dec. 1988				
	Phase II	Unit III: Oct. 1999	2 x 350	100%	700	Coal
		Unit IV: Oct. 1999				
	Phase III	Unit V: Jul. 2010	2 x 660	100%	660	Coal
Guangdong Province						
Shantou Power Plant	Phase I	Unit VI: Oct. 2011 Unit I: Jan. 1997	2 x 300	100%	600	Coal
		Unit II: Jan. 1997				
	Phase II	Unit III: Oct. 2005	1 x 600	100%	600	Coal
Haimen		Unit I: Jul. 2009	2 x 1,036	100%	2,072	Coal
		Unit II: Oct. 2009				
Haimen Power		Unit I: Mar. 2013	2 x 1,036	80%	1,657.6	Coal
		Unit II: Mar. 2013				
Yunnan Province						
Diandong Energy	Phase I	Unit I: Feb. 2006	2 x 600	100%	1,200	Coal
		Unit II: Jul. 2006				
	Phase II	Unit III: Nov. 2006	2 x 600	100%	1,200	Coal
		Unit IV: May 2007				
Yuwang Energy	Phase I	Unit I: Jul. 2009	2 x 600	100%	1,200	Coal
		Unit II: Feb. 2010				
Wenbisha Wind Power		20 turbines: Dec. 2014	40	100%	40	Wind
Hainan Province						
Haikou Power Plant		Unit IV: May 2000	2 x 138	91.8%	253.368	Coal
		Unit V: May 1999				
		Unit VIII: Apr. 2006	2 x 330	91.8%	605.88	Coal
		Unit IX: May 2007				
Dongfang Power Plant	Phase I	Unit I: Jun. 2009	2 x 350	91.8%	642.6	Coal
		Unit II: Dec. 2009				
	Phase II	Unit III: May 2012	2 x 350	91.8%	642.6	Coal
		Unit IV: Dec. 2012				
Nanshan Co-generation		Unit I: Apr. 1995	2 x 50	91.8%	91.8	Gas
		Unit II: Apr. 1995				
		Unit III: Oct. 2003	2 x 16	91.8%	29.370	Gas

		Unit IV: Oct. 2003				
Gezhen Hydropower		Unit I: Nov. 2009	2 x 40	91.8%	73.40	Hydro
		Unit II: Nov. 2009				
		Unit III: Dec. 2009	2 x 1	91.8%	1.836	Hydro
		Unit IV: Dec. 2009				
Wenchang Wind Power		33 turbines: Jan. 2009	49.5	91.8%	45.441	Wind
Singapore		Unit I: Mar. 1999	1 x 600	100%	600	Oil
Tuas Power		Unit III: Nov. 2001	4 x 367.5	100%	1,470	Gas
		Unit IV: Jan. 2002				
		Unit V: Feb. 2005				
		Unit VI: Sep. 2005				
		Unit VII: Dec. 2013	405.9	100%	405.9	Gas
TMUC	Phase I	Feb. 2013	1 x 101	100%	101	Coal & biomass
	Phase IIA	Jun. 2014	1 x 32.5	100%	32.5	Coal & biomass

The following table presents the availability factors and the capacity factors of our coal-fired operating power plants in China for the years ended December 31, 2012, 2013 and 2014.

Coal-fired Power Plant	Availability factor (%)			Capacity factor (%)		
	2012	2013	2014	2012	2013	2014
Liaoning Province						
Dalian	98.20	97.03	97.76	48.62	50.71	54.13
Dandong	94.96	96.77	95.89	52.08	50.79	52.14
Yingkou	94.21	92.05	94.16	48.67	45.42	49.64
Yingkou Co-generation	97.76	98.08	100	58.93	60.2	52.63
Hebei Province						
Shang'an	99.94	97.91	98.15	68.54	66.84	63.52
Gansu Province						
Pingliang	92.36	91.48	94.63	42.38	46.79	51.85
Beijing Municipality						
Beijing	93.01	95.13	94.48	62.46	59.53	54.79
Tianjin Municipality						
Yangliuqing	90.61	94.8	93.9	62.70	67.88	62.95
Shanxi Province						
Yushe	92.92	94.98	92.53	64.61	60.64	61.22
Zuoquan	92.88	91.69	92.93	56.16	56.67	50.88
Shandong Province						
Dezhou	95.19	95.51	97.01	65.66	65.87	64.46
Jining	88.84	95.74	92.03	58.78	59.43	55.56
Weihai	100.00	94.63	95.87	65.31	64.84	65.83
Xindian	100.00	90.94	87.15	69.51	61.92	62.83
Rizhao II	91.43	92.58	91.27	62.65	65.26	64.23
Zhanhua Co-generation	93.89	95.01	95.63	59.47	54.62	57.92
Henan Province						
Qinbei	95.51	95.12	92.85	62.80	60.47	50.92
Jiangsu Province						
Nantong	95.28	92.49	90.6	68.16	68.14	55.67
Nanjing	93.95	93.82	94.45	68.07	71.21	62.52
Taicang	93.31	98.09	99.99	69.93	74.41	65.2
Huaiyin	89.00	90.79	91.4	61.68	67.22	58.26
Jinling Coal-fired	95.21	89.49	88.66	76.20	72.72	64.1
Shanghai Municipality						
Shidongkou I	96.80	95.81	98.53	67.52	71.14	52.96
Shidongkou II	91.82	93.42	90.15	64.20	64.83	50.71
Chongqing Municipality						
Luohuang	88.72	93.57	94.84	52.57	63.21	48.21
Zhejiang Province						
Changxing	-	-	-	-	-	-
Yuhuan	93.08	92.76	95.45	68.64	72.07	63.22
Hunan Province						
Yueyang	95.21	99.99	99.97	43.55	45.02	39.27
Jiangxi Province						
Jinggangshan	94.74	92.59	95.03	52.42	57.69	50.5

Fujian Province						
Fuzhou	92.77	93.83	94.53	60.26	63.52	58.66
Guangdong Province						
Shantou	93.19	97.85	96.55	60.97	59.55	50.75
Haimen	94.75	96.1	96.99	68.84	55.76	53.09
Yunnan Province						
Diandong	93.07	94.25	94.92	40.36	35.8	28.32
Yuwang	96.81	93.92	95.36	47.25	43.31	34.88

Note:

(1) The details of our operating power plants, construction projects and related projects as of March 31, 2015 are described below.

Power Plants in Liaoning Province

Dalian Power Plant

Huaneng Dalian Power Plant (“Dalian Power Plant”) is located on the outskirts of Dalian, on the coast of Bohai Bay. Dalian Power Plant, including Phase I and Phase II, has an installed capacity of 1,400 MW and consists of four 350 MW coal-fired generating units which commenced operations in 1988 and 1999 respectively. We hold 100% equity interest in Dalian Power Plant.

The coal supply for Dalian Power Plant is obtained from several coal producers located mostly in Northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and shipped by special 27,000 ton automatic unloading ships to the wharf at the Dalian Power Plant. The wharf is owned and maintained by the Dalian Port Authority and is capable of handling 30,000 ton vessels. Dalian Power Plant typically stores 200,000 tons of coal on site.

In 2014, Dalian Power Plant obtained 84.4% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Dalian Power Plant in 2014 was RMB488.89 (2013: RMB525.33) per ton.

Dalian Power Plant sells its electricity to Liaoning Electric Power Company.

Dandong Power Plant

Huaneng Dandong Power Plant (“Dandong Power Plant”) is located on the outskirts of the city of Dandong in Liaoning. Dandong Power Plant had originally been developed by HIPDC which, pursuant to the Reorganization Agreement, transferred all its rights and interests therein to us effective December 31, 1994. In March 1997, we began the construction of Dandong Power Plant, which comprises two 350 MW coal-fired generating units. We hold 100% equity interest in Dandong Power Plant.

The coal supply for Dandong Power Plant is obtained from several coal producers in Northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and shipped by barge to the Dandong port in Dandong, where it is unloaded and transported to Dandong Power Plant using special coal handling facilities. The wharf is owned and maintained by Dandong Power Plant and is capable of handling 28,000 ton vessels. Dandong Power Plant typically stores 220,000 tons of coal on site.

In 2014, Dandong Power Plant obtained 37.6% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Dandong Power Plant in 2014 was RMB461.38(2013: RMB483.99) per ton.

Dandong Power Plant sells its electricity to Liaoning Electric Power Company.

Yingkou Power Plant

Huaneng Yingkou Power Plant (“Yingkou Power Plant”) is located in Yingkou City in Liaoning Province. Yingkou Power Plant Phase I has an installed capacity of 640 MW and consists of two 320 MW supercritical coal-fired generating units which commenced operations in January and December 1996, respectively. Yingkou Power Plant Phase II has an installed capacity of 1,200MW and consists of two 600 MW coal-fired generating units which commenced operations in August and October 2007, respectively. We hold 100% equity interest in Yingkou Power Plant.

The coal supply for Yingkou Power Plant is mainly obtained from Shanxi Province. Yingkou Power Plant typically stores 400,000 tons of coal on site. In 2014, Yingkou Power Plant obtained 70.6% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Yingkou Power Plant in 2014 was RMB482.94 (2013: RMB488.49) per ton.

Yingkou Power Plant sells its electricity to Liaoning Electric Power Company.

Yingkou Co-generation

Huaneng Yingkou Co-generation Power Plant (“Yingkou Co-generation”) is located in Yingkou City in Liaoning Province. Yingkou Co-generation Power Plant has an installed capacity of 660 MW and consists of two 330 MW generating units which commenced operation in December 2009. We hold 100% equity interest in Yingkou Co-generation Power Plant.

The coal supply for Yingkou Co-generation Power Plant is mainly obtained from Inner Mongolia Autonomous Region. Yingkou Co-generation Power Plant typically stores 140,000 tons of coal on site. In 2014, Yingkou Co-generation Power Plant obtained 97.7% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Yingkou Co-generation Power Plant in 2014 was RMB398.55 (2013: RMB393.77) per ton.

Yingkou Co-generation Power Plant sells its electricity to Liaoning Electric Power Company.

Wafangdian Wind Power

Dalian Wafangdian Wind Power Plant (“Wafangdian Wind Power”) is located in Dalian City in Liaoning Province. The installed capacity of phase I of Wafangdian Wind Power Plant is 48 MW and consists of 24 turbines. It commenced operation in June 2011. We hold 100% equity interest in Wafangdian Wind Power Plant.

Wafangdian Wind Power sells its electricity to Liaoning Electric Power Company.

Suzihe Hydropower

Liaoning Suzihe Hydropower Plant (“Suzihe Hydropower”) is located in Liaoning Province. The installed capacity of Suzihe Hydropower Plant is 37.5 MW and consists of three 12.5 MW generating units. Unit I (12.5 MW) of Suzihe Hydropower commenced operation in August 2012. We hold 100% equity interest in Suzihe Hydropower.

Changtu Taiping Wind Power

Huaneng Liaoning Changtu Taiping Wind Power Plant (“Changtu Taiping Wind Power”) is located in Liaoning Province. Phase I of the Changtu Taiping Wind Power commenced operation in November 2012, with an installed capacity of 49.5 MW, consisting of 33 wind power turbines of 1.5 MW each. We hold 100% of the equity interest in Changtu Taiping Wind Power.

Changtu Laocheng Wind Power

Huaneng Liaoning Changtu Laocheng Wind Power Plant (“Changtu Laocheng Wind Power”) is located in Liaoning Province. Changtu Laocheng Wind Power commenced operation in October 2014, with an installed capacity of 48 MW, consisting of 24 wind power turbines of 2 MW each. We hold 100% of the equity interest in Changtu Laocheng Wind Power.

Construction Project in Liaoning Province

Yingkou Xianrendao Co-generation Power Project. In December 2013, the project of Yingkou Xianrendao Co-generation Power Plant was approved by the Development and Reform Commission of Liaoning Province. We hold 100% equity interest in this project. The project is planned to have two sets of high temperature back-pressure turbo-generating units of 50 MW each.

Power Plant in Inner Mongolia Autonomous Region

Huade Wind Power

Huaneng Huade Wind Power Plant (“Huade Wind Power”) is located in Huade, Inner Mongolia Autonomous Region. Phase I of Huade Wind Power has an installed capacity of 49.5 MW and consists of 33 wind power turbines which commenced operation in 2009. Phase II of Huade Wind Power has an installed capacity of 49.5 MW and consists of 33 wind power turbines which commenced operation in June 2011. We hold 100% equity interest in Huade Wind Power Plant.

Huade Wind Power sells its electricity to Inner Mongolia Power (Group) Co., Ltd.

Power Plants in Hebei Province

Shang'an Power Plant

Huaneng Shang'an Power Plant ("Shang'an Power Plant") is located on the outskirts of Shijiazhuang. Shang'an Power Plant has been developed in three separate expansion phases. The Shang'an Power Plant Phase I has an installed capacity of 700 MW and consists of two 350 MW coal-fired generating units which commenced operations in 1990. Shang'an Power Plant Phase II shares with the Shang'an Power Plant Phase I certain facilities, such as coal storage facilities and effluence pipes, which have been built to accommodate the requirements of plant expansions. The Shang'an Power Plant Phase II utilizes two 300 MW coal-fired generating units, which commenced operation in 1997. The Shang'an Power Plant Phase III has an installed capacity of 1,200 MW and consists of two 600 MW supercritical coal-fired generating units which commenced operations in July and August 2008, respectively. Unit 5 of Shang'an Power Plant is the first 600MW supercritical air-cooling unit which commenced operation in the PRC. We hold 100% equity interest in Shang'an Power Plant.

The coal supply for Shang'an Power Plant is obtained from numerous coal producers in Central Shanxi Province, which is approximately 64 kilometers from Shang'an Power Plant. The coal is transported by rail from the mines to the Shang'an Power Plant. We own and maintain the coal unloading facilities which are capable of unloading 10,000 tons of coal per day. Shang'an Power Plant typically stores 300,000 tons of coal on site.

In 2014, Shang'an Power Plant obtained 88.6% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Shang'an Power Plant in 2014 was RMB442.91 (2013: RMB503.93) per ton.

Shang'an Power Plant sells its electricity to Hebei Electric Power Company.

Kangbao Wind Power

Huaneng Kangbao Wind Power Plant ("Kangbao Wind Power") consists of 33 wind power turbines with a total installed capacity of 49.5 MW. In January 2011, the Phase I of Kangbao Wind Power with a total generation capacity of 49.5MW completed the trial run. We hold 100% equity interest in Kangbao Wind Power.

Kangbao Wind Power sells its electricity to Beijing-Tianjin-Tanggu Electric Power Company.

Power Plant in Gansu Province

Pingliang Power Plant

Huaneng Pingliang Power Plant ("Pingliang Power Plant") is located in Pingliang City of Gansu Province. Pingliang Power Plant consists of three 325 MW and one 330 MW coal-fired generating units which commenced operation in 2000, 2001 and June and November 2003 respectively. The installed capacity of Unit I, Unit II and Unit III of Pingliang Power Plant were expanded from 300 MW to 325 MW in January 2010, respectively. The installed capacity of Unit IV of Pingliang Power Plant was expanded from 300 MW to 330 MW in January 2011. Pingliang Power Plant Phase II consists of two 600 MW generating units with a total installed capacity of 1200 MW, which commenced operation in February 2010 and March 2010, respectively. We hold 65% equity interest in Pingliang Power Plant.

The coal supply for Pingliang Power Plant is obtained from local coal mines. Pingliang Power Plant typically stores 230,000 tons of coal on site. In 2014, Pingliang Power Plant obtained 95.0% of its coal supplies from annual contracts and the remainder from the open market. The average coal purchase price for Pingliang Power Plant in 2014 was RMB358,47 (2013: RMB360.24) per ton.

Pingliang Power Plant sells its electricity to Gansu Electric Power Company.

Jiuquan Wind Power

Jiuquan Wind Power Plant ("Jiuquan Wind Power") consists of three wind power plants, Ganhekou Wind Power Plant II, Qiaowan Wind Power Plant II and Qiaowan Wind Power Plant III. It has 326 wind power turbines with a total installed capacity of 501.5 MW. In December 2011, all three wind power plants completed the trial run. We hold 100% equity interest in Jiuquan Wind Power.

Jiuquan Wind Power sells its electricity to Gansu Electric Power Company.

Anbei Third Wind Power

Anbei Third Wind Power Plant ("Anbei Third Wind Power") is located in Gansu Province. Part of this plant commenced operation in December 2014, with an installed capacity of 200 MW in operating, consisting of 100 wind power turbines of 2 MW each. We hold 100% equity interest in Anbei Third Wind Power.

Construction Projects in Gansu Province

Anbei Third Wind Power Plant . Anbei Wind Power Project was approved by China's National Development and Reform Commission in September 2012. We hold 100% equity interest in the Anbei Wind Power Project. The plant is planned to have an installed capacity of 400 MW, consisting of 200 wind power turbines of 2MW each, among which,

100 wind power turbines have commenced operation in December 2014.

48 MW Project of Beiyi Wind Power Plant. In September 2011, the Beiyi Wind Power Plant in Yumen Bridge Bay was approved by China's National Development and Reform Commission. We hold 100% equity interest in the plant. The plant is planned to have an installed capacity of 48 MW, consisting of 16 wind power turbines of 3MW.

Power Plant in Beijing Municipality

Beijing Co-generation

Huaneng Beijing Co-generation Power Plant ("Beijing Co-generation") is located in Beijing Municipality. Beijing Co-generation has an installed capacity of 845 MW and consists of two 165 MW generating units, two 220 MW generating units and one 75 MW generating units which commenced operation in January 1998, December 1998, June 1999 and April 2004, respectively. We hold 41% equity interest in Beijing Co-generation and believe we exercise effective control over Beijing Co-generation.

The coal supply for Beijing Co-generation is mainly obtained from Inner Mongolia Autonomous Region. Beijing Co-generation typically stores 165,000 tons of coal on site. In 2014, Beijing Co-generation obtained 89.5% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Beijing Co-generation in 2014 was RMB501.97 (2013: RMB551.32) per ton.

Beijing Co-generation sells its electricity to North China Electric Power Company.

Beijing Co-generation CCGT

Beijing Co-generation CCGT consists of one set of “two on one” F-grade gas and steam combined cycle generating units with a power generation capacity of 923.4 MW, heat supply capacity of 650 MW and heat supply area of approximately 13,000,000 square metres. High-standard denitrification, noise reduction, water treatment and other environmental protection facilities were constructed concurrently. In December 2011, Beijing Co-generation CCGT completed its trial run. Beijing Co-generation CCGT sells its electricity to North China Electric Company.

Being the first project commencing construction among the four major co-generation centers in Beijing, Beijing Co-generation CCGT firstly introduced the most efficient world-class F-grade gas turbine in the PRC, thus setting a new record of the maximum heat supply capacity, minimum power consumption for power generation and highest annual thermal efficiency for the same type of generating units in the PRC and attaining a leading and international class design standard in the PRC.

Power Plant in Tianjin Municipality

Yangliuqing Co-generation

Tianjin Huaneng Yangliuqing Co-generation Power Plant (“Yangliuqing Co-generation”) is located in Tianjin Municipality. Yangliuqing Co-generation has an installed capacity of 1,200 MW and consists of four 300 MW coal-fired co-generation units which commenced operation in December 1998, September 1999, December 2006 and May 2007, respectively. We hold 55% equity interest in Yangliuqing Co-generation.

The coal supply for Yangliuqing Co-generation is mainly obtained from Shanxi Province and Inner Mongolia Autonomous Region. Yangliuqing Co-generation typically stores 300,000 tons of coal on site. In 2014, Yangliuqing Co-generation obtained 88.0% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Yangliuqing Co-generation in 2014 was RMB458.42 (2013: RMB502.55) per ton.

Yangliuqing Co-generation sells its electricity to North China Electric Company.

Lingang Co-generation CCGT

Lingang Co-generation CCGT is located in Tianjin Municipality. The first set of generating units of Lingang Co-generation CCGT commenced operation in December 2014, with an installed capacity of 463 KW. We hold 100% equity interest in the Lingang Co-generation CCGT. The gas supply for Lingang Co-generation CCGT is transported through the pipeline of “Shannxi-Gansu-Ningxia Transport Project.”

Lingang Co-generation CCGT sells its electricity to North China Electric Company.

Power Plant in Shanxi Province

Yushe Power Plant

Huaneng Yushe Power Plant (“Yushe Power Plant”) is located in Yushe County of Shanxi Province. Yushe Power Plant Phase I has an installed capacity of 200 MW and consists of two 100 MW coal-fired generating units which commenced operations in August and December 1994, respectively. Two 300 MW coal-fired generating units of

Yushe Power Plant Phase II commenced operations in October and November 2004, respectively. Yushe Power Plant Phase I was shut down in 2011. We hold 60% equity interest in Yushe Power Plant.

The coal supply for Yushe Power Plant is obtained from several coal producers located mostly in Shanxi Province. Yushe Power Plant typically stores 500,000 tons of coal on site. In 2014, Yushe Power Plant obtained approximately 31.7% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Yushe Power Plant in 2014 was RMB 273.51 (2013: RMB328.53) per ton.

Yushe Power Plant sells its electricity to Shanxi Electric Power Company.

Zuoquan Power Plant

Shanxi Huaneng Zuoquan Power Plant (“Zuoquan Power Plant”) is located in Zuoquan County of Shanxi Province. Zuoquan Power Plant has an installed capacity of 1,346 MW and consists of two 673 MW coal-fired generating units which commenced operations in December 2011 and January 2012, respectively. We hold 80% equity interest in Zuoquan Power Plant.

Zuoquan Power Plant typically stores 200,000 tons of coal on site. In 2014, Zuoquan Power Plant obtained approximately 11.3% of its total consumption of coal from annual contracts and the remainders from the open market. The average coal purchase price for Zuoquan Power Plant in 2014 was RMB341.60 (2013: RMB396.58) per ton.

Zuoquan Power Plant sells its electricity to Shanxi Electric Power Company.

Construction Project in Shanxi Province

Taiyuan Dongshan 2×F Class Co-generation Power Project. The Taiyuan Dongshan 2×F Class Co-generation Power Project was approved by the Development and Reform Commission of Shanxi Province in May 2014. We hold 100% equity interest in the project. The project is planned to have an installed capacity of 859 KW, consisting of one 2×F Class gas-steam combined cycle co-generating unit.

Power Plants in Shandong Province

Dezhou Power Plant

Huaneng Dezhou Power Plant (“Dezhou Power Plant”) is located in Dezhou City, near the border between Shandong and Hebei Provinces, close to an industrial zone that is an important user of electric power for industrial and commercial purposes. Dezhou Power Plant is comprised of three phases, with Phase I consisting of one 320MW and one 330MW coal-fired generating units, Phase II consisting of two 300 MW coal-fired generating units, and Phase III consisting of two 700 MW coal-fired generating units. The installed capacity of Unit IV was upgraded from 300 MW to 320 MW in January 2009. We hold 100% equity interest in Dezhou Power Plant.

Dezhou Power Plant is approximately 200 km from Taiyuan, Shanxi Province, the source of the plant’s coal supply. The plant is located on the Taiyuan-Shijiazhuang-Dezhou rail line, giving it access to transportation facilities for coal. Dezhou Power Plant typically stores 400,000 tons of coal on site. In 2014, Dezhou Power Plant obtained approximately 73.2% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Dezhou Power Plant in 2014 was RMB497.30 (2013: RMB555.47) per ton. The plant is connected to the main trunk rail line at Dezhou by a dedicated 3.5 km spur line owned by us.

Dezhou Power Plant sells its electricity to Shandong Electric Power Company.

Jining Power Plant

Huaneng Jining Power Plant (“Jining Power Plant”) is located in Jining City, near the Jining load center and near numerous coal mines. Yanzhou coal mine, which is adjacent to the plant, alone has annual production of approximately 20 million tons. Jining Power Plant typically stores 100,000 tons of coal on site.

Jining Power Plant currently consists of two coal-fired generating units, with an aggregate installed capacity of 270 MW. In addition, Jining Power Plant (Co-generation) has an installed capacity of 700 MW and consists of two 350 MW generating units which commenced operation in November and December 2009, respectively. We hold 100% equity interest in Jining Power Plant.

In 2014, Jining Power Plant obtained approximately 33.4% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Jining Power Plant in 2014 was RMB482.55 (2013: RMB533.71) per ton.

Jining Power Plant sells its electricity to Shandong Electric Power Company.

Xindian Power Plant

Huaneng Xindian Power Plant (“Xindian Power Plant”) is located in Zibo City of Shandong Province. Xindian Power Plant has an installed capacity of 450 MW and consists of two 225 MW coal-fired generating units which commenced operations in December 2001 and January 2002, respectively, and were shut down in September 2009. Xindian Power

Plant Phase III Expansion consists of two 300 MW generating units with a total installed capacity of 600 MW, which were put into operation in September and November 2006, respectively. We hold 95% equity interest in Xindian Power Plant.

The coal supply for Xindian Power Plant is obtained from several coal producers located mostly in Shanxi Province. Xindian Power Plant typically stores 250,000 tons of coal on site. In 2014, Xindian Power Plant obtained 45.6% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Xindian Power Plant in 2014 was RMB491.23 (2013: RMB542.98) per ton.

Xindian Power Plant sells its electricity to Shandong Electric Power Company.

Weihai Power Plant

Huaneng Weihai Power Plant (“Weihai Power Plant”) is located approximately 16 km southeast of Weihai City, on the shore of the Bohai Gulf. Its location provides access to cooling water for operations and transportation of coal as well as ash and slag disposal facilities. We hold 60% equity interest in Weihai Power Plant, the remaining 40% interest of which is owned by Weihai Power Development Bureau (“WPDB”).

Weihai Power Plant Phase I consists of two 125 MW generating units (Units I and II), and Phase II consists of two 320 MW generating units (Units III and IV). Unit I began commercial operation in May 1994 and was shut down in December 2008, and Unit

II began commercial operation in January 1995 and was shut down in November 2008. Unit III and Unit IV commenced operation in March and November 1998, respectively. Each of the Units III and IV was upgraded from 300 MW to 320 MW in January 2009. Weihai Power Plant Phase III consists of two 680 MW generating units which commenced operations in December 2012. The coal supply for Weihai Power Plant is obtained from Shanxi Province and Inner Mongolia. Weihai Power Plant typically stores 160,000 tons of coal on site. In 2014, Weihai Power Plant obtained approximately 19.0% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Weihai Power Plant in 2014 was RMB496.83 (2013: RMB535.57) per ton.

Weihai Power Plant sells its electricity to Shandong Electric Power Company.

Rizhao Power Plant

Huaneng Rizhao Power Plant (“Rizhao Power Plant”) is located in Rizhao City of Shandong Province. Rizhao Power Plant currently has an aggregate installed capacity of 2,060 MW. Rizhao Power Plant Phase I has an installed capacity of 700 MW and consists of two 350 MW coal-fired generating units which both commenced operations in April 2000. We hold 44% equity interests in Phase I of Rizhao Power Plant.

We hold 100% equity interest in Phase II of Rizhao Power Plant, which commenced operation in December 2008 and consists of two 680 MW supercritical coal-fired generating units. The coal supply for Phase II of Rizhao Power Plant is obtained from Shanxi Province. Phase II of Rizhao Power Plant typically stores 200,000 tons of coal on site. In 2014, Phase II of Rizhao Power Plant obtained 3.43% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Phase II of Rizhao Power Plant in 2014 was RMB538.31 (2013: RMB570.52) per ton.

Rizhao Power Plant sells its electricity to Shandong Electric Power Company.

Zhanhua Co-generation

Shandong Zhanhua Co-generation Limited Company (“Zhanhua Co-generation”) is located in Zhanhua City of Shandong Province. Zhanhua Co-generation currently has an aggregate installed capacity of 330 MW, consisting of two generating units which commenced operations in July 2005. We hold 100% equity interest in Zhanhua Co-generation.

The coal supply for Zhanhua Co-generation is mainly obtained from Inner Mongolia Autonomous Region. Zhanhua Co-generation typically stores 90,000 tons of coal on site. In 2014, Zhanhua Co-generation obtained 58.0% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Zhanhua Co-generation in 2014 was RMB434.15 (2013: RMB490.48) per ton.

Zhanhua Co-generation sells its electricity to Shandong Electric Power Company.

Power Plant in Henan Province

Qinbei Power Plant

Huaneng Qinbei Power Plant (“Qinbei Power Plant”) is located in Jiyuan City of Henan Province. Its installed capacity is 2,400 MW which consists of four 600 MW supercritical coal-fired generating units. Two units commenced operations in November and December 2004, and the other two units commenced operation in November 2007. In March 2012 and February 2013, two 1,000 MW domestic ultra-supercritical coal-fired generating units of the Phase

III of Qinbei Power Plant commenced operation, respectively. We hold 60% equity interest in Qinbei Power Plant.

The coal supply for Qinbei Power Plant is obtained from Shanxi Province. Qinbei Power Plant typically stores 270,000 tons of coal on site. In 2014, Qinbei Power Plant obtained 79.9% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Qinbei Power Plant in 2014 was RMB495.59 (2013: RMB562.58) per ton.

Qinbei Power Plant sells its electricity to Henan Electric Power Company.

Construction Project in Henan Province

Mianchi Cogeneration Power Plant project. In September 2012, Henan Huaneng Mianchi Cogeneration Power Plant project was approved by the National Development and Reform Commission. The project is planned to consist of two sets of 350MW coal-fired cogeneration units. We hold 51% equity interest in this project.

Luoyang Cogeneration Power Plant project. The project is planned to consist of two sets of 350MW coal-fired generation units. We hold 51% equity interest in this project.

Power Plants and Projects in Jiangsu Province

Nantong Power Plant

Huaneng Nantong Power Plant (“Nantong Power Plant”) is located in Nantong City. Nantong Power Plant, including Phase I, Phase II and Phase III, has an installed capacity of 2,454 MW and consists of two 352 MW, two 350 MW and one 1,050 MW coal-fired generating units which commenced operations in 1989, 1990 1999 and 2014. We hold 100% equity interest in Phase I and Phase II of Nantong Power Plant and 35% equity interest in Phase III of Nantong Power Plant.

The coal supply for Nantong Power Plant is obtained from several coal producers located mostly in Northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and then shipped to the Nantong Power Plant. Nantong Power Plant typically stores 300,000 tons of coal on site.

In 2014, Nantong Power Plant obtained 60.7% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Nantong Power Plant in 2014 was RMB506.88 (2013: RMB545.84) per ton.

Nantong Power Plant sells its electricity to Jiangsu Electric Power Company.

Nanjing Power Plant

Huaneng Nanjing Power Plant (“Nanjing Power Plant”) has an installed capacity of 640 MW consisting of two 320 MW coal-fired generating units which commenced operations in March and October 1994, respectively. We hold 100% equity interest in Nanjing Power Plant.

The coal supply for the Nanjing Power Plant is obtained from several coal producers located in the Shanxi and Anhui Provinces. The coal is transported by rail from the mines to Yuxikou Port and Pukou Port and shipped to the plant’s own wharf facilities. The wharf is capable of handling 6,000 ton vessels. Nanjing Power Plant typically stores 120,000 tons of coal on site and consumes 5,000 tons of coal per day when operating at maximum generating capacity.

In 2014, Nanjing Power Plant obtained approximately 50.8% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Nanjing Power Plant in 2014 was RMB555.62 (2013: RMB614.05) per ton.

Nanjing Power Plant sells its electricity to Jiangsu Electric Power Company.

Taicang Power Plant

Huaneng Taicang Power Plant (“Taicang Power Plant”) is located in the vicinity of Suzhou, Wuxi and Changzhou, which is the most affluent area in Jiangsu Province. Taicang Power Plant is an ancillary facility of the China-Singapore Suzhou Industrial Park. Taicang Power Plant Phase I consists of two 300 MW coal-fired generating units, which commenced operations in December 1999 and April 2000 respectively. Taicang Phase II Expansion consists of two 600 MW coal-fired generating units, which commenced operations in January and February 2006, respectively. In April 2008, the installed capacities of the four units of Taicang Power Plant were upgraded to 320 MW, 320 MW, 630 MW and 630 MW, respectively, which increased the total installed capacity of Taicang Power Plant to 1,900 MW. We hold 75% equity interest in Taicang Power Plant.

The coal supply for Taicang Power Plant is primarily from Shenhua in Inner Mongolia and Datong in Shanxi Province. Taicang Power Plant typically stores 350,000 tons of coal on site. In 2014, Taicang Power Plant obtained approximately 25.8% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Taicang Power Plant in 2014 was RMB491.01 (2013: RMB505.13) per ton.

Taicang Power Plant sells its electricity to Jiangsu Electric Power Company.

Huaiyin Power Plant

Huaneng Huaiyin Power Plant (“Huaiyin Power Plant”) is located in the Center of the Northern Jiangsu Power Grid. The plant’s two 220 MW coal-fired generating units commenced operation in November 1993 and August 1994, respectively. In order to reduce energy consumption and increase capacity, one generating unit of Huaiyin Power Plant was upgraded in October 2001, which increased the maximum generating capacity of that unit to 220 MW. In 2002, upgrading of the second generating unit was completed, and the actual generating capacity of Huaiyin Power Plant is 440 MW. The other two 330 MW coal-fired generating units of Huaiyin Power Plant Phase II Expansion commenced operations in January and March 2005, respectively. Huaiyin Power Plant Phase III consists of two 330 MW coal-fired generating units, and which were put into operation in May and September 2006, respectively. We hold 100% equity interest in Phase I and 63.64% equity interest in Phase II and Phase III of Huaiyin Power Plant. Unit I and Unit II of Huaiyin Power Plant were shut down in December 2007 and January 2009, respectively.

The coal supply for the Huaiyin Power Plant is primarily from Anhui Province, Henan Province and Shanxi Province. Huaiyin Power Plant typically stores 180,000 tons of coal on site. In 2014, Huaiyin Power Plant obtained approximately 53.4% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Huaiyin Power Plant in 2014 was RMB556.52 (2013: RMB590.54) per ton.

Huaiyin Power Plant sells its electricity to Jiangsu Electric Power Company.

Jinling Power Plant

Huaneng Nanjing Jinling Power Plant (“Jinling Power Plant”) is located in Nanjing, Jiangsu. Jinling Power Plant (CCGT) consists of two 390 MW gas-fired generating units, which commenced operation in December 2006 and March 2007, respectively. We hold 60% equity interest in Jinling Power Plant (CCGT). The gas supply for Jinling Power Plant (CCGT) is transported through the pipeline of “West-East Gas Transport Project”.

Jinling Power Plant (Coal-fired) consists of two 1,030 MW domestic ultra-supercritical coal-fired generating units, which commenced operation in December 2009 and August 2012, respectively. We hold 60% equity interest in Phase I and Phase II of Jinling Power Plant (Coal-fired). The coal supply for Jinling Power Plant (Coal-fired) is primarily from Shanxi Province and Inner Mongolia Autonomous Region. Jinling Power Plant (Coal-fired) typically stores 300,000 tons of coal on site. In 2014, Jinling Power Plant (Coal-fired) obtained approximately 29.7% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Jinling Power Plant (Coal-fired) in 2014 was RMB532.62 (2013: RMB571.87) per ton.

Jinling Power Plant sells its electricity to Jiangsu Electric Power Company.

Qidong Wind Power

Huaneng Qidong Wind Power Plant (“Qidong Wind Power”) is located in Nantong City, Jiangsu. Qidong Wind Power Phase I has an installed capacity of 91.5 MW and commenced operation in March 2009. The first stage and second stage of the Phase II Project of Qidong Wind Power with a total generation capacity of 50 MW and 44 MW respectively commenced operation in January 2011 and June 2012, respectively. We hold 65% equity interest in Qidong Wind Power.

Qidong Wind Power Plant sells its electricity to Jiangsu Electric Power Company.

Jinling CCGT Co-generation

Jinling CCGT Co-generation is located in Nanjing, Jiangsu. The plant comprises of two 191 MW class (E grade) combined cycle gas turbine cogeneration units and the corresponding support facilities. The two units commenced operation in April 2013 and May 2013, respectively. We hold 51% equity interest in Jinling CCGT Co-generation. The gas supply for this plant is transported through the pipeline of “West-East Gas Transport Project”.

Jinling CCGT Co-generation sells its electricity to Jiangsu Electric Power Company.

Rudong Wind Power

Rudong Wind Power Plant (“Rudong Wind Power”) is located in Rudong, Jiangsu. Phase I of the plant has a total installed generation capacity of 48MW. It commenced operations in November 2013. We hold 65% equity interest in Rudong Wind Power .

Rudong Wind Power sells its electricity to Jiangsu Electric Power Company.

Suzhou Co-generation

Huaneng Suzhou Co-generation Power Plant (“Suzhou Co-generation”) is located in Suzhou City in Jiangsu Province. Suzhou Co-generation has an installed capacity of 120 MW and consists of two 60 MW coal-fired generating units which commenced operation in 2006. We hold 53.45% equity interest in Suzhou Co-generation. We acquired the

power plant in October, 2014 from Huaneng Group.

Suzhou Co-generation sells its electricity to Jiangsu Electric Power Company.

Taicang Coal Pier Project

Suzhou Port Taicang Terminal Zone Huaneng Coal Pier (“Taicang Coal Pier Project”) is located in Taicang, Suzhou. The Taicang Coal Pier Project has one berth of 100,000 dead weight tonnage (“DWT”) and one berth of 50,000 DWT for coal discharging, four berths of 5,000 DWT each and six berths of 1,000 DWT each for coal loading. The above facilities have commenced trial operation in 2013. We hold 100% equity interest in this project.

Construction Project in Jiangsu Province

Suzhou Gasfired Co-generation Project. In October 2012, Huaneng Suzhou gas-fired Co-generation Project was approval from the Jiangsu Province Development and Reform Commission. We hold 100% equity interest in this project. The Project is planned to consist of two sets of 255MW class (E-class) combined cycle gas turbine cogeneration units.

Nanjing Chemical Industry Park Co-generation Power Project. In October 2013, Nanjing Chemical Industry Park Co-generation Power Project was approved by the Development and Reform Commission of Jiangsu Province. We hold 80% equity interest in the project. The project is planned to have an installed capacity of 100 MW, consisting of three high temperature and pressure coal-fired boiler of 480t/h and two extraction back-pressure turbines of 50 MW.

Tongshan Wind Power Project. Tongshan Wind Power Project was approved by the Development and Reform Commission of Jiangsu Province in November 2014. We hold 70% equity interest in the project. Tongshan Wind Power Project is planned to have an installed capacity of 49.5 MW, consisting of 24 wind power turbines of 2 MW and one wind power turbines of 1.5 MW.

Luhe Wind Power Phase I Project. Luhe Wind Power Phase I Project was approved by the Development and Reform Commission of Jiangsu Province in December 2013. We hold 100% equity interest in the project. The Project is planned to have an installed capacity of 49.5 MW, consisting of 24 wind power turbines of 2 MW and one wind power turbines of 1.5 MW.

Power Plants in Shanghai Municipality

Shidongkou I

Huaneng Shanghai Shidongkou First Power Plant (“Shidongkou I”) is located in the northern region of the Shanghai Power Grid. The plant comprises four 325 MW coal-fired generating units, which commenced operation in February and December 1988, September 1989 and May 1990 respectively, and has a total installed capacity of 1,300 MW. The installed capacities of Unit II and Unit III were expanded from 300 MW to 325 MW in September 2007 and January 2008, respectively. The installed capacities of Unit I and Unit V were expanded from 300 MW and 320 MW to 325 MW and 325 MW in January 2010, respectively. We hold 100% equity interest in Shidongkou I.

The coal supply for Shidongkou I is primarily from Shanxi Province, Anhui Province and Henan Province. Shidongkou I Power Plant typically stores 150,000 tons of coal on site. In 2014, Shidongkou I obtained 12.7% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Shidongkou I in 2014 was RMB417.05 (2013: RMB455.53) per ton.

Shidongkou I sells its electricity to Shanghai Municipal Electric Power Company.

Shidongkou II

Huaneng Shanghai Shidongkou Second Power Plant (“Shidongkou II”) is located in the northern suburbs of Shanghai. Shidongkou II has an installed capacity of 1,200 MW and consists of two 600 MW coal-fired super-critical units which commenced operations in June and December 1992, respectively. We hold 100% equity interest in Phase I of Shidongkou II. Phase II of Shidongkou II has an installed capacity of 1,320 MW and consists of two 660 MW coal-fired super-critical units which commenced operations in October 2011. We hold 50% equity interest in Phase II of Shidongkou II.

The coal supply for Shidongkou II is obtained from several coal producers located mostly in Northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port or Tianjin port and shipped to the plant’s own wharf facilities. The wharf is capable of handling 35,000 ton vessels. Shidongkou II typically stores 180,000 tons of coal on site.

In 2014, Shidongkou II obtained 19.3% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Shidongkou II in 2014 was RMB484.76 (2013: RMB475.21) per ton.

Shidongkou II sells its electricity to Shanghai Municipal Electric Power Company.

Shanghai CCGT

Shanghai CCGT is located in Baoshan District of Shanghai Municipality. Shanghai CCGT consists of three 390 MW gas-fired combined-cycle generating units with a total installed capacity of 1,170 MW, which were put into operation in May, June and July 2006, respectively. We hold 70% equity interest in Shanghai CCGT.

The gas supply for Shanghai CCGT is transported through the pipeline of “West-East Gas Transport Project”. Shanghai CCGT generates electricity during the peak load periods and sells its electricity to Shanghai Municipal Electric Power Company.

Power Plant in Chongqing Municipality

Luohuang Power Plant

Huaneng Luohuang Power Plant (“Luohuang Power Plant”) is located in Chongqing Municipality. Each of Phase I and Phase II of Luohuang Power Plant has an installed capacity of 720 MW and consists of two 360 MW coal-fired generating units. The two units in Phase I commenced operation in September 1991 and February 1992 respectively, and the two units in Phase II commenced operation in December 1998. Luohuang Power Plant Phase III consist of two 600 MW coal-fired generating units with an installed capacity of 1,200 MW, which were put into operation in December 2006 and January 2007, respectively. We hold 60% equity interest in Luohuang Power Plant.

The coal supply for Luohuang Power Plant is obtained from Chongqing Municipality. Luohuang Power Plant typically stores 450,000 tons of coal on site. In 2014, Luohuang Power Plant obtained 72.1% of its coal supplies from annual contracts and the remainder from the open market. The average coal purchase price for Luohuang Power Plant in 2014 was RMB527.64 (2013: RMB537.73) per ton.

Luohuang Power Plant sells its electricity to Chongqing Municipal Electric Power Company.

Liangjiang CCGT

Liangjiang CCGT is located in Chongqing Municipality. Two generating units of this plant commenced operation in October and December 2014, respectively, with an installed capacity of 934 MW. We hold 100% equity interest in Liangjiang CCGT. The gas supply for Liangjiang CCGT is transported through pipeline of “West-East Gas Transport Project.”

Liangjiang CCGT sells its electricity to Chongqing Municipal Electric Power Company.

Power Plants in Zhejiang Province

Yuhuan Power Plant

Huaneng Yuhuan Power Plant (“Yuhuan Power Plant”) is located in Taizhou of Zhejiang Province. Yuhuan Power Plant Phase I consists of two 1,000 MW ultra-supercritical coal-fired generating units with a total installed capacity of 2,000 MW. Unit I and Unit II were put into operation in November 2006 and December 2006, respectively. Yuhuan Power Plant Phase II consists of two 1,000 MW ultra-supercritical coal-fired generating units with a total installed capacity of 2,000 MW, which commenced operations in November 2007. We hold 100% equity interest in Yuhuan Power Plant.

The coal supply for Yuhuan Power Plant is primarily obtained from Shanxi Province and Inner Mongolia Autonomous Region. Yuhuan Power Plant typically stores 500,000 tons of coal on site. In 2014, Yuhuan Power Plant obtained 46.1% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Yuhuan Power Plant in 2014 was RMB557.96 (2013: RMB615.59) per ton.

Yuhuan Power Plant sells its electricity to Zhejiang Electric Power Company.

Changxing “Replacing Small Units with Large Ones” Project

Changxing Power Plant “Replacing Small Units with Large Ones” Project is located in Changxing County of Zhejiang Province. Changxing “Replacing Small Units with Large Ones” Project commenced operation in December 2014, with an installed capacity of 1,320 MW. This is the first project of ultra-supercritical coal-fired generating units of the Company. We hold 100% equity interest in the project.

Tongxiang CCGT

Tongxiang CCGT is located in Tongxiang City of Zhejiang Province. The plant commenced operation in September 2014 with an installed capacity of 458.4 MW. We hold 95% equity interest in the Tongxiang CCGT. The gas supply for Tongxiang CCGT is transported through pipeline of “West-East Gas Transport Project.”

Tongxiang CCGT sells its electricity to Zhejiang Electric Power Company.

Si'an Photovoltaic

Si'an 10MW Distributed Photovoltaic Power Project (“Si'an Photovoltaic”) is located in Changxing County of Zhejiang Province. Part of the project commenced operation in December 2014, with an installed capacity of 5 MW. We hold 100% equity interest in Si'an Photovoltaic.

Power Plant in Hunan Province

Yueyang Power Plant

Huaneng Yueyang Power Plant (“Yueyang Power Plant”) is located in Yueyang City of Hunan Province. Yueyang Power Plant Phase I has an installed capacity of 725 MW and consists of two 362.5 MW sub-critical coal-fired generating units which commenced operation in September and December 1991 respectively. Yueyang Power Plant Phase II consists of two 300MW coal-fired generating units with installed capacity of 600 MW, which were put into operation in March and May 2006, respectively. Huaneng Yueyang Power Plant Phase III (“Yueyang Power Plant Phase III”) consists of two 600 MW generating units with a total installed capacity of 1,200 MW. In January 2011 and August 2012, Unit 5 and Unit 6 of Yueyang Power Plant Phase III, two 600MW coal-fired generating units, commenced operation, respectively. We hold 55% equity interest in Yueyang Power Plant.

The coal supply for Yueyang Power Plant is obtained from Datong in Shanxi Province. Yueyang Power Plant typically stores 500,000 tons of coal on site. In 2014, Yueyang Power Plant obtained 22.5% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Yueyang Power Plant in 2014 was RMB554.65 (2013: RMB604.30) per ton.

Yueyang Power Plant sells its electricity to Hunan Electric Power Company.

Xiangqi Hydropower

Huaneng Yongzhou Xiangqi Hydropower Station (“Xiangqi Hydropower”) is located in Xiangqi County of Hunan Province. Xiangqi Hydropower consists of four 20 MW hydraulic generating units with a total installed capacity of 80 MW. In December 2011, Unit I of Xiangqi Hydropower with an installed capacity of 20 MW passed a trial run. Unit I and Unit II of Yongzhou Xiangqi Hydropower with an installed capacity of 20 MW each commenced operation in December 2011 and May 2012, respectively. Unit III and Unit IV of Xiangqi Hydropower with an installed capacity of 20 MW commenced operation in May and August 2012, respectively. We hold 100% equity interest in Xiangqi Hydropower.

Xiangqi Hydropower sells its electricity to Hunan Electric Power Company.

Subaoding Wind Power

Subaoding Wind Power is located between Hongjiang City and Dongkou County in Hunan. Part of the Subaoding Wind Power commenced operation in December 2014, with an installed capacity of 80MW, consisting of 40 wind power turbines of 2 MW. We hold 100% equity interest in the Subaoding Wind Power.

Construction Projects in Hunan Province

Subaoding Wind Power Plant. Subaoding Wind Power Plant was approved by the Development and Reform Commission of Hunan Province in June 2013. We hold 100% equity interest in the project. The project is planned to have an installed capacity of 150MW, consisting of 75 wind power turbines of 2 MW, among which, 40 wind power turbines have commenced operation with an installed capacity of 80 MW.

Guidong Hankou Wind Power Plant. Guidong Hankou Wind Power Plant Project was approved by the Development and Reform Commission of Hunan Province. We hold 100% equity interest in the project. The project is planned to have an installed capacity of 48 MW, consisting of 24 wind power turbines of 2 MW.

Guidong Huangni Lake Wind Power Plant. Guidong Huangni Lake Wind Power Plant was approved by the Development and Reform Bureau of Guidong County of Hunan Province. We hold 100% equity interest in the project. The project is planned to have an installed capacity of 36 MW, consisting of 18 wind power turbines of 2 MW.

Power Plant in Hubei Province

Enshi Maweigou Hydropower

Hubei Enshi Maweigou Hydropower Station (“Enshi Maweigou Hydropower”) is located in Enshi City of Hubei Province. We entered into an equity transfer agreement to acquire Enshi Maweigou Hydropower on September 30, 2011. Enshi Maweigou Hydropower is planned to consist of eleven 5 MW hydraulic generating units with a total installed capacity of 55 MW. In December 2011, an installed capacity of 15 MW of Enshi Maweigou Hydropower commenced operation. We hold 100% equity interest in Enshi Maweigou Hydropower.

Enshi Maweigou Hydropower sells its electricity to Hubei Electric Power Company.

Wuhan Power Plant

Huaneng Wuhan Power Plant (“Wuhan Power Plant”) is located in Wuhan City in Hubei Province. Wuhan Power Plant has an installed capacity of 2,460 MW and consists of two 300 MW coal-fired generating units which commenced operation in 1993 and 1994, two 330 MW coal-fired generating units which commenced operation in 1997, and two

600 MW coal-fired generating units which commenced operation in 2006. We hold 75% equity interest in Wuhan Power Plant. We acquired the power plant in October, 2014 from Huaneng Group.

Wuhan Power Plant sells its electricity to Hubei Electric Power Company.

Dalongtan Hydropower

Huaneng Dalongtan Hydropower Station (“Dalongtan Hydropower”) is located in Enshi City of Hubei Province. Dalongtan Hydropower has an installed capacity of 37.6 MW. We hold 97% equity interest in Dalongtan Hydropower. We acquired the power plant in October, 2014 from Huaneng Group.

Dalongtan Hydropower sells its electricity to Hubei Electric Power Company.

Jingmen Co-generation

Huaneng Jingmen Co-generation Power Plant (“Jingmen Co-generation”) is located in Jingmen City in Hubei Province. Jingmen Co-generation has an installed capacity of 700 MW and consists of two 350 MW coal-fired generating units which commenced operation in 2014. We hold 100% equity interest in Jingmen Co-generation. We acquired the power plant in October, 2014 from HIPDC.

Jingmen Co-generation sells its electricity to Hubei Electric Power Company.

Yingcheng Co-generation

Huaneng Yingcheng Co-generation Power Plant (“Yingcheng Co-generation”) is located in Yingcheng City in Hubei Province. Yingcheng Co-generation has an installed capacity of 350 MW which commenced operation in 2015. We hold 100% equity interest in Yingcheng Co-generation. We acquired the power plant in October, 2014 from HIPDC.

Yingcheng Co-generation sells its electricity to Hubei Electric Power Company.

Construction Projects in Hubei Province

Enshi Qinglong Hydropower Project. We entered into an equity transfer agreement in September 2011 to purchase the Enshi Qinglong Hydropower Project. We hold 100% equity interest in the project. The project is planned to have an installed capacity of 40 MW, consisting of two hydropower generator of 20 MW.

Suixian Jieshan Wind Power Plant (“Jieshan Phase I”). Suixian Jieshan Wind Power Plant was approved by the Development and Reform Commission of Hubei Province in December 2013. We hold 100% equity interest in the project. The project is planned to have an installed capacity of 48 MW, consisting of 24 wind power turbines of 2 MW.

Power Plant in Jiangxi Province

Jinggangshan Power Plant

Huaneng Jinggangshan Power Plant (“Jinggangshan Power Plant”) is located in Ji’an City of Jiangxi Province. Jinggangshan Power Plant has an installed capacity of 1,920 MW and consists of two 300 MW coal-fired generating units which commenced operation in December 2000 and August 2001 respectively, and two 660 MW generating units which commenced operation in November and December 2009, respectively. We hold 100% equity interest in Jinggangshan Power Plant.

The coal supply for Jinggangshan Power Plant is obtained from Henan Province, Anhui Province and Jiangxi Province. Jinggangshan Power Plant typically stores 255,000 tons of coal on site. In 2014, Jinggangshan Power Plant obtained 56.3% of its total coal consumption from annual contracts and the remainder from the open market. The average coal purchase price for Jinggangshan Power Plant in 2014 was RMB631.58 (2013: RMB669.05) per ton.

Jinggangshan Power Plant sells its electricity to Jiangxi Electric Power Company.

Jianggongling Wind Power

Jianggongling Wind Power Plant (“Jianggongling Wind Power”) is located in Jiujiang Municipality of Jiangxi Province. Jianggongling Wind Power commenced operation in December 2014, with an installed capacity of 48 MW, consisting of 24 wind power turbine of 2 MW. We hold 100% equity interest in the Jianggongling Wind Power.

Ruijin Power Plant

Huaneng Ruijin Power Plant (“Ruijin Power Plant”) is located in Ruijin City in Jiangxi Province. Ruijin Power Plant has an installed capacity of 700 MW and consists of two 350 MW coal-fired generating units which commenced operation in 2008. We hold 100% equity interest in Ruijin Power Plant. We acquired the power plant in October, 2014 from HIPDC.

Ruijin Power Plant sells its electricity to Jiangxi Electric Power Company.

Construction Project in Jiangxi Province

Anyuan Power Plant in Pingxiang City, Jiangxi Province. We acquired 100% equity interest of the power plant in October, 2014 from HIPDC. The Power plant is planned to have an installed capacity of 1200 MW, consisting of two 600 MW coal-fired generating units.

Power Plant in Anhui Province

Chaohu Power Plant

Huaneng Chaohu Power Plant (“Chaohu Power Plant”) is located in Chaohu City in Anhui Province. Chaohu Power Plant has an installed capacity of 1200 MW and consists of two 600 MW coal-fired generating units which commenced operation in 2008. We hold 100% equity interest in Chaohu Power Plant. We acquired the power plant in October, 2014 from HIPDC.

Chaohu Power Plant sells its electricity to Anhui Electric Power Company.

Hualiangting Hydropower

Huaneng Hualiangting Hydropower Plant (“Hualiangting Hydropower”) is located in Anqing City in Anhui Province. Hualiangting Hydropower has an installed capacity of 40 MW which commenced operation in 1981 and 1987. We hold 100% equity interest in Hualiangting Hydropower. We acquired the power plant in October, 2014 from Huaneng Group.

Hualiangting Hydropower sells its electricity to Anhui Electric Power Company.

Construction Project in Anhui Province

Shijing Wind Power Plant in Huaining County. The project of Shijing Wind Power Plant in Huaining County was approved by the Development and Reform Commission of Anhui Province. We hold 100% equity interest of the project. The project is planned to have an installed capacity of 50 MW, consisting of 25 wind power turbines of 2 MW.

Power Plant in Fujian Province

Fuzhou Power Plant

Huaneng Fuzhou Power Plant (“Fuzhou Power Plant”) is located on the south bank of the Min River, southeast of the city of Fuzhou. Fuzhou Power Plant has been developed in three phases. The Fuzhou Power Plant Phase I and Phase II utilize four 350 MW coal-fired generating units with an installed capacity of 1,400 MW, and commenced operations in 1988 and 1999, respectively. The Fuzhou Power Plant Phase III consists of two 600 MW generating units with a total installed capacity of 1,200 MW, and commenced operations in 2010 and 2011, respectively. The capacity of Unit V and Unit VI of the Fuzhou Power Plant Phase III was expanded to 660 MW per unit since January 2012. We hold 100% equity interest in Fuzhou Power Plant.

The coal supply for Fuzhou Power Plant is obtained from several coal producers located mostly in Northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and by ship down to the east coast of China and up to the Min River to a wharf located at Fuzhou Power Plant. We own and maintain the wharf, which is capable of handling vessels of up to 20,000 tons and of unloading 10,000 tons to 15,000 tons of coal per day. Fuzhou Power Plant typically stores 180,000 tons of coal on site.

In 2014, the Fuzhou Power Plant obtained 22.9% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Fuzhou Power Plant in 2014 was RMB529.91 (2013: RMB586.87) per ton.

Fuzhou Power Plant sells its electricity to Fujian Electricity Power Company.

Construction Project in Fujian Province

Jiangjunmao Operating Zone Phase I Project in the Port of Fuzhou Luoyuan Bay Area. Jiangjunmao Operating Zone Phase I Project in the Port of Fuzhou Luoyuan Bay Area was approved by the NDRC. We entered into an asset transfer agreement in December 2009 to purchase the Jiangjunmao Operating Zone Phase I Project in the Port of Fuzhou Luoyuan Bay Area. We hold 100% equity interest in the project. The project is planned to build a dock with a loading capacity of 0.15 million tons and annual throughput of 10 million tons.

The Project of Bili Operating Zone Number Six Ship Berth in the Port of Fuzhou Luoyuan Bay Area. The Project of Bili Operating Zone Number Six Ship Berth in the Port of Fuzhou Luoyuan Bay Area was approved by the Development and Reform Commission of Fujian Province in July 2010. We entered into an asset transfer agreement in December 2009 to purchase the Project of Bili Operating Zoon Number Six Ship Berth in the Port of Fuzhou Luoyuan Bay Area. We hold 100% equity interest in the project. The project is planned to build a ship berth with a loading capacity of 0.05 million tons and annual throughput of 2.3 million tons. Power Plants in Guangdong Province

Power Plants in Guangdong Province

Shantou Power Plant

Huaneng Shantou Coal-Fired Power Plant (“Shantou Power Plant”) had originally been developed and constructed by HIPDC which transferred all its rights and interests therein to us effective on December 31, 1994. Located on the outskirts of the city of Shantou, Shantou Power Plant was set up with the support of the Shantou municipal government and the Guangdong provincial government. Shantou Power Plant Phase I consists of two 300 MW coal-fired generating units with boilers, which commenced operation in January 1997. Shantou Power Plant Phase II consists of one 600 MW coal-fired generating unit and commenced operation in October 2005. We hold 100% equity interest in Shantou Power Plant.

The coal supply for Shantou Power Plant is obtained from several coal producers located mostly in the northern area of Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and by ship down the east coast of China to the wharf located at Shantou Power Plant, which is maintained by the Shantou Port Authority and is capable of handling 35,000 ton vessels. The Shantou Power Plant typically stores 300,000 tons of coal on site.

In 2014, the Shantou Power Plant obtained 26.8% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Shantou Power Plant in 2014 was RMB516.82 (2013: RMB579.67) per ton.

Shantou Power Plant sells its electricity to Guangdong Electric Power Company.

Haimen Power Plant

Huaneng Haimen Power Plant (“Haimen Power Plant”) is located in Shantou City, Guangdong Province. Haimen Power Plant has an installed capacity of 4,144 MW and consists of four 1,036 MW generating units. The first two generating units commenced operation in July 2009 and October 2009, respectively. We hold 100% equity interest in the first two generating units. The other two generation units commenced operation at the beginning of 2013. We hold 80% equity interest in the other two generating units.

The coal supply for Haimen Power Plant is mainly imported from Indonesia. Haimen Power Plant typically stores 400,000 tons of coal on site. In 2014, Haimen Power Plant obtained 40.4% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Haimen Power Plant in 2014 was RMB530.99 (2013: RMB558.60) per ton.

Haimen Power Plant sells its electricity to Guangdong Electric Power Company.

Construction Project in Guangdong Province

Shantou Port Haimen Terminal Zone Huaneng Coal Transit Base Project. Shantou Port Haimen Terminal Zone Huaneng Coal Transit Base Project (“Haimen Terminal Project”) was approved by the NDRC in February 2012. Currently, we hold 100% equity interest in this project. Haimen Terminal Project is planned to transform and newly construct a 70,000 DWT coal unloading berth, a 50,000 DWT coal loading berth and a 3,000 DWT multi-purpose berth, with a planned annual throughput capacity of 22.7 million tons, including ship unloading capacity of 21.5 million tons and ship loading capacity of 1.2 million tons.

Power Plants in Yunnan Province

Diandong Energy

Yunnan Diandong Energy Limited Company (“Diandong Energy”) is located in Qujing City, Yunnan Province. Diandong Energy has an installed capacity of 2,400 MW and consists of four 600 MW generating units which commenced operation in February 2006, July 2006, November 2006 and May 2007, respectively. We hold 100% equity interest in Diandong Energy.

The coal supply for Diandong Energy is mainly obtained from Yunnan and Guizhou Provinces. Diandong Energy typically stores 1,200,000 tons of coal on site. In 2014, Diandong Energy obtained 18.8% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price for Diandong Energy in 2014 was RMB468.62 (2013: RMB469.18) per ton.

Diandong Energy sells its electricity to Yunnan Electric Power Company.

Yuwang Energy

Yunnan Diandong Yuwang Energy Limited Company (“Yuwang Energy”) is located in Qujing City, Yunnan Province. Yuwang Energy has an installed capacity of 1,200 MW and consists of two 600 MW generating units which commenced operation in July 2009 and February 2010, respectively. We hold 100% equity interest in Yuwang Energy.

The coal supply for Yuwang Energy is mainly obtained from Yunnan and Guizhou Provinces. Yuwang Energy typically stores 600,000 tons of coal on site. In 2014, Yuwang Energy obtained 56.8% of its total consumption of coal from annual contracts and the remainder from the open market. The average coal purchase price of coal for Yuwang Energy in 2014 was RMB454.56 (2013: RMB456.19) per ton.

Yuwang Energy sells its electricity to Yunnan Electric Power Company.

Wenbishaan Wind Power

Wenbishaan Wind Power Plant (“Wenbishaan Wind Power”) is located in the Fuyuan County of Qujing Municipality of Yunnan Province. Wenbishaan Wind Power commenced operation in November 2014, with an installed capacity of 40 MW, consisting of 20 wind power turbines of 2 MW each. We hold 100% equity interest in the Wenbishaan Wind Power.

Construction Project in Yunnan Province

Yunnan Chuxiong Gas Co-generation Project. Huaneng Yunnan Chuxiong Gas Co-generation Project (“Yunnan Chuxiong Project”), which is wholly owned by us, was approved by the Development and Reform Commission of the Yunnan Province in February 2012. We hold 100% equity interest in this project. Yunnan Chuxiong Project is planned to build two 300 MW class combined cycle gas turbine cogeneration units.

Diandong Mine Project. Diandong Mine Project consists of Bailongshan Coal Mine and Yuwang Coal Mine with an area of approximately 131.4 square kilometers. It has a recoverable reserve of approximately 1.788 billion tons. Diandong Mine Project is planned to commence operation gradually from 2014 to 2018, with an aggregate planned production capacity of approximately 6.0 million tons per year.

Power Plants in Hainan Province

Haikou Power Plant

Huaneng Haikou Power Plant (“Haikou Power Plant”) is located in Haikou City in Hainan Province. Haikou Power Plant has an installed capacity of 936 MW and consists of two 138 MW coal-fired generating units which commenced operation in 1999, 2000, and two 330 MW coal-fired generating units which commenced operation in 2006. We hold 91.8% equity interest in Haikou Power Plant. We acquired the power plant in October, 2014 from Huaneng Group.

Haikou Power Plant sells its electricity to Hainan Electric Power Company.

Dongfang Power Plant

Huaneng Dongfang Power Plant (“Dongfang Power Plant”) is located in Dongfang City in Hainan Province. Dongfang Power Plant has an installed capacity of 1400 MW and consists of four 350 MW coal-fired generating units which commenced operation in 2009, 2012. We hold 91.8% equity interest in Dongfang Power Plant. We acquired the power plant in October, 2014 from Huaneng Group.

Dongfang Power Plant sells its electricity to Hainan Electric Power Company.

Nanshan Co-generation

Huaneng Nanshan Co-generation Power Plant (“Nanshan Co-generation”) is located in Sanya City in Hainan Province. Nanshan Co-generation has an installed capacity of 132 MW which commenced operation in 2003. We hold 91.8% equity interest in Nanshan Co-generation. We acquired the power plant in October, 2014 from Huaneng Group.

Nanshan Co-generation sells its electricity to Hainan Electric Power Company.

Gezhen Hydropower Plant

Huaneng Gezhen Hydropower Plant (“Gezhen Hydropower Plant”) is located in Dongfang City in Hainan Province. Gezhen Hydropower Plant has an installed capacity of 82 MW which commenced operation in 2009. We hold 91.8% equity interest in Gezhen Hydropower Plant. We acquired the power plant in October, 2014 from Huaneng Group.

Gezhen Hydropower Plant sells its electricity to Hainan Electric Power Company.

Wenchang Wind Power

Huaneng Wenchang Wind Power Plant (“Wenchang Wind Power”) is located in Wenchang City in Hainan Province. Wenchang Wind Power has an installed capacity of 49.5 MW and consists of 33 turbines with each capacity of 1.5 MW which commenced operation in 2008. We hold 91.8% equity interest in Wenchang Wind Power. We acquired the power plant in October, 2014 from Huaneng Group.

Wenchang Wind Power sells its electricity to Hainan Electric Power Company.

Construction Project in Guangxi Province

Distribution Energy Project of Guilin World Tourism City. Distribution Energy Project of Guilin World Tourism City was approved by the Development and Reform Commission of Guangxi Autonomous. We hold 100 % equity interest in the project. The project is planned to have an installed capacity of 237 MW, consisting of four co-generating units of 42 MW, three dual pressure waste-heat boilers, three condensing turbo-generating units of 21 MW and one back-pressure turbo-generating unit of 6 MW.

Power Plant in Singapore

Tuas Power

With a licensed generating capacity of 2,670MW, Tuas Power is one of the three largest power generation companies in Singapore. It currently has an installed operation generating capacity of 2,609MW, comprising of 1,876 MW gas-fired combined cycle generating units, 133 MW of coal-biomass fired steam turbine generating units and 600 MW of oil-fired steam generating unit.

Supply of coal is procured from coal producers in Indonesia via two long-term coal supply contracts with 10 years and 15 years term respectively. Supply of gas is obtained from Pavilion Gas Pte Ltd, Sembcorp Gas Pte Ltd and BG Singapore Gas Marketing Pte Ltd. Oil supply, if required, is obtained through the spot market.

Competition and Dispatch

All power plants in China are subject to dispatch conducted by various dispatch centers. A dispatch center is required to dispatch electricity pursuant to the Regulations on the Administration of Electric Power Dispatch Networks and Grids, issued by the State Council with effect from November 1, 1993, and in accordance with its agreements with power plants subject to its dispatch. Power generation companies are also required to enter into on-grid dispatch agreements with power grid companies. As a result, there is competition for favorable dispatch treatment in the PRC electric power industry, especially during the off-peak load periods. More efficient power plants usually operate at higher output than less efficient power plants. We believe that in order to increase system stability, large and efficient power plants such as ours will be preferred as base load plants to generate power for the grids to which they connect. We believe that our dispatch arrangements with the local power corporations and dispatch centers, superior quality equipment, lower coal consumption rate, higher efficiency of plant operation, lower emission levels and larger capacity represent competitive advantages in the markets in which we operate.

Since 2002, we have been facing competition from four other major power generation groups: China Power Investment Corporation, China Huadian Power Corporation, China Guodian Power Corporation and China Datang Power Corporation, which were created following the break-up of the former State Electric Corporation in 2002. Although we were not affected by this reform measure, as we have developed good working relationship with the dispatch centers and the relevant government departments in the areas where our power plants are located, there can be no assurance that such good working relationships will not be adversely affected as more power generation companies compete for favorable dispatch treatment.

As power generation companies were separated from power grid companies and more competitors entered into the market, the SERC issued the Interim Measures Regarding Promotion of Openness, Fairness and Equitableness of Power Dispatch, requiring power dispatch centers to treat all competitors indiscriminately in respect of dispatch administration and information disclosure, except in cases where safe and stable operation of the electric power system requires different treatment.

In 2008, with the purpose of improving energy usage efficiency, the government implemented an electricity-optimized dispatch policy in Henan Province, Sichuan Province, Jiangsu Province, Guangdong Province and Guizhou Province on a pilot basis, and plans to roll out to others if the trial operation is successful. In addition, as of December 31, 2014, in all regions in which we operate power plants, the government's power administrative departments make differential power generation plan policies to improve the planned utilization hours of the environment-protecting and energy-saving units.

Competition and Dispatch in Singapore

The Singapore power market remains concentrated, as the three largest power generation companies account for approximately 80% of total generating capacity. Tuas Power competes in the NEMS using its portfolio of gas-fired, coal-biomass fired and oil-fired generating units. It was able to achieve a market share of approximately 21.80% in the NEMS for 2014. Its major competitors include Senoko Energy (formerly Senoko Power) which is owned by a Japanese/French consortium led by Marubeni Group, YTL PowerSeraya that is owned by YTL Group of Malaysia, SembCorp Cogen and Keppel Merlimau Cogen. A new entrant, PacificLight Power Pte Ltd, entered the market in 2014. Tuas Power's generating units are relatively new with a track record of steady operation and high reliability. The technical and economic parameters of Tuas Power's units make Tuas Power one of the leaders in Singapore's power industry.

In the NEMS, power generation companies compete to generate and sell electricity every half-hour by offering their capacity (specifying price/quantity pairs). The EMC, the operator of Singapore's wholesale electricity market,

determines the least-cost dispatch quantities and the corresponding market-clearing or spot prices based on the offers made by power generation companies. The spot prices in the NEMS reflect the least-cost market solution for the dispatch of energy and provision of operating reserves. In general, this means that each power generation company that submitted an offer below the spot price will be dispatched, and a power generation company that submitted an offer above the spot price will not be dispatched. The spot price that a power generation company receives is a nodal price, which may vary according to their location on the network. Nodal prices would be higher in areas where higher transmission losses are incurred in getting the electricity to the load facilities.

Environmental Regulation

We are subject to the PRC Environmental Protection Law, the regulations of the State Council issued thereunder, the PRC Law on the Prevention and Treatment of Water Pollution, the PRC Law on the Prevention and Treatment of Air Pollution, the Emission Standard of Air Pollutants for Thermal Power Plants thereunder and the PRC Law on Ocean Environment Protection (collectively the “National Environmental Laws”) and the environmental rules promulgated by the Local Governments in whose jurisdictions our various power plants are located (the “Local Environmental Rules”). According to the National Environmental Laws, the State Environmental Protection Bureau sets national environmental protection standards and local environmental protection bureaus may set stricter local standards. Enterprises are required to comply with the stricter of the two standards.

At present, new projects are subject to the environmental evaluation approval. The project proposal is required to be submitted to the State Environmental Protection Administration (“SEPA”) for approval.

Effective July 1, 2003, all power plants in China became subject to the pollutant discharge levy system, pursuant to which discharge fees are levied based on the actual amount of pollutants discharged. As a result, all of our power plants are now required to pay discharge fees in such manner. Since 2008, certain provinces have raised the rates of waste disposal fees. In 2011, 2012 and 2013, we paid to the local governments total discharge fees of approximately RMB530 million, RMB543 million and RMB475 million respectively.

In 2011, the PRC Government promulgated a New Emission Standards of Air Pollutants for Thermal Power Plants, which implement more stringent standards on discharge of polluting substances by thermal power plants. These restrictive standards govern both the total sulfur dioxide and nitrous oxide emissions from the power plant and the emission density of each chimney, and also require thermal power plants to equip all units with denitrification facilities by the end of 2015.

In September 2013, the State Council issued the Air Pollution Prevention Action Plan (the “Plan”), setting forth stricter requirements for air pollution prevention and control. Local government departments have released local rules and regulations under the Plan, some of which require higher emission standards than the national ones. Carbon emission trading has been conducted in certain regions on a trial basis and could be gradually introduced to an expanded market in the future. On July 1, 2014, the new pollutants emission standards for thermal power plants and the dust emission standards in key regions will also come into effect. In September 2014, the NDRC, the Ministry of Environmental Protection and the National Energy Administration jointly issued the 2014-2020 Action Plan for Energy Saving, Emission Reduction and Renovation of Coal-fired Generation Units, imposing more strict requirements for efficient and clean development of coal-fired generating plants.

In order to meet with the requirements of the New Emission Standards, we have installed flue gas desulphurization (“FGD”) facilities and denitrification facilities with all of our newly constructed generating units. We have also carried out sulfur disposal reform on the existing generating units. As of the end of 2012, we have installed and operated desulphurization facilities on all our existing coal-fired generating units. By the end of 2014, all coal-fired generating units of the Company have been renovated to include denitrification facilities.

In order to reduce fly ash, we use very high-efficiency electrostatic precipitators and conduct efficiency improvement and renovations according to increasingly strict state and local emission standards. Each power plant is also equipped with a wastewater treatment facility to treat water used by the power plant before it is released into the river or the sea. We pay discharge fees on the basis of measurements made at discharge points of each plant where waste is released. All of the disposal equipment and facilities for sulfur dioxide, fly ash, wastewater, nitrogen oxides, smoke dust and noise in our existing power plants completely satisfy the existing national standards.

We believe we have implemented systems that are adequate to control environmental pollution caused by our facilities. In addition to the measures identified above, each power plant has its own environment protection office and staff responsible for monitoring and operating the environmental protection equipment. The environmental protection departments of the local governments monitor the level of emissions and base their fee assessments on the results of their tests.

We believe our environmental protection systems and facilities for the power plants are adequate for us to comply with the currently effective national and local environmental protection regulations. It is expected that the PRC Government will impose additional and stricter regulations to implement the emission plan which would require additional expenditure in compliance with environmental regulations.

Environmental Regulation in Singapore

Tuas Power's generation operations are subjected to Singapore's Environmental Protection and Management Act and Environmental Public Health Act. The former sets out requirements pertaining to control of pollution and management of hazardous substance while the latter focuses mainly on proper waste management.

Tuas Power Station

To address the environmental concerns and regulatory requirements, Tuas Power Station has put in place an environmental management system. All generating units are equipped with pollution control facilities. Stage I steam plant burn low sulfur content fuel oil and employ an electro-precipitator to control sulfur dioxide and particulate emissions. Stage II combined-cycle plants burn natural gas and are fitted with low-nitrogen oxide burners to control nitrogen oxide emissions. Source emission test are conducted annually and the results are submitted to the Pollution Control Department.

Tuas Power Station has a dedicated wastewater treatment plant to treat its oily wastewater and process wastewater prior to discharge into the sea. The treatment processes are automated to prevent accidental adverse discharge and critical parameters are monitored on a real-time basis. Trade effluent testing is performed annually and the results are shared with the Pollution Control Department.

Land contamination is prevented through well-designed storage and containment procedures. Specific areas for storage of waste and hazardous substances are designated within the power plant.

Waste generated in Tuas Power Station plants is identified and managed accordingly. Waste with residual value, such as waste oil, is resold to licensed collectors for reuse while other waste is disposed through licensed disposal contractors.

Hazardous substances which have potential to cause environmental pollution are controlled within the power plant compound. A-hazardous substance permit, issued by the Pollution Control Department, is required to store the hazardous substances in the premises. Operators who handle these chemicals are competent and the storage concept of these substances is designed to prevent and mitigate the impact of any abnormal release. Regular audits are conducted to ensure these hazardous substances are managed properly and the findings and recommendations for improvements are reported to the Pollution Control Department.

TMUC

TMUC utilises an efficient cogeneration process where about 80% of the useful energy from the plant is used to produce steam for industrial customers and the remaining 20% is converted to electricity for internal use and transmission to the national grid. The overall plant system efficiency is up to 70%.

The TMUC plant is designed to comply with stringent environmental standards set by the local authority. TMUC adopts the circulating fluidized bed boiler technology that enable use of high percentage of carbon neutral biomass (palm kernel shell and woodchips) co-fired with clean coal (low sulphur and low ash) to reduce carbon footprint significantly to the same level as oil-fired plant and lower the sulphur and nitrogen oxides emission. High efficiency bag filters are installed to ensure low particulates emission.

Coal, biomass and ash handling, transfer and storage systems at TMUC are fully enclosed to prevent any fugitive dust during unloading, storage and handling operation. Coal and ash are stored in silo while biomass is stored in enclosed warehouse.

Fly ash and bed ash generated from the CFB boilers are fully recycled and processed for use as value-added construction materials.

Oily wastewater and coal/ash washing wastewater are treated prior to discharge. Online monitoring of oil-in-water and suspended solids (through turbidity meter) are carried out for oily wastewater and coal/ash washing wastewater respectively to prevent accidental discharge. Chemical/regeneration wastewater is neutralized prior to discharge. Online monitoring of pH is conducted to prevent accidental discharge. Stop-gates are strategically installed at drain to prevent poor quality effluent/water from entering the sea

Insurance

We currently maintain property all-risks insurance and machinery-breakdown insurance for all of our power plants, and construction all-risks insurance or erection all-risks insurance for all of our newly built and expansion projects as well as large-scaled upgrading projects. Our current insurance coverage on our property, plant and equipment (including construction all-risk insurance) is mainly maintained with Yongcheng Property and Casualty Insurance Company, and co-insured by PICC Property and Casualty Company Ltd. and China Pacific Property Insurance Co., Ltd., which amounted to approximately RMB298 billion. In 2014, we renewed the liabilities insurance for our directors and officers with a coverage of US\$10 million.

We do not maintain any third-party liability insurance to cover claims in respect of bodily injury or property or environment damage arising from accidents on our property or relating to our operation other than the third-party additional risk insurance included in construction all-risk insurance or erection all-risk insurance. We do not usually carry business interruption insurance either, which is not customarily carried by power companies in the PRC. We believe that our insurance coverage is adequate and is standard for the power industry in China. Please refer to the section entitled "Risk factors – Risks relating to our business and the PRC's power industry – Operation of power plants involves many risks and we may not have enough insurance to cover the economic losses if any of our power plant's

ordinary operation is interrupted.”

Tuas Power purchases key insurance policies, such as industrial all-risks insurance, business-interruption insurance, product and public liability insurance, directors’ and officers’ liability insurance and pollution legal liability insurance. The insured value under industrial all-risks is S\$2.72 billion. For the Tembusu Multi-Utilities Complex project, the owner-controlled insurance program covers erection/ construction all-risks insurance with delay in start-up, third party liability insurance and marine cargo insurance with delay in start-up.

ITEM 4A

Unresolved Staff Comments

None

ITEM 5

Operating and Financial Review and Prospects

A.

General

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.

45

Since its incorporation, the Company has continued to expand its operating scale. The Company has been the leader in its industry on competitiveness, resources utilization efficiency and environmental protection. The Company is Asia's largest listed power producer. Its power generation operations are widely located with coverage in 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 coverage in Singapore.

Looking back in 2014, with the strong support of its shareholders, the employees of the Company made active and concerted efforts in response to the changes in power, coal and capital markets by expanding overseas markets, improving marketing analysis and enhancing internal management with a focus on key operations, thorough planning and sound controls. These efforts have contributed to growth of the Company in various aspects in 2014. During 2014, the Company maintained its leading position in major technological and economic indexes through safe production and active marketing activities. It also maintained a leading position in utilization hours in most of the area, where the Company's coal-fired power plants are located. Its fuel management was strengthened, fuel costs were considerably reduced, and financial costs were effectively controlled. Marked improvement was noticeable in the Company's growth quality because of its active power generation restructuring efforts. The Company has also made new developments in energy saving, ultra-low emission, and technological renovation, diligently fulfilling its social responsibilities as a reliable provider of sufficient and clean energy to the society.

Critical accounting policies

The Company and its subsidiaries have identified the policies below as critical to our business operations and the understanding of our results of operations. The impact of and any associated risks related to these policies on the business operations are discussed throughout the Operating and Financial Review and Prospects where such policies affect our reported and expected financial results. For a detailed discussion on the application of these and other accounting policies, see Note 2 to the Financial Statements in Item 18 of this Annual Report on Form 20-F. Note that our preparation of this Annual Report on Form 20-F requires us to make estimates and assumptions that affect the reported amount of assets and liabilities, disclosure of contingent assets and liabilities at the date of our financial statements, and the reported amount of revenue and expenses during the reported periods. There can be no assurance that actual results will not differ from those estimates.

Depreciation of property, plant and equipment

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

	2014
Dam	8 – 50 years
Port facilities	20 – 40 years
Buildings	8 – 30 years
Electric utility plant in service	5 – 30 years
Transportation facilities	8 – 27 years
Others	5 – 14 years

Where parts of an item of property, plant or equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. 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 and make adjustment when necessary.

Useful life of power generation license

The Company and its subsidiaries acquired the power generation license as part of the business combination with Tuas Power. The power generation license is initially recognized at fair value at the acquisition date. The license has an indefinite useful life and is not amortized. The assessment that the license has an indefinite useful life is based on the expected renewal of power generation license without significant restriction and cost, together with the consideration on related future cash flows generated and the expectation of continuous operations. It is tested annually for impairment and carried at cost less accumulated impairment loss. Useful life of the power generation license 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.

Impairment of non-financial assets

The carrying amounts of property, plant and equipment, intangible assets with definite useful lives, land use rights and long-term equity investments not accounted for as financial assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and indefinite-lived intangible assets are tested for impairment annually regardless of whether there are indications of impairment or more frequently if events or changes in circumstances indicate a potential impairment. An impairment loss is recognized if the carrying amount of an asset or cash-generating unit ("CGU") exceeds its recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less cost to sell. For impairment testing, assets are grouped together into the smallest group of assets that generate cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs.

Subject to an operating segment ceiling test, CGUs to which goodwill has been allocated are aggregated so that the level at which impairment testing is performed reflects the lowest level at which goodwill is monitored for internal reporting purposes.

Goodwill acquired in a business combination is allocated to groups of CGUs that are expected to benefit from the synergies of the combination.

Impairment losses are recognized in profit or loss. Impairment losses recognised in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the CGU (group of CGUs), and then to reduce the carrying amounts of the other assets in the CGU (group of CGUs) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs of disposal (if measurable) or value in use (if determinable).

An impairment loss in respect of goodwill is not reversed. Except for goodwill, all impaired non-financial assets are subject to review for possible reversal of impairment at each reporting date. A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognized in prior year. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognized.

Newly adopted accounting policies

The following new amendments to standards and one interpretation are adopted for the first time for the financial year beginning January 1, 2014.

- Amendments to IFRS 10, IFRS 12 and IAS 27, 'Investment entities'. The amendments provide consolidation relief to those parents which qualify to be an investment entity as defined in the amended IFRS 10. Investment entities are required to measure their subsidiaries at fair value through profit or loss. These amendments do not have an impact on the consolidated financial statements as the Company and its subsidiaries do not qualify to be investment entities.
- Amendments to IAS 32, 'Financial instruments: Presentation – Offsetting financial assets and financial liabilities' clarify the offsetting criteria in IAS 32. The amendments do not have any material impact on the consolidated financial statements as they are consistent with the policies already adopted by the Company and its subsidiaries.
- Amendments to IAS 36, 'Impairment of Assets – Recoverable amount disclosures for non-financial assets' modify the disclosure requirements for impaired non-financial assets. Among them, the amendments expand the disclosures required for an impaired asset or CGU whose recoverable amount is based on fair value less costs of disposal. The amendments do not have any material impact on the consolidated financial statements.
- Amendments to IAS 39, 'Financial Instruments: Recognition and Measurement - Novation of derivatives and continuation of hedge accounting' provide relief from discontinuing hedge accounting when novation of a derivative designated as a hedging instrument meets certain criteria. The amendments do not have any material impact on the consolidated financial statements as the Company and its subsidiaries have not novated any of its derivatives.

- IFRIC 21 ‘Levies’ provides guidance on when a liability to pay a levy imposed by a government should be recognized. The amendments do not have any material impact on the consolidated financial statements as the guidance is consistent with the Company and its subsidiaries’ existing accounting policies.

New accounting pronouncements

For a detailed discussion of new accounting pronouncements, see Note 2(ac) to the Financial Statements.

B. Operating results

Our financial statements are prepared under IFRS as issued by IASB. The following management’s discussion and analysis is based on the financial information prepared under IFRS.

Year ended December 31, 2014 compared with year ended December 31, 2013

	For the Year Ended December 31,		Increased/ (Decreased) %
	2014 RMB’000	2013 RMB’000	
Operating revenue	125,406,855	133,832,875	(6)
Tax and levies on operations	(932,485)	(1,043,855)	(11)
Operating expenses			
Fuel	(64,762,908)	(73,807,817)	(12)
Maintenance	(3,729,912)	(3,856,975)	(3)
Depreciation	(11,646,683)	(11,293,522)	3
Labor	(6,259,588)	(5,762,884)	9
Service fees on transmission and transformer facilities of HIPDC	(140,771)	(140,771)	0
Purchase of electricity	(5,055,076)	(4,955,603)	2
Others	(7,604,790)	(8,860,409)	(14)
Total operating expenses	(99,199,728)	(108,677,981)	(9)
Profit from operations	25,274,642	24,111,039	5
Interest income	159,550	170,723	(7)
Financial expenses, net			
Interest expense	(7,814,114)	(7,787,472)	0
Exchange (loss) / gain and bank charges , net	(9,492)	94,109	(110)
Total financial expenses, net	(7,823,606)	(7,693,363)	2
Share of profits less losses of associates and joint ventures	1,315,876	615,083	114
Gain / (loss) on fair value changes of financial assets / liabilities	42,538	(5,701)	846
Other investment income	80,580	224,908	(64)
Profit before income tax expense	19,049,580	17,422,689	9
Income tax expense	(5,487,208)	(4,522,671)	21
Net Profit	13,562,372	12,900,018	5
Attributable to:			
-Equity holders of the Company	10,757,317	10,426,024	3
-Non-controlling interests	2,805,055	2,473,994	13
	13,562,372	12,900,018	5

For the year ended December 31, 2014, the Company's total power generation on a consolidated basis amounted to 304.869 billion kWh, of which, the domestic power generation of the Company amounted to 294.388 billion kWh, representing a decrease of 7.27% year-on-year. Total electricity sold by the Company's power plants within China was 277.538 billion kWh, representing a decrease of 7.49% over the same period last year.

The main reasons for the decrease in the Company's power output are as follows: firstly, China's economic growth slowed in 2014 and power consumption growth nationwide declined correspondingly. Secondly, the commencement of operation of a number of ultra-high voltage west-to-east power transmission lines in China reduced the power market for thermal power generating units in the southeast coastal regions where a high proportion of thermal power generating units owned the Company are located. Thirdly, most of China experienced a sharp decrease of temperature during the summer in 2014 compared with the same period of 2013 and an increase in rainfall, thus resulting in a lower demand for electricity and a significant decline in power output compared with the higher number registered in 2013. Fourthly, the commencement of operation of many hydropower generating units in the southwest region as well as the abundant water supply in the same region contributed to a significant increase in hydro-power generations, which has reduced the market for thermal power generating units in Yunnan Province as well as Shanghai, Zhejiang, Jiangsu and Guangdong. Meanwhile, power output from thermal power generating units in Liaoning and Fujian were affected by the commencement of operation of large nuclear generating units in these two provinces.

The power generation of the Company's domestic power plants for the year ended December 31, 2014 is listed below (in billion kWh):

Domestic Power Plant	Power generation in 2014	Power generation in 2013	Change
Liaoning Province			
Dalian	6.423	6.132	4.74 %
Dandong	3.197	3.115	2.64 %
Yingkou	7.980	7.321	9.00 %
Yingkou Co-generation	3.043	3.329	(8.58) %
Wafangdian Wind Power	0.099	0.111	(11.21) %
Suzihe Hydropower	0.040	0.027	48.51 %
Changtu Wind Power	0.127	0.093	37.04 %
Inner Mongolia Autonomous Region			
Huade Wind Power	0.217	0.226	(4.14) %
Hebei Province			
Shang'an	12.836	13.633	(5.85) %
Kangbao Wind Power	0.085	0.080	6.39 %
Gansu Province			
Pingliang	9.129	10.144	(10.00) %
Jiuquan Wind Power	0.838	0.887	(5.49) %
Anbei Wind Power Third	0.039	—	—
Beijing Municipality			
Beijing Co-generation	4.456	4.686	(4.92) %
Beijing Co-generation CCGT	4.051	3.980	1.79 %
Tianjin Municipality			
Yangliuqing Co-generation	6.572	6.851	(4.07) %
Lingang CCGT Co-generation	0.126	—	—
Shanxi Province			
Yushe	2.608	2.951	(11.62) %
Zuoquan	5.999	6.682	(10.22) %

Shandong Province				
Dezhou	15.348	15.405	(0.37)%
Jining	5.096	5.050	0.91	%
Xindian	3.303	3.254	1.49	%
Weihai	11.771	11.361	3.61	%
Rizhao Phase II	8.236	7.775	5.93	%
Zhanhua Co-generation	1.674	1.761	(4.93)%
Henan Province				
Qinbei	20.366	21.927	(7.12)%
Jiangsu Province				
Nantong	6.752	7.951	(15.08)%
Nanjing	3.154	3.678	(14.24)%
Taicang	11.174	11.445	(2.37)%
Huaiyin	6.486	7.244	(10.47)%
Jinling CCGT	1.895	2.400	(21.03)%
Jinling Coal-fired	11.567	12.811	(9.71)%
Jinling Co-generation	1.358	1.115	21.81	%
Rudong Wind Power	0.113	0.012	839.76	%
Qidong Wind Power	0.379	0.350	8.33	%
Shanghai Municipality				
Shidongkou I	5.665	7.875	(28.06)%
Shidongkou II	5.190	6.708	(22.63)%
Shidongkou Power	6.018	7.603	(20.85)%
Shanghai CCGT	2.097	1.974	6.23	%
Chongqing Municipality				
Luohuang	10.862	14.278	(23.93)%
Liangjiang CCGT	0.246	–	–	

Domestic Power Plant	Power generation in 2014	Power generation in 2013	Change
Zhejiang Province			
Yuhuan	21.771	24.819	(12.28)%
Changxing	0.488	–	–
Tongxiang CCGT	0.171	–	–
Si'an Photovoltaic	0.000	–	–
Hunan Province			
Yueyang	8.553	9.958	(14.10)%
Xiangqi Hydropower	0.310	0.267	16.16 %
Subaoding Wind Power	0.020	–	–
Hubei Province			
Enshi Maweigou Hydropower	0.042	0.045	(7.41)%
Jiangxi Province			
Jinggangshan	9.244	9.702	(4.72)%
Jianggongling Wind Power	0.001	–	–
Fujian Province			
Fuzhou	13.925	14.666	(5.05)%
Guangdong Province			
Shantou	5.200	5.614	(7.37)%
Haimen	12.270	18.105	(32.20)%
Haimen Power	6.152	–	–
Yunnan Province			
Diandong Energy	5.953	7.527	(20.92)%
Yuwang Energy	3.651	4.553	(19.82)%
Wenbishan Wind Power	0.022	–	–
Total	294.388	317.481	(7.27)%

In 2014, the power generated by Singapore operations accounted for 21.8% of the total power generated in Singapore, representing an increase of 1.2 percentage points from 2013.

In respect of the tariff, the Company's average tariff of domestic power plants for the year ended December 31, 2014 was RMB454.95 per MWh, representing an increase of RMB0.57 per MWh from the year ended December 31, 2013. SinoSing Power's average tariff for 2014 was RMB920.74 per MWh, representing a decrease by 7.42% from the same period last year.

In respect of fuel cost, the decrease of coal price and effective cost controls of the Company contributed to reduced fuel costs of the Company. Compared to last year, the unit fuel cost of power sold of the Company's domestic power plants decreased by 7.96% to RMB 201.19 per MWh.

Combining the foregoing factors, the operating revenue of the Company and its subsidiaries for the year ended December 31, 2014 remained generally the same as last year at approximately RMB125.407 billion, representing a decrease of 6.30% from RMB 133.833 billion of last year. For the year ended December 31, 2014, the Company and its subsidiaries recorded a net profit attributable to equity holders of the Company of RMB10.757 billion, representing an increase of 3.18% from the profit of RMB 10.426 billion for the year ended December 31, 2013.

For the year ended December 31, 2014, the profit attributable to equity holders of the Company from domestic power plants was RMB 10.629 billion, representing an increase of RMB 0.316 billion compared to RMB10.313 billion for the same period last year. The increase was primarily attributable to the combined effect of the decrease of coal market price and the decrease of power generation.

For the year ended December 31, 2014, the profit attributable to equity holders of the Company from Singapore operations was RMB 0.128 billion, increased by RMB 0.015 billion compared to the same period last year.

Operating revenue

Operating revenue mainly consists of revenue from power sold. For the year ended December 31, 2014, the consolidated operating revenue of the Company and its subsidiaries amounted to RMB125.407 billion, representing a decrease of 6.30% from RMB133.833 billion for the year ended December 31, 2013. The operating revenue from domestic operations of the Company decreased by RMB8.557 billion over the same period of last year, which is mainly because of reduced power generations. The operation of new generation capabilities contributed RMB1.655 billion to the consolidated revenue of the Company, while the operating revenue generated from existing generating units decreased by RMB10.212 billion.

The operating revenue of Singapore operations increased by RMB0.131 billion for the year ended December 31, 2014 from last year, which is mainly because of increased power output from operation of new generating units and increase of revenue generated from steam sales.

The following table sets forth the average tariff rate of the Company's power plants, as well as percentage changes from 2013 to 2014.

Power Plant	Average tariff rate (VAT inclusive) (RMB/MWh)		
	2014	2013	Change
Liaoning Province			
Dalian	394.50	407.89	(3.28)%
Dandong	393.06	401.09	(2.00)%
Yingkou	399.33	406.85	(1.85)%
Yingkou Co-generation	399.21	396.96	0.57 %
Wafangdian Wind Power	609.68	632.85	(3.66)%
Suzihe Hydropower	330.00	330.00	0.00 %
Changtu Wind Power	602.82	605.30	(0.41)%
Inner Mongolia Autonomous Region			
Huade Wind Power	520.00	520.00	0.00 %
Hebei Province			
Shang'an	429.39	431.15	(0.41)%
Kangbao Wind Power	538.84	534.47	0.82 %
Gansu Province			
Pingliang	322.72	332.16	(2.84)%
Jiuquan Wind Power	520.60	520.60	0.00 %
Anbei Third Wind Power	540.00	—	—
Beijing Municipality			
Beijing Co-generation	699.19	500.06	39.82 %
Tianjin Municipality			
Yangliuqing Co-generation	434.28	438.73	(1.01)%
Lingang Co-generation CCGT	—	—	—
Shanxi Province			
Yushe	391.22	393.37	0.55 %
Zuoquan	382.01	389.83	(2.01)%
Shandong Province			
Dezhou	463.36	464.89	(0.33)%
Jining	446.73	455.46	(1.92)%
Xindian	448.55	453.35	(1.06)%
Weihai	461.18	474.38	(2.78)%
Rizhao Phase II	441.59	446.38	(1.07)%
Zhanhua Co-generation	434.71	446.56	(2.65)%
Henan Province			
Qinbei	435.42	437.01	(0.36)%
Jiangsu Province			
Nantong	436.00	435.69	0.07 %
Nanjing	436.50	436.35	0.03 %
Taicang I	419.19	432.81	(3.15)%
Taicang II	395.38	427.58	(7.53)%
Huaiyin	443.04	449.87	(1.52)%
Jinling Coal-fired	408.24	428.38	4.70 %
Jinling Combined-Circle	606.21	585.53	3.53 %
Jinling Combined-Cycle Cogeneration	690.00	635.42	8.59 %

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Qidong Wind Power	555.92	541.34	2.69	%
Rudong Wind Power	610.00	610.00	0.00	%
Shanghai Municipality				
Shidongkou I	438.21	453.27	3.32	%
Shidongkou II	437.54	442.00	(1.01))%
Shanghai CCGT	551.48	486.74	13.30	%
Shidongkou Power	449.92	462.02	(2.62))%
Chongqing Municipality				
Luohuang	440.21	448.57	(1.86))%
Liangjiang CCGT	—	—	—	
Zhejiang Province				
Yuhuan	468.71	484.79	(3.32))%
Changxing	431.03	—	—	
Tongxiang Combined-cycle	895.42	—	—	
Hunan Province				
Yueyang	495.31	505.13	(1.94))%
Xiangqi Hydropower	410.00	390.00	5.13	%
Subaoding Wind Power	494.00	—	—	
Hubei Province				
Enshi Maweigou Hydropower	366.59	356.96	2.70	%
Jiangxi Province				
Jinggangshan	468.92	482.95	(2.91))%
Jianggongling Wind Power	610.00	—	—	
Fujian Province				
Fuzhou	441.83	442.81	(0.22))%
Guangdong Province				
Shantou Coal-fired	529.99	541.39	(2.11))%
Haimen	503.18	514.30	(2.16))%
Haimen Power	479.55	—	—	
Yunnan Province				
Diandong Energy	401.59	371.30	8.16	%
Yuwang Energy	395.96	377.41	4.91	%
Wenbishaan Wind Power	610.00	—	—	
Domestic total	454.95	454.38	0.13	%
Singapore				
SinoSing Power	920.74	994.54	(7.42))%

Tax and levies on operations

Tax and levies on operations mainly consists 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. For the year ended December 31, 2014, the tax and levies on operations amounted to RMB0.932 billion, representing a decrease of RMB0.112 billion from RMB1.044 billion for the same period of last year. This is largely due to reduced surcharges resulting from less value added tax payment by the Company during the same period.

Operating expenses

For the year ended December 31, 2014, the total operating expenses of the Company and its subsidiaries was RMB99.200 billion, representing a decrease of 8.72% from the same period last year.

The operating costs and expenses in domestic power plants of the Company decreased by RMB9.659 billion, or 10.17%, from the same period last year, which was primarily attributable to the reduced market price of coal in the PRC.

The operating expenses of Singapore operations increased by RMB0.181 billion, or 1.32%, for the year ended December 31, 2014 from last year. This is mainly because of the commencement of new generating unit in 2014.

Fuel

Fuel cost represents the majority of the operating expense for the Company and its subsidiaries. For the year ended December 31, 2014, fuel cost of the Company and its subsidiaries decreased by 12.25% to RMB64.763 billion from RMB73.808 billion for the year ended December 31, 2013. The fuel costs of domestic power plants decreased by RMB9.384 billion from last year, which was primarily attributable to the lowered coal price in the domestic market.

For the year ended December 31, 2014, the average unit price (excluding tax) of fuel coal was RMB434.88 per ton, representing a decrease of 6.86% from RMB466.91 per ton for the year ended December 31, 2013. The fuel cost per unit of power sold by the Company's domestic coal-fired power plant decreased by 7.96% from RMB218.59/MWh in 2013 to RMB201.19/MWh in 2014.

Fuel costs of Singapore operations was increased by RMB0.339 billion from last year, mainly due to increased fuel costs as a result of increased power generation in Singapore.

Maintenance

For the year ended December 31, 2014, the maintenance expenses of the Company and its subsidiaries amounted to RMB3.730 billion, representing a decrease of RMB0.127 billion from RMB3.857 billion for the year ended December 31, 2013. The maintenance expenses of domestic operations decreased by RMB0.128 billion. The maintenance expenses of Singapore operations increased by approximately RMB1 million.

Depreciation

For the year ended December 31, 2014, depreciation expenses of the Company and its subsidiaries increased by 3.13% to RMB11.647 billion from RMB11.294 billion for the year ended December 31, 2013. The depreciation expenses of the new generation units were RMB0.186 billion.

Labor

Labor costs consist of salaries to employees and contributions payable for employees' housing fund, medical insurance, pension and unemployment insurance, as well as training costs and others. For the year ended December 31, 2014, the labor costs of the Company and its subsidiaries amounted to RMB6.260 billion, representing an 8.62% increase from RMB5.763 billion for the year ended December 31, 2013. This is mainly attributable to the operation of new generation units of the Company, increase of mandatory social insurance contribution, and the increase of employees' performance-related salaries.

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, Tuas Power's purchase of electricity, assets impairment losses and non-operating expenses and net loss on disposals of property, plant and equipment. For the year ended December 31, 2014, other operating expenses (including purchase cost of electricity) of the Company and its subsidiaries was RMB12.800 billion, representing a decrease of RMB1.157 billion from RMB13.957 billion for the year ended December 31, 2013.

Other operating expenses from domestic operations of the Company decreased by RMB0.843 billion, due to a subsidy in its amount of RMB0.534 billion from the government, of which RMB0.462 billion was earmarked by Ministry of Finance for Tuas Power and TMUC, a decrease of RMB 0.469 billion of asset disposal losses of certain subsidiaries largely due to technical renovations for energy saving and safe production, a decrease of RMB 0.154 billion for pollution discharge fees and expenses for non-maintenance materials such as desulfurization. The combination of the aforementioned factors led to a decrease in operating expenses, notwithstanding an increase of RMB0.055 billion from costs of entrusted power generation of certain subsidiaries. The impairment loss for the Company's operation in China increased by RMB1.012 billion, mainly due to the impairment of goodwill arisen from the acquisition of Diandong Energy and Diandong Yuwang as well as the assets impairment of Yingkou port.

Other operating expenses of Singapore operations decreased by RMB0.314 billion. The assets impairment in the operations in Singapore decreased by RMB0.347 billion largely due to the provision of goodwill impairment last year.

Financial expenses

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

Interest expense

For the year ended December 31, 2014, the interest expenses of the Company and its subsidiaries were RMB7.814 billion, representing an increase of 0.35% from RMB 7.787 billion for the year ended December 31, 2013. The interest expenses from domestic operations increased by RMB0.049 billion.

Net exchange differences and bank charges

For the year ended December 31, 2014, the Company and its subsidiaries registered net losses of RMB9 million in exchange difference and bank charges, representing a net decrease of RMB 103 million compared with the net gains of RMB94 million for the year ended December 31, 2013, mainly because of decrease of exchange gain resulting from weaken of exchange rate between Renminbi and U.S. dollar.

The operations in Singapore registered a net gains of RMB50 million from exchange difference and bank charge, representing an increase of RMB55 million from the net loss of RMB5 million in the last year, mainly due to the strengthen exchange rate between U.S. dollar and Singapore dollar.

Share of profit of associates and joint ventures

For the year ended December 31, 2014, the share of profit of associates and joint ventures was RMB1.316 billion, representing an increase of RMB0.701 billion from RMB0.615 billion from last year, mainly due to increased profit from associates and joint ventures.

Income tax expense

For the year ended December 31, 2014, the Company and its subsidiaries recorded an enterprise income tax expense of RMB5.487 billion, representing an increase of RMB0.964 billion from RMB4.523 billion for the year ended December 31, 2013. The enterprise income tax expense of domestic operations increased by RMB0.999 billion, which was primarily due to the increase of pre-tax profit. The income tax expense of Singapore operations decreased by approximately RMB35 million.

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

For the year ended December 31, 2014, the Company and its subsidiaries achieved a net profit of RMB13.562 billion, representing an increase of RMB0.662 billion or 5.13% from RMB12.900 billion for the year ended December 31, 2013. For the year ended December 31, 2014, the profit attributable to equity holders of the Company was RMB10.757 billion, representing an increase of RMB0.331 billion from RMB0.426 billion for the year ended December 31, 2013.

The profit attributable to equity holders of the Company from domestic operations increased by RMB0.316 billion, which was mainly due to the effect of lowered coal market price, which helped to offset the impact of reduced power generation. The profit attributable to equity holders of the Company from Singapore operations was RMB0.128 billion, representing an increase of RMB0.015 million from the same period last year.

The profit attributable to non-controlling interests of the Company increased from RMB2.474 billion for the year ended December 31, 2013 to RMB2.805 billion for the year ended December 31, 2014. This was mainly attributable to the increased profit of the non-wholly owned subsidiaries of the Company.

Year ended December 31, 2013 compared with year ended December 31, 2012

	For the Year Ended December 31,		Increased/ (Decreased) %
	2013 RMB'000	2012 RMB'000	
Operating revenue	133,832,875	133,966,659	-
Tax and levies on operations	(1,043,855)	(672,040)	55
Operating expenses			
Fuel	(73,807,817)	(82,355,449)	(10)
Maintenance	(3,856,975)	(2,846,521)	35
Depreciation	(11,293,522)	(11,032,748)	2
Labor	(5,762,884)	(5,112,484)	13
Service fees on transmission and transformer facilities of HIPDC	(140,771)	(140,771)	-
Purchase of electricity	(4,955,603)	(7,101,878)	(30)
Others	(8,860,409)	(7,747,828)	14
Total operating expenses	(108,677,981)	(116,337,679)	(7)
Profit from operations	24,111,039	16,956,940	42
Interest income	170,723	175,402	(3)
Financial expenses, net			
Interest expense	(7,787,472)	(8,897,097)	(12)
Exchange gain / (loss) and bank charges , net	94,109	(166,778)	(156)
Total financial expenses, net	(7,693,363)	(9,063,875)	(15)
Share of profits less losses of associates and joint ventures	615,083	622,358	(1)
Loss on fair value changes of financial assets / liabilities	(5,701)	(1,171)	387
Other investment income	224,908	187,131	20
Profit before income tax expense	17,422,689	8,876,785	96
Income tax expense	(4,522,671)	(2,510,370)	80
Net Profit	12,900,018	6,366,415	103
Attributable to:			
-Equity holders of the Company	10,426,024	5,512,454	89
-Non-controlling interests	2,473,994	853,961	190
	12,900,018	6,366,415	103

For the year ended December 31, 2013, the Company's total power generation on a consolidated basis amounted to 317.481 billion kWh, representing a 4.98% increase from the year ended December 31, 2012. The increase in the Company's power generation was mainly attributable to the Company efforts to restructure its power generation processes.

The power generation of the Company's domestic power plants for the year ended December 31, 2013 is listed below (in billion kWh):

Domestic Power Plant	Power generation in 2013	Power generation in 2012	Change
Liaoning Province			
Dalian	6.132	5.980	2.54 %
Dandong	3.115	3.202	(2.72) %
Yingkou	7.321	7.867	(6.94) %
Yingkou Co-generation	3.329	3.337	(0.24) %
Wafangdian Wind Power	0.111	0.102	8.82 %
Suzihe Hydropower	0.027	0.013	107.69 %
Changtu Wind Power	0.093	0.006	1,450.00 %
Inner Mongolia Autonomous Region			
Huade Wind Power	0.226	0.203	11.33 %
Hebei Province			
Shang'an	13.633	14.265	(4.43) %
Kangbao Wind Power	0.080	0.062	29.03 %
Gansu Province			
Pingliang	10.144	9.214	10.09 %
Jiuquan Wind Power	0.887	0.756	17.33 %
Beijing Municipality			
Beijing Co-generation	4.686	4.636	1.08 %
Beijing Co-generation (CCGT)	3.980	3.955	0.63 %
Tianjin Municipality			
Yangliuqing Co-generation	6.851	6.609	3.66 %
Shanxi Province			
Yushe	2.951	3.405	(13.33) %
Zuoquan	6.682	6.358	5.10 %
Shandong Province			
Dezhou	15.405	15.400	0.03 %
Jining	5.050	5.097	(0.92) %
Weihai	11.361	11.608	(2.13) %
Xindian	3.254	3.256	(0.06) %
Rizhao Phase II	7.775	7.484	3.89 %
Zhanhua Co-generation	1.761	1.724	2.15 %
Henan Province			
Qinbei	21.927	17.764	23.44 %
Jiangsu Province			
Nantong	7.951	8.406	(5.41) %
Nanjing	3.678	3.827	(3.89) %
Taicang	11.445	11.672	(1.94) %
Huaiyin	7.244	7.152	1.29 %

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Jinling CCGT	2.400	3.788	(36.64))%
Jinling Coal-fired	12.811	11.538	11.03	%
Jinling Co-generation	1.115	—	—	
Rudong Windpower	0.012	—	—	
Qidong Wind Power	0.350	0.357	(1.96))%
Shanghai Municipality				
Shidongkou I	7.875	7.710	2.14	%
Shidongkou II	6.708	6.472	3.65	%
Shidongkou Power	7.603	7.739	(1.76))%
Shanghai CCGT	1.974	1.633	20.88	%
Chongqing Municipality				
Luohuang	14.278	12.191	17.12	%
Zhejiang Province				
Yuhuan	24.819	24.116	2.92	%
Hunan Province				
Yueyang	9.958	8.204	21.38	%
Xiangqi Hydropower	0.267	0.183	45.90	%
Hubei Province				
Enshi Hydro	0.045	0.050	(10.00))%
Jiangxi Province				
Jinggangshan	9.702	8.842	9.73	%
Fujian Province				
Fuzhou	14.666	13.800	6.28	%
Guangdong Province				
Shantou Coal-fired	5.614	6.420	(12.55))%
Haimen	18.105	12.529	44.50	%
Yunnan Province				
Diandong	7.527	8.509	(11.54))%
Yuwang	4.553	4.992	(8.79))%

In 2013, the power generated by Singapore operations accounted for 20.60% of the total power generated in Singapore, decreased by 4.6 percentage points from 2012, mainly attributable to the decreased power generation in Singapore resulting from intensified competition in the Singaporean market.

In respect of the tariff, the average tariff of domestic power plants for the year ended December 31, 2013 was RMB 454.38 per MWh, an increase of RMB0.19 per MWh from the year ended December 31, 2012.

In respect of fuel cost, the decrease of coal price and effective cost controls of the Company contributed to reduced fuel costs of the Company. Compared to last year, the unit fuel cost of power sold of the Company's domestic power plants decreased by 12.50% to RMB218.59 per MWh.

Combining the foregoing factors, the operating revenue of the Company and its subsidiaries for the year ended December 31, 2013 remained generally the same as last year at approximately RMB133.833 billion. For the year ended December 31, 2013, the Company and its subsidiaries recorded a net profit attributable to equity holders of the Company of RMB10.426 billion, representing an increase of 89.14% from the profit of RMB5.512 billion for the year ended December 31, 2012.

For the year ended December 31, 2013, the profit attributable to equity holders of the Company from domestic power plants was RMB10.313 billion, representing an increase of RMB5.842 billion compared to RMB4.471 billion for the same period last year. The increase was primarily attributable to the increase of sold electricity and the decrease of coal market price. The reduced market price of coal was mainly because of the change of coal supply-demand situation within the PRC.

For the year ended December 31, 2013, the profit attributable to equity holders of the Company from Singapore operations was RMB0.113 billion, decreased by RMB0.928 million compared to the same period last year. This is largely attributable to the intensified competition in the power generation market in Singapore as a result of growing power generation capacities, thus reducing the tariff and volume of power generation operations of the Company in the Singaporean market.

Operating revenue

Operating revenue mainly consists of revenue from power sold. For the year ended December 31, 2013, the consolidated operating revenue of the Company and its subsidiaries amounted to RMB133.833 billion, representing a 0.10% decrease from RMB133.967 billion for the year ended December 31, 2012. Due to power generation growth as well as capacity increase of the Company, the operating revenue from domestic power plants increased by approximately RMB5.468 billion. The operating revenue of Singapore operations decreased by approximately RMB5.602 billion for the year ended December 31, 2013 from last year, which is mainly because of the intensified competition in the power generation market in Singapore as a result of growing power generation capacities since 2013, which has reduced the tariff and volume of power generation operations of the Company in overseas market and consequently reduced its operating revenue.

The following table sets forth the average tariff rate of the Company's power plants, as well as percentage changes from 2012 to 2013.

Power Plant	Average tariff rate (VAT inclusive) (RMB/MWh)		
	2013	2012	Change
Liaoning Province			

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Dalian	407.89	409.18	(0.32)%
Dandong	401.09	405.73	(1.14)%
Yingkou	406.85	409.35	(0.61)%
Yingkou Co-generation	396.96	397.59	(0.16)%
Wafangdian Wind Power	632.85	610.82	3.61	%
Suzihe Hydropower	330.00	364.25	(9.40)%
Changtu Wind Power	605.30	610.00	(0.77)%
Inner Mongolia Autonomous Region				
Huade Wind Power	520.00	520.00	-	
Hebei Province				
Shang'an	431.15	434.63	(0.80)%
Kangbao Wind Power	534.47	536.72	(0.42)%
Gansu Province				
Pingliang	332.16	336.12	(1.18)%
Jiuquan Wind Power	520.60	520.60	-	
Beijing Municipality				
Beijing Co-generation	500.06	494.00	1.23	%
Tianjin Municipality				
Yangliuqing Co-generation	438.73	438.03	0.16	%
Shanxi Province				
Yushe	393.37	396.56	(0.80)%
Zuoquan	389.83	383.25	1.72	%
Shandong Province				
Dezhou	464.89	468.90	(0.86)%
Jining	455.46	459.63	(0.91)%
Xindian II	453.35	453.75	(0.09)%
Weihai	474.38	461.89	2.70	%
Rizhao Phase II	446.38	446.90	(0.12)%
Zhanhua Co-generation	446.56	450.55	(0.89)%

Power Plant	Average tariff rate (VAT inclusive) (RMB/MWh)		
	2013	2012	Change
Henan Province			
Qinbei	437.01	441.43	(1.00)%
Jiangsu Province			
Nantong	435.69	441.25	(1.26)%
Nanjing	436.35	442.17	(1.32)%
Taicang I	432.81	430.43	0.55 %
Taicang II	427.58	443.88	(3.67)%
Huaiyin	449.87	458.25	(1.83)%
Jinling			
Qidong Wind Power	541.34	542.65	(0.24)%
Shanghai Municipality			
Shidongkou I	453.27	457.18	(0.86)%
Shidongkou II	442.00	442.13	(0.03)%
Shanghai CCGT	486.74	457.11	6.48 %
Shidongkou Power	462.02	463.85	(0.39)%
Chongqing Municipality			
Luohuang	448.57	448.95	(0.08)%
Zhejiang Province			
Yuhuan	484.79	491.37	(1.34)%
Hunan Province			
Yueyang	505.13	506.87	(0.34)%
Xiangqi Hydropower	390.00	390.00	-
Hubei Province			
Enshi Maweigou Hydropower	356.96	360.00	(0.84)%
Jiangxi Province			
Jinggangshan	482.95	483.90	(0.20)%
Fujian Province			
Fuzhou	442.81	445.64	(0.64)%
Guangdong Province			
Shantou Coal-fired	541.39	542.97	(0.29)%
Haimen	514.30	529.06	(2.79)%
Yunnan Province			
Diandong Energy	371.30	359.58	3.26 %
Yuwang Energy	377.41	361.70	4.34 %
Singapore			
Tuas Power	994.54	1,206.23	(17.55)%

Tax and levies on operations

Tax and levies on operations mainly consists 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. For the year ended December 31, 2013, the tax and levies on operations amounted to RMB1.044 billion.

Operating expenses

For the year ended December 31, 2013, the total operating expenses of the Company and its subsidiaries was RMB108.678 billion, representing a 6.58% decrease from RMB116.338 billion for the year ended December 31, 2012.

The operating costs and expenses in domestic power plants of the Company decreased by RMB3.310 billion, which was primarily attributable to the balanced results of reduced market price of coal in the PRC and assets impairment and increase of assets disposal loss. The operating expenses of Singapore operations decreased by RMB4.350 billion for the year ended December 31, 2013 from last year. The decrease was mainly because of decreased fuel costs and retail electricity purchase cost as a result of the declined electricity price of Singapore.

Fuel

Fuel cost represents the majority of the operating expense for the Company and its subsidiaries. For the year ended December 31, 2013, fuel cost of the Company and its subsidiaries decreased by 10.38% to RMB73.808 billion from RMB82.355 billion for the year ended December 31, 2012. The fuel costs of domestic power plants decreased by RMB5.976 billion from last year, which was primarily attributable to the reduced market price of coal in the PRC and effective cost controls of the Company.

For the year ended December 31, 2013, the average unit price (excluding tax) of fuel coal was RMB466.91 per ton, representing a 11.28% decrease from RMB526.25 per ton for the year ended December 31, 2012. The fuel cost per unit of power sold by the Company's domestic coal-fired power plant decreased by 12.50% from RMB249.82/MWh in 2012 to RMB218.59/MWh in 2013.

Fuel costs of Singapore operations was reduced by RMB 2.571 billion from last year, mainly due to decreased fuel costs as a result of declined power generation in Singapore.

Maintenance

For the year ended December 31, 2013, the maintenance expenses of the Company and its subsidiaries amounted to RMB3.857 billion, representing a 35.47% increase from RMB2.847 billion for the year ended December 31, 2012. The maintenance expenses of domestic operations increased by RMB 0.978 billion mainly because of extensive maintenances scheduled in 2013. The maintenance expenses of Singapore operations increased by approximately RMB32 million.

Depreciation

For the year ended December 31, 2013, depreciation expenses of the Company and its subsidiaries increased by 2.37% to RMB11.294 billion from RMB11.033 billion for the year ended December 31, 2012. The depreciation expenses of the new generation units were RMB 0.450 billion.

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 and others. For the year ended December 31, 2013, the labor costs of the Company and its subsidiaries amounted to RMB5.763 billion, representing a 12.73% increase from RMB5.112 billion for the year ended December 31, 2012. The increase was mainly attributable to the operation of new generation units of the Company, increase of mandatory social insurance contribution, and the increase of employees' performance-related salaries.

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, Tuas Power's purchase of electricity and others. For the year ended December 31, 2013, other operating expenses (including purchase of electricity) of the Company and its subsidiaries was RMB13.957 billion, representing a decrease of RMB1.033 billion from RMB14.990 billion for the year ended December 31, 2012. Other operating expenses from domestic operations of the Company increased by RMB0.825 billion, including RMB 0.639billion from asset retirement losses of certain subsidiaries, RMB0.125 billion from assets impairment, and RMB0.223 billion from replacement electricity costs of certain subsidiaries. Other operating expenses of Singapore operations decreased by RMB1.858 billion, of which purchase of electricity decreased by RMB2.146 billion, which was mainly because of intensified competition in the power generation market in Singapore as a result of growing power generation capacities in 2013, which has reduced the electricity tariff. The assets impairment in the operations in Singapore increased by RMB0.319 billion largely due to the provision of goodwill impairment by SinoSing Power.

Financial expenses

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

Interest expense

For the year ended December 31, 2013, the interest expenses of the Company and its subsidiaries were RMB7.787 billion, representing a decrease of 12.48%, compared with that of RMB8.897 billion for the year ended December 31, 2012. The interest expenses from domestic operations decreased by RMB1.077 billion, primarily attributable to the reduced debts of the Company and a decrease of RMB borrowing interest rates.

Net exchange differences and bank charges

For the year ended December 31, 2013, the exchange gains plus bank charges of the Company and its subsidiaries amounted to RMB94 million, representing a net increase of RMB 261 million compared with the net losses of RMB167 million for the year ended December 31, 2012. The reasons for the increase include reduced borrowing in United States dollars and steady increase of exchange rate between RMB and United States dollars. The operations in Singapore registered a net loss of RMB5 million from exchange difference and bank charge, representing a decrease of RMB117 million, which can mainly be attributable to the increased exchange rate between US dollar and Singaporean dollar.

Share of profit of associates / joint ventures

For the year ended December 31, 2013, the share of profit of associates and joint ventures was RMB615 million, which is similar to the amount in 2012.

Income tax expense

For the year ended December 31, 2013, the Company and its subsidiaries recorded an income tax expense of RMB4.523 billion, representing an increase of RMB2.013 billion or 80.20% from RMB2.510 billion for the year ended December 31, 2012. The income tax expense of domestic operations increased by RMB2.181 billion, which was primarily due to the increase of profit before income tax expense. The income tax expense of Singapore operations decreased by approximately RMB168 million, which was mainly attributable to the decrease of profit before income tax expense.

Net Profit, Profit attributable to the equity holders of the Company and Non-controlling interests

For the year ended December 31, 2013, the Company and its subsidiaries achieved a net profit of RMB12.900 billion, representing an increase of RMB6.534 billion or 102.64% from RMB6.366 billion for the year ended December 31, 2012. For the year ended December 31, 2013, the profit attributable to equity holders of the Company was RMB10.426 billion, representing an increase of RMB4.914 billion from RMB5.512 billion for the year ended December 31, 2012. The profit attributable to equity holders of the Company from domestic operations increased by RMB5.842 billion, which was mainly due to the increased power generation and reduced coal costs. The profit attributable to equity holders of the Company from Singapore operations was RMB113 billion, representing a decrease of RMB928 million from the same period last year. This was primarily because of the decreased market share and electricity sold within Singapore due to the new generation units of other power plant companies in Singapore.

The profit attributable to non-controlling interests of the Company increased RMB1.620 billion from the year ended December 31, 2012 to RMB2.474 billion for the year ended December 31, 2013. This was mainly attributable to the increased profit of the Company.

C. Financial position

General

As of December 31, 2014, total assets of the Company and its subsidiaries were RMB275.172 billion, representing an increase of 4.93% from RMB262.233 billion as of December 31, 2013.

As of December 31, 2014, total liabilities of the Company and its subsidiaries were RMB190.389 billion, representing an increase of 1.79% from RMB187.040 billion as of December 31, 2013.

Assets

As of December 31, 2014, total assets of the domestic operations increased by RMB13.770 billion to RMB246.270 billion, including a net increase of RMB10.373 billion in non-current assets, which is mainly attributable to the increase in the Company and its subsidiaries' capital expenditure on construction projects and increased fair value of available-for-sale financial assets during 2014.

As of December 31, 2014, total assets of the operations in Singapore were RMB28.902 billion, representing a decrease of RMB0.831 billion from the same period last year. Non-current assets decreased by 4.36% to RMB24.377 billion, primarily attributable to depreciation of property, plant and equipment. Current assets increased by 6.60% to RMB4.525 billion, mainly attributable to increased fair value of hedging instruments and increase in inventory of materials and spare parts.

Liabilities

As of December 31, 2014, interest-bearing debts of the Company and its subsidiaries totaled RMB156.135 billion. The interest-bearing debts consist of long-term loans (including those maturing within a year), long-term bonds (including those maturing within a year), short-term loans, short-term bonds, and finance lease payable. The interest-bearing debts denominated in foreign currencies were RMB3.746 billion.

As of December 31, 2014, total liabilities of the operations in Singapore were RMB16.980 billion, representing a decrease of 1.48% from RMB17.235 billion as of December 31, 2013, mainly attributable to the decrease in long-term

loans.

Shareholders' equity

Excluding the impact of profit and profit appropriations, total equity attributable to equity shareholders of the Company increased as of December 31, 2014 compared to the beginning of the year, including increase of RMB2.454 billion from new share issuance, increase of post-tax impact of RMB 0.840 billion from reduced fair value of tradable stocks held by the Company, decrease of post-tax impact of RMB0.790 billion due to decreased fair value of cash flow hedge of the operations, decrease of RMB0.378 billion from foreign currency translation differences. Non-controlling interests as of December 31, 2014 increased by approximately RMB1.911 billion as compared to the end of the last year.

Major financial position ratios

	2014	2013
Current ratio	0.36	0.35
Quick ratio	0.30	0.28
Ratio of liability and shareholders' equity	2.71	3.00
Multiples of interest earned	3.21	3.04

Formula of the financial ratios:

Current ratio = balance of current assets as of year end / balance of current liabilities as of year end

Quick ratio = (balance of current assets as of year end – net inventories as of the year end) / balance of current liabilities as of year end

Ratio of liabilities to shareholders' equity = balance of liabilities as of year end / balance of shareholders' equity (excluding non-controlling interests) as of year end

Multiples of interest earned = (profit before income tax + interest expense) / interest expenditure (inclusive of capitalized interest)

The current ratio and quick ratio remained at relatively low levels for the years ended December 31, 2014 and 2013 with slight increase at year-end of 2014 from year-end of 2013. The decrease in the ratio of liabilities and shareholders' equity at the year end of 2014 compared with that of 2013 was primarily due to the increased shareholder's equity as a result of profit increase of the Company and issuance of new shares. The multiples of interest earned increased, primarily attributable to the increase of net profit for the year ended December 31, 2014.

D. Liquidity and cash resources

The primary sources of funding for the Company and its subsidiaries have been cash provided by internal funds from operating activities, short-term and long-term loans and proceeds from issuances of bonds, and the primary use of funds have been for working capital, capital expenditure and repayments of short-term and long-term borrowings.

As of December 31, 2014, net current liabilities of the Company and its subsidiaries were approximately RMB66.981 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.

Cash flows from operating activities

	For the Year Ended December 31,		
	2014	2013	2012
	RMB'000	RMB'000	RMB'000
Cash flows from operating activities			
Profit before income tax expense	19,049,580	17,422,689	8,876,785
Non-cash items adjustments	20,391,789	20,575,691	20,430,486
Changes in working capital	(226,180)	6,777,910	(175,854)
Interest received	97,374	100,278	109,635
Income tax expense paid	(5,992,496)	(4,637,139)	(2,312,970)
Net cash provided by operating activities	33,320,067	40,239,429	26,928,082

Net cash generated by operating activities is the main source of cash for the Company. For the year ended December 31, 2014, net cash generated by operating activities of the Company and its subsidiaries was RMB33.320 billion, of which RMB0.806 billion was from its operating activities in Singapore.

Cash flows used in investing activities

	For the Year Ended December 31,		
	2014	2013	2012
	RMB'000	RMB'000	RMB'000
Cash flows used in investing activities			
Payment for the purchase of property, plant and equipment	(19,858,216)	(17,691,382)	(15,474,614)
Proceeds from disposals of property, plant and equipment	70,712	166,459	949,469
Prepayments of land use rights	(500,100)	(5,947)	(81,382)
Payment for the purchase of other non-current assets	(21,576)	(32,601)	(51,615)
Cash dividend received	565,334	408,166	728,754
Payment for investment in associates and joint ventures	(266,877)	(2,017,853)	(947,574)
Cash paid for acquiring available-for-sale financial assets	-	(200,000)	(500,000)
Cash consideration paid for acquisitions of subsidiaries, net of cash acquired	(17,991)	36,599	(149,048)
Cash received from disposal of trading securities	-	102,784	-

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Cash received from disposal of a subsidiary	503,809	6,199	-
Short-term loan repayment from an associate	-	-	100,000
Others	54,092	173,326	116,406
Net cash used in investing activities	(19,470,813)	(19,054,250)	(15,309,604)

60

Net cash used in investing activities amounted to approximately RMB19.471 billion, RMB19.054 billion and RMB15.310 billion in 2014, 2013 and 2012. The cash used in investing activities in 2014, 2013 and 2012 was mainly attributable to capital expenditure for construction projects.

Cash flows from financing activities

	For the Year Ended December 31,		
	2014	2013	2012
	RMB'000	RMB'000	RMB'000
Cash flows from financing activities			
Issuance of short-term bonds	17,971,000	24,950,000	34,930,000
Repayments of short-term bonds	(15,000,000)	(45,000,000)	(11,000,000)
Proceeds from short-term loans	61,503,204	41,314,000	48,294,295
Repayments of short-term loans	(55,896,200)	(30,869,290)	(64,832,425)
Proceeds from long-term loans	9,647,090	5,091,175	19,425,661
Repayments of long-term loans	(17,522,953)	(12,889,078)	(32,483,848)
Issuance of long-term bonds	3,988,000	6,485,000	4,985,000
Repayment of long-term bonds	(5,700,000)	-	-
Interest paid	(8,097,216)	(8,290,433)	(8,941,814)
Net proceeds from the issuance of new H shares	2,453,986	-	-
Net capital injection from non-controlling interests of the subsidiaries	606,719	868,225	665,333
Government grants	188,406	274,472	266,949
Dividends paid to shareholders of the Company	(5,341,046)	(2,951,631)	(702,867)
Dividends paid to non-controlling interests of the subsidiaries	(1,474,329)	(539,876)	(460,607)
Proceeds from sales leaseback classified as finance lease	1,500,000	-	-
Repayment of state-owned fund received from China Huaneng Group in prior years	-	(640,485)	-
Cash received from disposal of non-controlling interests of a subsidiary	384,702	-	-
Others	(105,543)	(42,167)	37,423
Net cash used in financing activities	(10,894,180)	(22,240,088)	(9,816,900)

Net cash outflow used in financing activities in 2014 amounted to RMB 10.894 billion, which was largely attributable to repayment of short-term and long-term borrowings.

Net cash outflow used in financing activities in 2013 amounted to RMB 22.240 billion, which was primarily attributable to the decreased drawdown of loans, accelerated repayment of its borrowings and increased dividends payment of the Company in 2013, as a result of the increase in cash provided by operating activities.

Net cash outflow used in financing activities in 2012 amounted to RMB 9.817 billion, which was primarily attributable to the decreased drawdown of loans in 2012, as a result of the increase in cash generated by operating activities.

Cash and cash equivalents

	For the Year Ended December 31,		
	2014	2013	2012
	RMB'000	RMB'000	RMB'000
Effect of exchange rate	(58,379)	(108,806)	151,027
Net increase / (decrease) in cash and cash equivalents	2,896,695	(1,163,715)	1,952,605

Cash and cash equivalents, beginning of the year	9,341,672	10,505,387	8,552,782
Cash and cash equivalents as of the end of the year	12,238,367	9,341,672	10,505,387

As of December 31, 2014, the cash and cash equivalents of the Company and its subsidiaries denominated in Renminbi, HK dollar, Singapore dollar and U.S. dollar were RMB7.976 billion, RMB2.445 billion, RMB1.064 billion and RMB0.753 billion, respectively.

As of December 31, 2013, the cash and cash equivalents of the Company and its subsidiaries denominated in Renminbi, Singapore dollar, U.S. dollar, and Japanese Yen were RMB7.689 billion, RMB1.110 billion, RMB0.543 billion, and RMB0.015 million, respectively.

As of December 31, 2012, the cash and cash equivalents of the Company and its subsidiaries denominated in Renminbi, Singapore dollar, U.S. dollar, Japanese Yen, and HK dollar were RMB7.934 billion, RMB2.143 billion, RMB0.546 billion, RMB0.4 million, and RMB0.5 million, respectively.

Capital expenditure and cash resources

Capital expenditures on construction and renovation projects

The capital expenditures for the year ended December 31, 2014 were RMB20.380 billion, mainly for construction and renovation of projects, including RMB2.277 billion for Changxing expansion project, RMB1.742 billion for Liangjiang Cogeneration project, RMB0.861 billion for Luoyang Cogeneration project, RMB0.853 billion for Jiuquan Wind Power Second, RMB0.611 billion for Qinbei project, RMB0.550 billion for Haimen project, RMB0.525 billion for Subaoding project, RMB0.515 billion for Tongxiang Cogeneration project, RMB0.511 billion for Diandong project, RMB0.510 billion for Luoyuan Project, RMB0.500 billion for Dalian project, RMB0.451 billion for Dongshan Combined-cycle project, RMB0.445 billion for Shang'an project, RMB0.408 billion for Mianchi Cogeneration project, RMB0.393 billion for Taicang Port project, RMB0.332 billion for Lingang Combined-cycle project, RMB0.320 billion for Pingliang project, RMB0.318 billion for Huaiyin II project, RMB0.310 billion for Yueyang project, and RMB0.302 billion for Dezhou project. The capital expenditures of the Company's operations in Singapore were RMB0.456 billion. The expenditures on other projects were RMB7.190 billion.

The capital expenditures on construction and renovation amounted to approximately RMB17.729 billion and RMB15.608 billion in 2013 and 2012, respectively.

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

The Company expects to have significant capital expenditures in the next few years. During the course, the Company will make active efforts to improve the project planning process on a 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 and equity financing.

The following table sets forth the major capital expenditure cash requirements, usage plans and cash resources of the Company for the year 2015.

Project	Capital expenditure arrangements RMB billion	Funding resources arrangements	Financing costs and note on usage
Thermal power projects	10	Internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of the PBOC
Hydropower projects	0.1	Internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of the PBOC
Wind power projects	5.7	Internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of the PBOC
Port projects	0.4	Internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of the PBOC
Coal mining projects	0.9	Internal cash resources and bank loans	Within the floating range of benchmark lending interest

Photovoltaic power projects	0.2	Internal cash resources and bank loans	rates of the PBOC Within the floating range of benchmark lending interest rates of the PBOC
Others	0.7	Internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of the PBOC
Technology renovation	6.1	Internal cash resources and bank loans	Within the floating range of benchmark lending interest rates of the PBOC

Cash resources and anticipated financing costs

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

Good operating results and a sound credit status provide the Company with strong financing capabilities. As of December 31, 2014, the undrawn available banking facilities available to the Company and its subsidiaries amounted to more than RMB190 billion, granted by Bank of China, Construction Bank of China and China Development Bank, among other sources.

On November 13, 2014, the Company issued an aggregate of 365,000,000 H Shares to nine places at the issue price of HK\$8.60 per share. The aggregate gross proceeds from the placing amounted to approximately HK\$3,139 million.

As resolved at the 2010 annual general meeting held on May 17, 2011, our Company has been given a mandate to apply to the competent authority for quota of the non-public issuance of debt financing instruments with a principal amount of not exceeding RMB10 billion within 12 months from the date of obtaining an approval at the general meeting (to be issued within such period on a rolling basis). On September 8, 2011, we received the approval from the competent authority. On November 7, 2011, we completed the issuance of the first tranche of non-public issuance of debt financing instruments in the amount of RMB5 billion with a maturity period of 5 years, a unit face value of RMB100 and an interest rate of 5.74%. On January 6, 2012, we completed the issuance of the second tranche of the non-public issuance of debt financing instruments in the amount of RMB5 billion with a maturity period of 3 years, a unit face value of RMB100 and an interest rate is 5.24%. On June 4, 2013, we completed the issuance of the third tranche of non-public issuance of debt financing instruments in the amount of RMB5 billion with a maturity period of 3 years and an interest rate of 4.82%.

As resolved at the 2010 annual general meeting on May 17, 2011, our Company has been given a mandate to issue one or multiple tranches of financing instruments of RMB-denominated debt instruments of a principal amount up to RMB5 billion in or outside PRC within 12 months from the date of approval at the general meeting. On April 19, 2012, we received an approval regarding the issuance of RMB-denominated debt instruments in Hong Kong in the sum of RMB5 billion issued by the NDRC, approving our Company to issue the RMB-denominated debt instruments in Hong Kong in an aggregate amount of up to RMB5 billion, with an effective period of one year from the date of approval. On January 30, 2013, our Company and the managers entered into a subscription agreement in relation to the proposed issuance of RMB1,500 million bonds due 2016 with an interest rate of 3.85% (“RMB Bonds”). On February 5, 2013, the listing of and dealing in the RMB Bonds became effective.

As resolved at the 2012 annual general meeting on June 19, 2013, our Company has been given a mandate to issue one or multiple tranches of super short-term notes within the PRC in a principal amount not exceeding RMB30 billion on a rolling basis within 24 months of approval by the general shareholders’ meeting. On August 22, September 10 and November 3, 2014, we issued super short-term notes in three installments at principal amount of RMB2 billion, RMB3 billion and RMB3 billion and with nominal annual interest rate of 4.63%, 4.63% and 4.00%, respectively. All these series of notes were denominated in RMB, issued at par value, and would mature in 270 days from issuance.

As resolved at the 2012 annual general meeting on June 19, 2013, our Company has been given a mandate to issue one or multiple tranches of short-term notes in the PRC in a principal amount not exceeding RMB 15 billion on a rolling basis within 24 months of approval by the general shareholders’ meeting. On April 25 and November 14, 2014, we issued unsecured short-term bonds in two installments each at principal amount of RMB5 billion with nominal annual interest rate of 4.90% and 3.98%, respectively. Each of the bonds was denominated in RMB, issued at par value, and would mature in 365 days from issuance.

As resolved at the 2012 annual general meeting held on June 19, 2013, our Company has been given a mandate to issue non-public debt financing instruments in the PRC in a principal amount of not exceeding RMB10 billion within 24 months from the date of obtaining an approval at the general meeting. On July 11, 2014, we issued mid-term notes at principal amount of RMB4 billion with nominal annual interest rate of 5.30%. The notes were denominated in RMB, issued at par value, and would mature in five years from issuance.

As of December 31, 2014, short-term borrowings of the Company and its subsidiaries totaled RMB43.529 billion (2013: RMB37.937 billion). Loans from banks were charged at interest rates ranging from 4.00% to 6.00% per annum (2013: 2.67% to 6.10%). Short-term bonds payable by the Company and its subsidiaries totaled RMB18.245 billion (2013: RMB15.135 billion).

As of December 31, 2014, long-term borrowings of the Company and its subsidiaries totaled RMB65.031 billion (2013: RMB73.311 billion), including RMB denominated borrowings of RMB48.413 billion (2013: RMB55.342 billion), U.S. dollar denominated borrowings of approximately US\$0.542 billion (2013: US\$0.616 billion), Euro denominated borrowings of approximately €58 million (2013: €67 million), and Singaporean dollar denominated borrowings of S\$2.774 billion (2013: S\$2.852 billion). The U.S. dollar denominated borrowings charged at floating interest rate were US\$0.539 billion (2013: US\$0.608 billion), and all of the borrowings denominated in Singaporean dollar were floating-rate borrowings. For the year ended December 31, 2014, long-term bank borrowings of the Company and its subsidiaries have had interest rates ranging from 0.81% to 6.55% per annum (2013: 0.81% to 6.55%).

As of December 31, 2014, the borrowings for the Singapore operations were all long-term loans approximately in aggregate of RMB12.872 billion, including borrowings denominated in Singapore dollars in the amount of S\$2.772 billion, with interest rates 1.98% per annum, and borrowings denominated in U.S. dollars in the amount of US\$1.706 million with interest rate of 4.25% per annum.

The Company and its subsidiaries will closely monitor any change in the exchange rate and interest rate markets and cautiously assess the currency 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 not only to meet cash requirements of daily operations, constructions and acquisitions, but also to 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.

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 at the shareholders' meeting), the Company expects to pay a cash dividend of RMB 5.480 billion for 2014.

Maturity profile of borrowings

The following table sets forth the maturity profile of the Company's borrowings as of December 31, 2014.

Maturity Profile (RMB in billions)	2015(1)	2016	2017	2018	2019
Principal proposed to be repaid	73.921	20.497	12.592	9.667	10.870
Interest proposed to be repaid	6.697	3.852	2.765	2.236	1.760
Total	80.618	24.349	15.357	11.903	12.630

Note:

(1) The amount of the principal to be repaid in 2015 is relatively large because this includes expected repayment of short-term loans and short-term bonds.

E. Trend information

The major trend of the electricity power market

Based on China Electricity Council's forecast, China's GDP is expected to grow by 7.0% in 2015, and national power consumption is estimated to increase by 4% to 5%, among which, the power consumption by primary industries is estimated to increase by 2%, the power consumption by secondary industries is estimated to increase by 3.5% and the power consumption by tertiary industries is estimated to increase by 8.5%. Residential electricity consumption is estimated to increase by 7%. Total installed generation capacity in the PRC is expected to increase by 100 million KW, representing an increase of 7.5% compared with that of last year, among which its hydro power capacity is expected to increase by 14 million KW, thermal power capacity is expected to increase by 44 million KW, nuclear power capacity is expected to increase by 8.76 million KW, on-grid wind power capacity is expected to increase by 19 million KW, and on-grid solar power capacity is expected to increase by 10 million KW. By the end of 2015, the total installed generation capacity in the PRC is expected to reach 1.46 billion KW. The power supply and demand in China are expected to generally ease up with abundant surplus capacity in Northeast and Northwest region, balanced supply and demand in Eastern, Central and Southern regions, and broadly balanced supply in Northern region, where some supply shortage in Shandong, South Hebei, Beijing, Tianjin and Tangshan area still exists during peak hours. As the growth rate of generation capacity would be higher than that of electricity consumption, annual power generation utilization hours in 2015 will experience a slight decline and power generations are expected to grow by about 4% to 5%.

The trend of the fuel supply

We expect to see the Chinese economy shift gear in 2015 from the previous high speed growth model to a medium-to-high-speed growth model that is characterized by improved industry structure and new driving forces. In

domestic coal market, supply will remain in excess of demand, due to excess production capacities. Additionally, coal prices will be subject to the following uncertainties: (i) the government has enacted the Safe Production Law and taken other measures to limit coal production capacities and quantities; and (ii) the newly issued Environmental Protection Law and Commodity Coal Quality Management Measures is imposing stricter environmental protection measures and requirements for the production of coal, electricity and steel and the inspection of imported coals. We will closely monitor any change in policies and the climate in coal market, continue to cooperate with major coal vendors, timely adjust purchasing strategy, initiate a centralized purchasing program, and take efforts to control fuel costs by improving the management of fuel usage.

The trend of capital market and foreign exchange

In 2015, the PBOC will continue to implement steady monetary policies and make predicative fine-tuning monetary policies from time to time. In respect of the credit market, money supply is expected to increase as a result of two successive cut of benchmark interest rate and a cut of deposit reserve ratio by the PBOC. In respect of monetary policies, the PBOC will continue to maintain a prudent monetary policy that allows for steady macro-control and flexible micro-adjustment, making on-going efforts to liberalize Renminbi interest rates and improve the mechanism the interest rate regulated.

F. Employee benefits

As of December 31, 2014, the Company and its subsidiaries had 37,737 domestic and overseas employees. 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 stock or option based incentive plan.

Based on the development plans of the Company and its subsidiaries and the requirements of individual job positions, together with consideration of specific characteristics of individual employees, the Company and its subsidiaries tailored various training programs for their employees on management, technological and otherskills.

All employees of the Company have entered into employment contracts with the Company. The Company's standard contract includes description of the position, responsibilities, compensations and causes of termination. The terms of the employment contracts vary and they generally range from one to five years. The contracts are typically renewable upon expiration by mutual agreement of the Company and the relevant employee.

The Company is unionized, both at its head office and with respect to all power plants. Labor unions are intended to protect the rights of employees, while allowing the Company to achieve economic objectives. They encourage employees' participation in the Company's decision-making process, and serve as mediators in any dispute between the Company and its employees. The Company has experienced no occurrence of any strike or labor dispute which have impact upon the Company's operations. The Company believes that the Company and its employees are in good relationship.

Compensations of our employees consists of salaries, bonuses and allowances. Compensations are linked to performance of the Company as well as the employee. Our employees are also entitled to certain education, healthcare and other benefits and allowances provided by the Company.

The Company maintains social security schemes for its employees pursuant to government regulations. These social security benefits are subject to changes in the relevant law and policy. As of December 31, 2014, the Company has performed its obligation to contribute to these social security schemes and is not aware of any violation of any relevant law or policy.

Based on the development plans of the Company and its subsidiaries and the requirements of individual positions, together with the 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 have enhanced both the knowledge and operational skills of the employees.

G. Guarantees and pledges on loans and restricted assets

As of December 31, 2014, the Company provided a guarantee of approximately RMB12.861 billion for Tuas Power's long-term bank borrowings.

As of December 31, 2014, 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 2014. As of December 31, 2014, short-term loans of RMB3.150 billion were secured by accounts receivable of the Company and its subsidiaries with net book value amounting to RMB3.592 billion.
- (2) As of December 31, 2014, a short-term loan of RMB40 million was secured by a subsidiary port facility.
- (3)As of December 31, 2014, bank borrowings of RMB114.90 million were secured by discount of notes receivable with recourse. The borrowings were so recorded as the underlying discounted notes were not mature yet.
- (4)As of December 31, 2014, a long-term loan of RMB37 million of a subsidiary of the Company was secured by territorial water use right with net book value amounting to RMB80.36 million.

(5) As of December 31, 2014, a long-term loan of RMB95 million of a subsidiary of the Company was secured by certain property, plant and equipment with net book value of RMB194 million.

(6) As of December 31, 2014, a long-term loan of approximately RMB10,404 million was secured by future electricity revenue of the Company and its subsidiaries.

(7) As of December 31, 2014, a long-term loan of RMB69 million was secured by a subsidiary's port facility.

As of December 31, 2014, notes payable of RMB13 million were secured by notes receivable of the Company and its subsidiaries with net book value amounted to RMB15 million.

As of December 31, 2014, restricted bank deposits of the Company and its subsidiaries were RMB370 million.

H. Off-balance sheet arrangements

As of December 31, 2014, there were no off-balance sheet arrangements which have or are reasonably likely to have an effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

I. Performance of significant investments and their prospects

The Company acquired a 25% equity interest in Shenzhen Energy Group for RMB2.39 billion on April 22, 2003. In 2011, Shenzhen Energy Group divided into a remainder Company, Shenzhen Energy Group, and a new Company, Shenzhen Energy Management Company, and the Company holds 25% equity interests in each of the two companies. The Company acquired 200 million shares from Shenzhen Energy, a subsidiary of Shenzhen Energy Group, in December 2007. Shenzhen Energy allotted shares with its capital surplus in 2011. In February 2013, Shenzhen Energy merged Shenzhen Energy Management Corporation through the combination of a directional seasoned offering and cash payments to the shareholders of Shenzhen Energy Management Corporation, Shenzhen State-owned Assets Supervision and Administration Commission and the Company. After the merger, the Company directly held 661,161,106 shares, representing 25.02% shares in Shenzhen Energy. These investments brought a profit of RMB479 million to the Company for the year ended December 31, 2014 under IFRS. This investment is expected to provide steady returns to the Company.

The Company has held directly 60% equity interest in Sichuan Hydropower as of December 31, 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 RMB180 million for the year ended December 31, 2014 under IFRS. This investment is expected to provide steady returns to the Company.

J. Tabular disclosure of contractual obligations and commercial commitments

A summary of payments due by period of our contractual obligations and commercial commitments as of December 31, 2014 is shown in the tables below. A more complete description of these obligations and commitments is included in the Notes to Financial Statements as referenced below.

Contractual Cash Obligations

(RMB in millions)	2015	2016-2017	2018-2019	Thereafter	Total
Long-term loans from a shareholder(1)	-	640	-	-	640
Long-term bank loans(1)	6,942	16,614	12,537	26,801	62,894
Other long-term loans(1)	450	1,035	-	11	1,496
Long-term bonds(2)	5,000	14,800	8,000	-	27,800
Interest payments	2,972	4,759	3,349	4,441	15,521
Operating Lease – Head Office(3)	116	146	-	-	262
Operating Lease – Shang'an Power Plant(3)	2	4	4	48	58
Operating Lease – Nanjing Power Plant(3)	2	4	4	65	75
Operating Lease – Liaoning Branch(3)	2	1	-	-	3
Operating Lease – Hebei Branch(3)	1	-	-	-	1
Operating Lease – Liaoning Wind Power Branch(3)	1	-	-	-	1
Operating Lease – Dezhou Power Plant(3)	34	68	68	146	316
Operating Lease – Tuas Power Generation Pte Ltd.(3)	25	53	48	928	1,054
	15,547	38,124	24,010	32,440	110,121

Other commercial commitments					
(RMB in millions)	2015	2016-2017	2018-2019	Thereafter	Total
Long – term gas purchase contract(4)	11,800	23,690	23,780	103,490	162,760
Other commitments(3)	21,953	-	-	-	21,953
	33,753	23,690	23,780	103,490	184,713

Notes:

- (1) See Note 23 to the Financial Statements, “Long-term Loans”.
- (2) See Note 24 to the Financial Statements, “Long-term Bonds”.
- (3) See Note 38 to the Financial Statements, “Commitments”.
- (4) The numbers shown in the table above were calculated based on the minimum purchases stipulated in the long-term gas contracts disclosed in Note 38 to the Financial Statements.

The Company and its subsidiaries have various defined contribution plans in accordance with the local conditions and practices in the provinces in which they operate. The Company and its subsidiaries pay fixed contributions into separate entities (funds) and will have no further payment obligations if the funds do not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

Disclosures of the pension plans, including the contribution amounts, are included in Note 36 to the Financial Statements.

K. Sensitivity analysis to impairment test

Goodwill impairment

The Company and its subsidiaries perform test on an annual basis to determine whether there is any impairment in goodwill. In 2014, due to the delay in coal mine construction schedule and continuous lower utilization of the power plants in Yunnan province, the goodwill arising from the acquisition of Diandong Energy and Yuwang Energy have been impaired based on the impairment testing result. The above mentioned goodwill impairment provided in 2014 approximately amounted to RMB641 million in the aggregate.

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 of December 31, 2014, 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 RMB357 million and RMB1,113 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 RMB25 million and approximately RMB124 million, respectively.

Property, plant and equipment impairment

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

In 2014, impairment losses for certain property, plant and equipment of approximately RMB1,359 million have been recognized. Factors leading to the impairment primarily included continuous losses and external environment deterioration in respect of port industry, continuous low level of water inflow to the main dam of a hydropower plant and shut-down of a coal-fired power plant.

Changes of assumptions in tariff and fuel price will affect the result of property, plant and equipment impairment assessment. For power plants assets that are subject to impairment testing, as at December 31, 2014, 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 RMB108 million and RMB1,186 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 RMB8 million and RMB39 million, respectively.

L. Business plan

In 2015, the Company will seek to further improve its market position, encourage technological innovation, and reduce risks, increase its profitability and competitiveness, and improve the sustainability of its operation. For the

power market, the Company will actively take part in market competition and aim to achieve power generation of 345 billion kWh and 4,460 utilization hours in 2015. For the fuel market, the Company will strive to control fuel costs and secure stable fuel supply in the long term. For the capital market, the Company intends to maintain its leading position in the industry in obtaining low cost financing through market means

We will reinforce marketing activities and optimize the adjustment in production operation. We will continue to foster the establishment of a stable and reliable fuel supply system, reinforce the operation and management of Tuas Power in Singapore and strive to increase our market share, so as to create long term, stable and increasing returns for our shareholders.

ITEM 6 Directors, Senior Management and Employees

A. Directors, members of the supervisory committee and senior management

Directors

The table below sets forth certain information concerning our directors as of March 31, 2015. The current term for all of our directors is three years, which will expire in 2017.

Name	Age	Position with us
Cao Peixi	59	Chairman of the Board of Directors
Guo Junming	49	Vice Chairman of the Board of Directors
Liu Guoyue	51	Director, President
Li Shiqi	58	Director

Name	Age	Position with us
Huang Jian	52	Director
Fan Xiaxia	52	Director, Vice President
Mi Dabin	46	Director
Guo Hongbo	46	Director
Xu Zujian	60	Director
Li Song	57	Director
Li Zhensheng	70	Independent Director
Qi Yudong	48	Independent Director
Zhang Shouwen	48	Independent Director
Yue Heng	40	Independent Director
Zhang Lizi	51	Independent Director

CAO Peixi, aged 59, 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 Vice President and the President of China Huadian Corporation and the Chairman of Huadian Power International Corporation Limited. He graduated from Shandong University, majoring in electrical engineering. He holds a postgraduate degree of master in engineering awarded by the Party School of the Central Committee, and is a researcher-grade senior engineer.

GUO Junming, aged 49, is the Vice Chairman of the Company, the Chief Accountant of Huaneng Group, a Director of HIPDC and the Chairman of Huaneng Capital Services Co. Ltd.. He was the Deputy Chief Accountant and the Manager of the Finance Department of Huaneng Group. He graduated from Shanxi Finance and Economic Institute, majoring in business finance and accounting, and holds a bachelor's degree. He is a senior accountant.

LIU Guoyue, aged 51, is a Director and the President of the Company, the Vice President of Huaneng Group, the Chairman of Shanghai Times Shipping Limited Company, a Director of Xi'an Thermal Research Institute Limited Company, an Executive Director of Huaneng Power International Fuel Co., Ltd. and a Director of Tuas Power Ltd., Tuas Power Supply Pte Ltd. and Tuas Power Utilities Pte Ltd.. He was the Vice President of the Company. He graduated from North China Electric Power University, majoring in thermal engineering. He holds a Doctor's degree in engineering. He is a senior engineer.

LI Shiqi, aged 58, is a Director of the Company and the President of HIPDC. He was the Chairman and the Executive Vice Chairman of Huaneng Capital Services Co., Ltd. Mr. Li graduated from Renmin University of China, majoring in finance. He is a senior accountant.

HUANG Jian, aged 52, is a Director of the Company, an Assistant to the President of Huaneng Group, the Executive Vice Chairman of Huaneng Capital Services Co.,Ltd. and the Chairman of Huaneng Hainan Power Ltd and Huaneng Carbon Assets Management Company Limited. He was the Deputy Chief Economist and the Chief of Financial Planning of Huaneng Group. Mr. Huang graduated from the Department of Accounting of Institute of Fiscal Science of the Ministry of Finance with a master's degree in economics. He is a senior accountant.

FAN Xiaxia, aged 52, is a Director and the Vice President of the Company. He was an Assistant to the President of the Company and the General Manager (Officer) of the Company's Zhejiang Branch (Yuhuan Power Plant Preparatory Office). He graduated from the Economic Management School of Tsinghua University with an EMBA degree. He is a senior engineer.

MI Dabin, aged 46, is a Director of the Company, the Vice President of Hebei Construction & Investment Group Co., Ltd. and the Chairman of Hebei Construction & Energy Investment Co., Ltd. He was the Chief Engineer, Vice President and President of Qinhuangdao Power Generation Co., Ltd., the President of Qinhuangdao Thermal Power

Generation Co., Ltd., an assistant to the President and the Head of Production and Operation Department of Hebei Construction & Investment Group Co., Ltd., the President of Qinhuangdao Power Generation Co., Ltd. and Qinhuangdao Thermal Power Generation Co., Ltd.. He graduated from North China Electric Power University, majoring in Power Engineering, and holds a master's degree. He is a senior engineer.

GUO Hongbo, aged 46, is a Director of the Company and the Chairman of Liaoning Energy Investment (Group) Limited Liability Company. He was the Assistant to the president, vice president, Executive vice president, a Director, the president and Vice Chairman of Liaoning Energy Investment (Group) Limited Liability Company. Mr. Guo graduated from Jilin University with a master's degree in administrative management, and holds an MBA degree from Macau University of Science and Technology. He is a profession-grade senior engineer.

XU Zujian, aged 60, is a Director of the Company. He was the Vice President of Jiangsu Provincial International Trust & Investment Corporation, the President of Jiangsu Investment Management Co. Ltd., a Director and Vice President of Jiangsu Guoxin Investment Group Limited, the Chairman of Jiangsu Investment Management Co. Ltd. and the Chairman of Zking Property & Casualty Insurance Co., Ltd. He graduated from Liaoning Finance University, majoring in infrastructure finance, and holds a bachelor's degree. He is a senior economist.

LI Song, aged 57, is a Director of the Company, the Vice President of Fujian Investment and Development Group Co., Ltd., Vice Chairman of CNOOC Fujian Natural Gas Co. Ltd., Vice Chairman of CNOOC Fujian Gas Power Generation Co. Ltd. and CNOOC Fujian Zhangzhou Natural Gas Company Limited and a Director of Fujian Futou Renewable Energy Co., Ltd. She graduated from Xiamen Jimei Finance and Commerce College majoring in Finance, Open College of Party School of the Central Committee majoring in Economic Management, and holds a bachelor's degree from Party School of the Central Committee. She is an accountant.

LI Zhensheng, aged 70, is an Independent Director of the Company and TGOOD Electric Co., Ltd. He was the Head of Shanxi Electric Power and Industrial Bureau, the Chief of Rural Power Department of State Power Corporation, the 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-grade senior engineer.

QI Yudong, aged 48, is the Independent Director of the Company and the Assistant to the Principal of Capital University of Economics and Business. He is also the Head and a Professor (Grade II) of the Chinese Academy of Industry Economy Research, mentor to PhD and post-doctoral tutor (finance discipline). He is an External Supervisor and the Chairman of the Audit Committee under the Supervisory Committee of Hua Xia Bank Co., Ltd. and an Independent Director of Shenzhen Fountain Corporation. He was the Director of the School of Business Administration of Capital University of Economics and Business. He graduated from the Graduate School of Chinese Academy of Social Sciences, majoring in industrial economics, with a PhD in Economics.

ZHANG Shouwen, aged 48, is an Independent Director of the Company and a Professor and Doctoral Mentor in the Law School of Peking University, the Director of Economic Law Institute of Peking University, the Vice President and Secretary General of the Economic Law Research Society of China Law Society, an Independent Director of Guoxin Securities Co., Ltd. and an Independent Director of Minmetals Development Co., Ltd.. He was a lecturer and Associate Professor of the Law School of Peking University. He graduated from the Law School of Peking University with a PhD in Laws.

YUE Heng, aged 40, is an Independent Director of the Company, a Professor, Dean and Doctorate Mentor of Accounting Department of Guanghua Management School of Peking University, and an Independent Director of Sinopharm, Jingjin Filter Press Group Limited and Beijing United Media Information Technology Co., Ltd. He is the winner of the first session of China National Funds for Distinguished Young Scientists, the winner of New Century Excellent Talents of the Ministry of Education 2012, the leading accounting talent of Ministry of Finance, the Councilor of Accounting Society of China and the Deputy Editor-in-Chief of CJAS magazine of Accounting Society of China. He was the Assistant Professor, Associate Professor and Professor of Accounting Department of Guanghua Management School of Peking University. He graduated from Tulane University in the United States with a doctor's degree in accounting.

ZHANG Lizhi, aged 51, is an Independent Director of the Company, a Professor and Assistant to the President of North China Electric Power University, and the Executive Deputy Head of the Academy of Modern Electric Power Research. She was successively as an Associate Professor and Associate Head of Faculty of the Beijing Graduate School of North China Electric Power Institute and Beijing Institute of Economic Momentum, a Professor and Head of Faculty of North China Electric Power University. Ms. Zhang graduated from North China Electric Power Institute, majoring in Electric Power System and Its Automation. She holds a doctor's degree.

Supervisors

The table below sets forth certain information concerning our supervisors as of March 31, 2015. The current term for all of our supervisors is three years, which will expire in 2017.

Name	Age	Position with us
Ye Xiangdong	47	Chairman of the Board of Supervisors
Mu Xuan	39	Vice Chairman of the Board of Supervisors
Zhang Mengjiao	50	Supervisor
Gu Jianguo	48	Supervisor
Wang Zhaobin	59	Supervisor
Zhang Ling	54	Supervisor

YE Xiangdong, aged 47, is the Chairman of the Board of Supervisors of the Company and the Vice President of Huaneng Group. He was the Vice President of the Company, and the Executive Director and President of Huaneng Hulunbeier Energy Development Company Ltd.. He graduated from Chongqing University, majoring in thermal energy, and holds a master's degree in Engineering. He is a senior engineer.

MU Xuan, aged 39, is the Vice Chairman of the Board of Supervisors of the Company and the Vice President of Dalian Construction Investment Group Co., Ltd. He was the Officer of Finance Department, the Deputy Head and Head of Budget and Finance Department of Dalian Construction Investment Co., Ltd., the Vice President of Dalian Changxing Island Development and Construction Investment Co., Ltd., the Assistant to the President of Dalian Construction Investment Group Co., Ltd. He graduated from Dongbei University of Finance and Economics, majoring in Technical Economy and Management, and holds a master's degree.

ZHANG Mengjiao, aged 50, is a Supervisor of the Company, the Manager of the Finance Department of HIPDC, a Supervisor of Huaneng Anyuan Generation Co., Ltd., Huaneng DuanZhai Coal & Electricity Co., Ltd., Huaneng Chaohu Power Generation Co., Ltd. and Shaanxi Coal Industry Co., Ltd. and the Chairman of the board of Supervisors of Huaneng Shaanxi Power Generation Co., Ltd.. She was the Deputy Manager of the Finance Department of the Company. She graduated from Xiamen University, majoring in accounting. She holds a master's degree in economics and is a senior accountant.

GU Jianguo, aged 48, is a Supervisor of the Company, the Chairman of Nantong Investment & Management Limited Company and the Vice President of Nantong State-owned Assets Investment Holdings Co., Ltd.. Mr. Gu was the Chief of Nantong Investment Management Centre, and a Director and the President of Nantong Investment & Management Limited Company. He graduated from Shanghai Jiao Tong University with a master's degree. He is an economist.

WANG Zhaobin, aged 59, is a Supervisor of the Company and the Chairman of the Labour Union. He was the Manager of the Administration Department and the Corporate Culture Department of the Company. He graduated from China Beijing Municipal Communist Party School, majoring in economic management, and holds a bachelor's degree. He is a senior corporate culture specialist.

ZHANG Ling, aged 54, is a Supervisor and the Manager of the Audit and Supervisory Department of the Company. She was the Manager of the Equity Management Department of the Company. She graduated from Zhongnan University of Finance and Economics with a bachelor's degree in management, majoring in financial. She is a senior accountant.

Other Executive Officers

GU Biquan, aged 57, is the Vice President and General Counsel of the Company. He was the Secretary to the Board of the Company. He graduated from Beijing Radio and Television University, majoring in Electronics, and holds a college degree. He is an engineer.

ZHOU Hui, aged 51, is the Vice President and Chief Accountant of the Company. She was the Chief Accountant of the Company. She graduated from Renmin University of China, majoring in Financial Accounting, and holds a master's degree in Economics. She is a senior accountant.

ZHAO Ping, aged 52, is the Vice President of the Company. He was the Chief Engineer of the Company. He graduated from Tsinghua University, majoring in thermal engineering, with a master's degree in science and an EMBA degree. He is a researcher-grade senior engineer.

DU Daming, aged 48, is the Vice President and the Secretary to the Board of Directors of the Company. He was the Chief of the Administration Office of Huaneng Group and the Chief of the Office of the Board of Directors of the Company. He graduated from North China Electric Power University, majoring in electric system and automation, with a master's degree in science. He is a senior engineer.

WU Senrong, aged 53, is the Vice President of the Company. He was the Manager of the Human Resources Department of the Company. He graduated from the School of Economics and Management of Tsinghua University, majoring in business administration for senior management, with a bachelor's degree and an EMBA degree. He is a researcher-grade senior engineer.

SONG Zhiyi, aged 54, is the Vice President of the Company. He was the General Manager of Huaneng Northeast Branch and the Head of Construction Department of Huaneng Group. He graduated from the Guanghua Management Institute of Peking University, majoring in business administration, with a bachelor's degree and an MBA degree. He is a senior engineer.

LI Jianmin, aged 53, is the Vice President of the Company. He was the General Manager (Factory Manager) of Huaneng Zhejiang Branch (Yuhuan Power Plant) and the General Manager of Huaneng Hebei Branch. He graduated from North China Electricity College, majoring in power plant and electricity system, with a bachelor's degree in science. He is a researcher-grade senior engineer.

LIU Ranxing, aged 52, is the Vice President of the Company (commencement of term of office: March 2015). He was the President of Huaneng Northeast (Liaoning) Branch, and an Executive Director and President of Huaneng Energy & Communications Holdings Co., Ltd. He graduated from Harbin Institute of Technology, majoring in management engineering, with a master's degree in science. He is a researcher-grade senior engineer.

HE Yong, aged 56, is the Chief Engineer of the Company. He was the Manager of the Safety and Production Department and the Deputy Chief Engineer of the Company. He graduated from Wuhan University, majoring in corporate management, with a master's degree in management. He is a researcher-grade senior engineer.

B. Compensation for Directors, Supervisors and Executive Officers

The table below sets forth the compensation on individual basis for the directors, supervisors and other executive officers for the year ended December 31, 2014:

Name	Position with the Company	Pre-tax Remuneration Paid by the Company in 2014(5) (RMB in thousand)
Directors		
Mr. Cao Peixi	Chairman of the Board of Directors	-
Mr. Guo Junming(3)	Vice Chairman of the Board of Directors	-
Mr. Liu Guoyue	Director and President	653
Mr. Li Shiqi	Director	-
Mr. Huang Jian	Director	-
Mr. Fan Xi Xia	Director and Vice President	974

Name	Position with the Company	Pre-tax Remuneration Paid by the Company in 2014(5)
Mr. Mi Dabin(2)	Director	-
Mr. Guo Hongbo	Director	48
Mr. Xu Zujian	Director	48
Ms. Li Song	Director	-
Mr. Li Zhensheng	Independent Director	74
Mr. Qi Yudong	Independent Director	74
Mr. Zhang Shouwen	Independent Director	74
Mr. Yue Heng(2)	Independent Director	-
Ms. Zhang Lizi(2)	Independent Director	-
Mr. Huang Long(1)	Vice Chairman of the Board of Directors	-
Mr. Shan Qunying(1)	Director	48
Mr. Xie Rongxing(1)	Director	48
Mr. Shao Shiwei(1)	Independent Director	74
Mr. Wu Liansheng(1)	Independent Director	74
Sub-total:		2,189
Supervisors		
Mr. Ye Xiangdong(2)	Chairman of the Board of Supervisors	-
Mr. Mu Xuan(2)	Vice Chairman of the Board of Supervisors	-
Ms. Zhang Mengjiao	Supervisor	-
Mr. Gu Jianguo	Supervisor	48
Mr. Wang Zhaobin	Supervisor	836
Ms. Zhang Ling	Supervisor	736
Sub-total		1,620
Other Executive officers		
Mr. Gu Biqian	Vice President and General Counsel	839
Ms. Zhou Hui	Vice President and Chief Accountant	839
Mr. Zhao Ping	Vice President	838
Mr. Du Daming	Vice President and Secretary to the Board of Directors	838
Mr. Wu Senrong	Vice President	838
Mr. Song Zhiyi	Vice President	834
Mr. Li Jianmin	Vice President	836
Mr. Liu Ranxing(4)	Vice President	-
Mr. He Yong	Chief Engineer	836
Sub-total:		6,698
Total		10,507

Notes:

(1) Mr. Huang Long, Mr. Shan Qunying, Mr. Xie Rongxing, Mr. Shao Shiwei and Mr. Wu Liansheng retired on September 18, 2014.

(2) Mr. Mi Dabin, Mr. Yue Heng, Ms. Zhang Lizi, Mr. Ye Xiangdong and Mr. Mu Xuan were appointed on September 18, 2014.

- (3) Mr. Guo Junming retired as a supervisor and appointed as a director on September 18, 2014.
- (4) Mr. Liu Ranxing was appointed on March 24, 2015
- (5) The remuneration paid by the Company in 2014 includes fees, basic salaries, performance salaries and pension. Please see Note 37 to the Item 18 Financial Statements, "Directors', supervisors' and senior management's emoluments".

The total remuneration paid to our directors, supervisors and executive officers is comprised of basic salaries, performance salaries and pension. Of these, performance salaries account for approximately 51% of the total remuneration. In addition, directors and supervisors who are also officers or employees of the Company receive certain other benefits, such as subsidized or free health care services, housing and transportation, which are customarily provided by large enterprises in the PRC to their employees. Each of the Company's independent directors receives annual after-tax cash compensation of RMB60,000. We do not have any service contract with any director that provides for benefits upon termination of employment. In 2014, no option was granted to the directors or the supervisors.

C. Board practice

We, in accordance with the resolutions passed at a shareholders' general meeting, have set up four board committees, namely, the Audit Committee, the Strategy Committee, the Nomination Committee, and the Remuneration and Appraisal Committee, and formulated the working regulations for each committees in accordance with relevant rules and regulations. All committees operate in accordance with the working rules and utilize their members' specific backgrounds, experience and industry expertise to provide advice to us, so as to enhance our operation efficiency and to make the decision-making process better informed.

The main duties of the Audit Committee are to assist our board in performing its statutory and fiduciary duties of supervising our accounting, financial reports, internal controls and compliance, including but not limited to, assisting our board in supervising (i) the authenticity of our financial statements; (ii) our compliance with the applicable laws and regulations; (iii) the qualification and independence of our independent auditors; (iv) the performances of our independent auditors and internal auditing department and (v) the control and management of the related-party transactions of the Company

The main duties of the Strategy Committee are to advise on, and conduct research in relation to, our long-term development strategies and decisions regarding significant investments.

The main duties of the Nomination Committee are to conduct research and provide advice in relation to the requirements for selection of directors and managers and the relevant procedures, to search for qualified candidates for the positions of director and manager, to examine the candidates for the positions of director and manager and to advise matters in relation thereto.

The main duties of the Remuneration and Appraisal Committee are to conduct research on the appraisal guidelines for directors and managers, to carry out performance appraisals and provide advice accordingly, and to conduct research on the remuneration policies and proposals regarding the directors and senior management.

The members of Audit Committee are Mr. Yue Heng (Chairman), Mr. Li Zhensheng, Mr. Qi Yudong, Mr. Zhang Shouwen and Ms. Zhang Lizi.

The members of Strategy Committee are Mr. Liu Guoyue (Chairman), Mr. Li Shiqi, Mr. Huang Jian, Mr. Fan Xiaxia, Mr. Li Zhensheng and Ms. Zhang Lizi.

The members of Nomination Committee are Mr. Li Zhensheng (Chairman), Mr. Fan Xiaxia, Mr. Mi Dabin, Ms. Li Song, Mr. Qi Yudong, Mr. Zhang Shouwen and Mr. Yue Heng.

The members of Remuneration and Appraisal Committee are Mr. Qi Yudong (Chairman), Mr. Liu Guoyue, Mr. Guo Hongbo, Mr. Xu Zujian, Mr. Li Zhensheng, Mr. Yue Heng and Ms. Zhang Lizi.

D. Employees

As of December 31, 2014, we have 37,737 employees. Of these, 287 are headquarters management staff, 10,933 are power plant personnel directly involved in the management and operation of the power plants, and the remainder are maintenance personnel, ancillary service workers and others. Over 71% our work force graduated from university or technical college. As of December 31, 2012 and 2013, we had approximately 36,326 and 37,729 employees, respectively.

We conduct continuing education programs for our employees at our head office and at each power plant. We provide training in foreign language, computer, accounting and other areas to our professionals and technicians in their relevant fields. Employees are trained in accordance with the different requirements for professional and managerial positions.

We have reformed the labor system by introducing individual labor contracts. Currently, all employees are employed under employment contracts, which specify the employee's position, responsibilities, remuneration and grounds for termination. Short-term employment contracts have fixed terms of typically one to five years, at the end of which they may be renewed by agreement of both the Company and the employee.

The contract system imposes discipline, provides incentives to adopt better work methods, and provides us with a greater degree of management control over our work force. We believe that, by linking remuneration to productivity, the contract system has also improved employee morale.

Each of our power plants has a trade union and the employees of our headquarters are also members of a trade union. These trade unions protect employees' rights, aim to fulfill our economic objectives, encourage employees to participate in management decisions and mediate disputes between us and union members. We have not been subject to any strikes or other labor disturbances interfering with our operations, and we believe that our relationships with our employees are good.

Total remuneration of our employees includes salaries, bonuses and allowances. The employees also receive certain benefits in the form of education and health services subsidized by the Company and other miscellaneous subsidies.

In compliance with the relevant regulations, we and our employees participate in the local government pension plan under which all the employees are entitled to pension payments upon retirement. See Note 35 to the Financial Statements.

The Company also participates in the social insurance program administered by the social security institution, under which all employees are entitled to certain social insurance benefits, subject to adjustments in accordance with relevant PRC regulations. The Company is in compliance with all social insurance regulations and has no overdue obligations for any social insurance contribution.

E. Share ownership

None of our directors, supervisors or senior management owns any of our shares.

ITEM 7

Major Shareholders and Related Party Transactions

A. Major shareholders

Our outstanding ordinary shares consist of A Shares and H Shares, each with a par value of RMB1.00 per share. The following table sets forth certain information regarding our major shareholders as of March 31, 2015.

Shareholder	Number of shares	Approximate percentage in the total issued domestic share capital %	Approximate percentage in the total issued share capital %
Huaneng International Power Development Corporation	5,066,662,118	48.25	35.14
China Huaneng Group(1)	1,672,769,384	15.93	11.60
Hebei Provincial Construction Investment Company	603,000,000	5.74	4.18
China Hua Neng Hong Kong Company Limited	472,000,000	-	(2) 3.27

Notes:

- (1) Of the 1,672,769,384 shares, 6,246,664 A shares are held by Huaneng Group through its wholly owned subsidiary, Huaneng Capital Services Company Limited and 111,398,171 domestic shares through its controlling subsidiary, Huaneng Finance Corporation Limited.
- (2) 472,000,000 shares are H shares and represent 12.04% of the total issued H shares of the Company and 3.27% of the total issued share capital of the Company.

In 2006, all of our shareholders of non-tradable domestic shares except HIPDC transferred a total of approximately 1.1 billion shares to Huaneng Group, representing 9.24% of our total issued shares. Among others, HPCIC transferred approximately 301 million shares to Huaneng Group, and decreased its shareholdings in the Company to 5.00%.

On April 19, 2006, we carried out our reform plan to convert all non-tradable domestic shares into tradable domestic shares. According to the plan, Huaneng Group and HIPDC transferred a total of 150 million A Shares to our shareholders. As a result, the direct shareholdings of Huaneng Group and HIPDC decreased to 8.75% and 42.03%, respectively.

In June and July of 2008, through its wholly owned subsidiary, China Hua Neng Hong Kong Company Limited, Huaneng Group acquired 20 million H shares from the open market. As a result, the shareholding of Huaneng Group increased to 8.92%.

In 2010, we increased our share capital through non-public issuances of new shares, including A shares and H shares. With the approval of shareholders and relevant PRC governmental authorities, we were authorized to issue (i) not exceeding 1,500 million new A shares by way of placement to not more than 10 designated investors, including Huaneng Group, which would subscribe for no more than 500 million new A shares, and (ii) no more than 500 million new H Shares to China Hua Neng Hong Kong Company Limited (“Hua Neng HK”). On December 23, 2010, we completed the non-public issuance of 1,500 million new A shares (ordinary shares with a par value of RMB1 per share) to 10 designated investors, including Huaneng Group, at the issuance price of RMB5.57 per share. The other nine investors are CCB International Asset Management (Tianjin) Company Limited, China Life Insurance Asset Management Company Limited, New China Life Assurance Company Limited, Harbin Power Equipment Company Limited, China Three Gorges Corporation, Liaoning Energy Investment (Group) Limited Liability Company,

Dongfang Electric Co., Ltd., Dacheng Fund Management Co., Ltd. and China National Offshore Oil Corporation. The shares subscribed by Huaneng Group are subject to a lock-up period of 36 months, and the shares subscribed by other designated investors are subject to a lock-up period of 12 months. On December 28, 2010, we completed the placement of 500 million H shares (ordinary shares with a par value of RMB1 per share) to Hua Neng HK at the subscription price of HK\$4.73 per share.

On December 31, 2010, Huaneng Capital Services Company Limited (“Huaneng Capital”), a wholly owned subsidiary of Huaneng Group, acquired 12,876,654 A shares of our Company through the trading system at the Shanghai Stock Exchange, representing 0.09% of the total issued share capital of our Company. Prior to the acquisition, Huaneng Group directly and indirectly controls 7,141,786,667 shares in our Company, representing approximately 50.81% of the total issued share capital of our Company. After the acquisition, Huaneng Group directly and indirectly controls 7,154,663,321 shares of our Company, representing approximately 50.90% of the total issued share capital of our Company. Huaneng Group proposes to continue the acquisition of the A shares of our Company in the secondary market through Huaneng Capital or other concerted party(ies) or in its own name within the 12-month period starting December 31, 2010. The aggregate of such acquisition will not exceed 2% (inclusive of the shares acquired this time) of the issued share capital of our Company.

On December 23, 2011, Huaneng Group acquired 143,620,000 A Shares of our Company through China Huaneng Finance Corporation Limited, a controlling subsidiary of Huaneng Group, via the block trading system at the Shanghai Stock Exchange. After the acquisition, Huaneng Group directly and indirectly controlled 7,298,283,321 shares of our Company, representing approximately 51.93% of the total issue share capital of our Company.

Before we were established in 1994, HIPDC and seven other promoters entered into the Shareholders' Agreement dated May 31, 1994 (the "Shareholders' Agreement") which, among other things, grants to HIPDC the right to vote all the shares owned by each of the other promoters so as to enable HIPDC to have majority voting rights in general meetings for so long as we are in existence. In addition, directors designated by HIPDC will have majority representation on our board of directors and each of the other promoters will have one representative designated by it appointed as a member of our board of directors. The Shareholders' Agreement also provides that for so long as we are in existence (i) HIPDC and the other signatories to the Shareholders' Agreement will maintain their combined shareholdings to ensure their collective majority control of the Company, (ii) HIPDC has certain priority rights to purchase the shares held by the other signatories to the Shareholders' Agreement, (iii) if HIPDC does not exercise its priority rights to purchase such shares, each of the signatories to the Shareholders' Agreement other than HIPDC shall have a priority right to purchase such shares on a pro rata basis, and (iv) no shares may be sold or transferred unless their transferees agree to abide by the terms of the Shareholders' Agreement. As a result of the Shareholders' Agreement, HIPDC holds 70.09% of the total voting rights of the outstanding shares and, subject to the Shareholders' Agreement, has the power to control the election of all of our directors and to direct our management and policies.

On May 12, 2006, HIPDC and other promoters (including the shareholders who assumed the rights and obligations of original promoters as a result of share transfer) entered into an amendment to the Shareholders' Agreement, pursuant to which each promoter shall be entitled to exercise its own voting rights at the shareholders' general meeting. Consequently, HIPDC currently holds 35.14% of our total voting rights. Since HIPDC's parent company, Huaneng Group, currently holds, directly or indirectly, 14.87% of our total voting rights, HIPDC is able to exert control over us when acting in concert with Huaneng Group.

Huaneng Group and HIPDC had previously given a non-compete undertaking to us during our initial public offering of A shares in 2001, in order to support our business development, to integrate relevant quality assets and to avoid business competition. In September 2010, we received from Huaneng Group an undertaking on relevant matters for further avoidance of business competition. While Huaneng Group will continue to perform its undertakings previously given, Huaneng Group further undertakes that: (i) it shall treat us as the only platform for ultimate integration of the conventional energy business of Huaneng Group; (ii) 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 invest those assets into us. We have 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; (iii) with respect to the other non-listed conventional energy business assets of Huaneng Group located in other provincial administrative regions, Huaneng Group undertakes that it will take approximately 5 years, and upon such assets meeting the conditions for listing, it will invest such assets into us in order to support our sustainable and stable development; and (iv) Huaneng Group will continue to perform each of its undertakings to support the development of its subordinated listed companies.

On June 28, 2014, pursuant to Guideline No. 4 for the Supervision of Listed Companies No.4 - Commitments and Their Fulfillment by Listed Companies and Their Actual Controllers, Shareholders, Related Parties and Acquirers issued by CSRC, Huaneng Group strengthened its aforementioned non-competing undertaking in the following ways: (i) it shall treat us as the only platform for integrating the conventional energy business of Huaneng Group; (ii) with respect to the conventional energy business assets of Huaneng Group located in Shandong Province, Huaneng Group undertakes that by the end of 2016, it will inject such assets into the our Company when the profitability of such assets has been improved and meets our internal requirements for the listing of our assets, which include clear delineation of assets and shares ownership between our Company and Huaneng Group, absence of decrease in earnings per share of the Company after injection and any unlawful events of significance, appreciation of state-owned assets, and certain waivers of shareholder rights by Huaneng Group; (iii) with respect to the other non-listed conventional energy business assets of Huaneng Group in other provincial administrative regions, Huaneng Group undertook that by the

end of 2016, upon such assets meeting the our aforementioned internal requirements, the Group will inject such assets into the Company, with a view to supporting the Company's continuous and stable development; and (iv) Huaneng Group will continue to perform each of its undertakings to support the development of its subordinated listed companies. The period of such undertakings is between June 28, 2014 and December 31, 2016.

On October 13, 2014, the Company signed a number of equity transfer agreements with each of Huaneng Group and HIPDC, pursuant to which the Company acquired the equity interests of ten power companies in total held by Huaneng Group and HIPDC for the consideration of approximately RMB9.276 billion. This transaction further reduced the business competition between the Company and major shareholder, and honoring the undertakings provided by major shareholder to support the development of the Company.

B. Related party transactions

Guarantees

The table below sets forth information on guarantees provided by Huaneng Group, HIPDC and the Company to the related parties in 2014 for the purposes of financing their operation, construction and renovation.

Guarantor	Guarantee	Interest Rate (%)	Largest Amount Outstanding in 2014 (RMB)	Amount Outstanding As of December 31, 2014 (RMB)
Huaneng Group (Ultimate Parent of the Company)	The Company	6.36	47,837,704.08	16,315,897.41
	The Company	LIBOR + 0.075	57,865,516.51	19,358,422.02
	Yangliuqing Power Company(1)	2.15	321,628,569.25	254,845,628.27
HIPDC	The Company	5.00	2,000,000,000.00	2,000,000,000.00
The Company	Tuas Power Company(1)	SIBOR+1.65	11,885,565,887.54	11,216,464,042.81
	Tuas Power Company(1)	SIBOR+1.65	1,742,988,849.27	1,644,866,718.16
Gas Supply Pte. Ltd.	TPGS Green Energy Pte Ltd(1)	4.25	16,745,750.00	10,439,100.00

Note:

(1) These entities are subsidiaries of the Company.

Loans

The table below sets forth the loans made by Huaneng Group, subsidiaries of Huaneng Group, and the Company to the related parties in 2014 for the purposes of financing their operation, construction and renovation.

Lender	Borrower	Interest Rate %	Largest Amount Outstanding in 2014 (RMB)	Outstanding Balance as of December 31, 2014 (RMB)
Huaneng Group (Ultimate Parent of the Company)	The Company	5.400	640,484,600	640,484,600
Huaneng Finance (Subsidiary of Huaneng Group)	The Company	5.400	267,000,000	267,000,000
	Yangliuqing(1)	5.400	150,000,000	150,000,000
	Weihai Power Plant(1)	5.400	100,000,000	100,000,000
	Huaiyin II Power Plant(1)	5.400	100,000,000	100,000,000
	Qinbei Power Plant(1)	5.040	200,000,000	200,000,000
	Yushe Power Plant(1)	5.400	100,000,000	100,000,000
	Yushe Power Plant(1)	5.040	130,000,000	130,000,000
	Yushe Power Plant(1)	5.600	100,000,000	100,000,000
	Xindian Power Plant(1)	5.700	100,000,000	100,000,000
	Luohuang Power Plant(1)	5.040	200,000,000	200,000,000
	Pingliang Power Plant(1)	5.040	100,000,000	100,000,000
	Yangliuqing Co-generation(1)	5.400	100,000,000	-
	Yangliuqing Co-generation(1)	5.040	200,000,000	200,000,000
	The Company(1)	5.040	200,000,000	200,000,000

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

	The Company(1)	5.040	200,000,000	200,000,000
	Suzhou Power Plant(1)	5.040	160,000,000	160,000,000
Xi'an Thermal (Subsidiary of Huaneng Group)				
	Diandong Energy(1)	5.320	200,000,000	200,000,000
China Huaneng Group Clean Energy Technology Research Institute Co. Ltd. (Subsidiary of Huaneng Group)				
	The Company	5.040	150,000,000	150,000,000
Hua Neng HK (Subsidiary of Huaneng Group)				
	Beijing Co-Generation(1)	5.400	100,000,000	100,000,000
The Company	Weihai Power Plant(1)	6.000	400,000,000	-
	Weihai Power Plant(1)	5.700	200,000,000	-
	Weihai Power Plant(1)	5.700	200,000,000	-
	Weihai Power Plant(1)	5.700	350,000,000	-
	Weihai Power Plant(1)	5.700	300,000,000	-
	Weihai Power Plant(1)	6.000	280,000,000	-
	Weihai Power Plant(1)	5.535	24,203,000	-

Lender	Borrower	Interest Rate	Largest Amount Outstanding in 2014	Outstanding Balance as of December 31, 2014
	Huaiyin II Power Plant(1)	5.700	1,560,000,000	-
	Huaiyin II Power Plant(1)	5.885	1,420,000,000	1,200,000,000
	Taicang II Power Plant(1)	5.700	600,000,000	-
	Taicang II Power Plant(1)	5.700	100,000,000	-
	Taicang II Power Plant(1)	6.000	100,000,000	-
	Taicang II Power Plant(1)	6.600	70,000,000	-
	Taicang II Power Plant(1)	5.885	200,000,000	200,000,000
	Taicang II Power Plant(1)	5.350	100,000,000	100,000,000
	Taicang II Power Plant(1)	6.600	50,000	-
	Taicang Port(1)	6.600	50,000,000	-
	Qinbei Power Plant(1)	5.175	4,200,000	4,200,000
	Qinbei Power Plant(1)	5.600	1,100,000,000	-
	Qinbei Power Plant(1)	5.600	1,000,000,000	-
	Qinbei Power Plant(1)	6.000	1,000,000,000	-
	Qinbei Power Plant(1)	5.350	1,100,000,000	1,100,000,000
	Qinbei Power Plant(1)	5.350	500,000,000	500,000,000
	Yushe Power Plant(1)	5.700	100,000,000	-
	Yushe Power Plant(1)	5.700	100,000,000	-
	Yushe Power Plant(1)	5.700	140,000,000	-
	Yushe Power Plant(1)	5.700	70,000,000	-
	Yushe Power Plant(1)	5.700	70,000,000	-
	Yushe Power Plant(1)	5.700	265,000,000	-
	Yushe Power Plant(1)	6.000	100,000,000	-
	Yushe Power Plant(1)	5.600	300,000,000	-
	Yushe Power Plant(1)	5.600	40,000,000	-
	Yushe Power Plant(1)	5.600	160,000,000	-
	Yushe Power Plant(1)	6.031	140,000,000	140,000,000
	Yushe Power Plant(1)	5.762	200,000,000	200,000,000
	Yushe Power Plant(1)	5.885	140,000,000	140,000,000
	Yushe Power Plant(1)	5.350	265,000,000	265,000,000
	Yushe Power Plant(1)	5.350	100,000,000	100,000,000
	Yushe Power Plant(1)	5.350	340,000,000	340,000,000
	Yushe Power Plant(1)	5.350	160,000,000	160,000,000
	Xindian Power Plant(1)	6.000	170,000,000	-
	Xindian Power Plant(1)	6.000	400,000,000	-
	Xindian Power Plant(1)	5.700	85,000,000	-
	Xindian Power Plant(1)	5.700	50,000,000	-
	Xindian Power Plant(1)	5.700	50,000,000	-
	Xindian Power Plant(1)	5.700	1,200,000,000	-
	Xindian Power Plant(1)	5.350	1,285,000,000	1,285,000,000
	Xindian Power Plant(1)	5.350	720,000,000	720,000,000
	Yueyang Power Plant(1)	6.000	900,000,000	-
	Yueyang Power Plant(1)	5.175	14,780,000	14,780,000
	Luohuang Power Plant(1)	5.700	330,000,000	-
	Luohuang Power Plant(1)	5.175	34,500,000	34,500,000

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Pingliang Power Plant(1)	5.700	970,000,000	-
Pingliang Power Plant(1)	5.700	1,250,000,000	-
Pingliang Power Plant(1)	5.600	100,000,000	-
Pingliang Power Plant(1)	5.350	970,000,000	970,000,000
Pingliang Power Plant(1)	5.350	1,250,000,000	1,250,000,000
Pingliang Power Plant(1)	5.350	100,000,000	100,000,000
Shidongkou Power(1)	5.175	5,160,000	5,160,000
Daditaihong(1)	5.600	88,000,000	-
Daditaihong(1)	5.600	140,000,000	-
Daditaihong(1)	5.700	67,000,000	-
Daditaihong(1)	5.700	200,000,000	-
Daditaihong(1)	5.762	34,000,000	34,000,000

Lender	Borrower	Interest Rate	Largest Amount Outstanding in 2014	Outstanding Balance as of December 31, 2014
	Daditaihong(1)	5.885	200,000,000	200,000,000
	Daditaihong(1)	5.350	140,000,000	140,000,000
	Daditaihong(1)	5.350	68,000,000	68,000,000
	Qidong Wind Power(1)	5.600	360,000,000	-
	Qidong Wind Power(1)	5.350	360,000,000	360,000,000
	Qidong Wind Power(1)	5.350	40,000,000	40,000,000
	Yangliuqing Co-generation(1)	5.580	170,000,000	-
	Yangliuqing Co-generation(1)	5.175	4,390,000	4,390,000
	Xiangqi Hydropower(1)	5.700	100,000,000	-
	Xiangqi Hydropower(1)	5.700	50,000,000	-
	Xiangqi Hydropower(1)	5.700	10,000,000	-
	Xiangqi Hydropower(1)	5.700	10,000,000	-
	Xiangqi Hydropower(1)	5.700	30,000,000	-
	Xiangqi Hydropower(1)	5.600	200,000,000	-
	Xiangqi Hydropower(1)	6.462	100,000,000	-
	Xiangqi Hydropower(1)	5.762	10,000,000	10,000,000
	Xiangqi Hydropower(1)	5.885	100,000,000	100,000,000
	Xiangqi Hydropower(1)	5.885	10,000,000	10,000,000
	Xiangqi Hydropower(1)	5.350	200,000,000	200,000,000
	Xiangqi Hydropower(1)	5.350	20,000,000	20,000,000
	Yingkou Co-generation(1)	5.200	700,000,000	700,000,000
	Yingkou Co-generation(1)	3.720	700,000,000	-
	Yingkou Co-generation(1)	5.600	500,000,000	-
	Yingkou Co-generation(1)	5.350	500,000,000	500,000,000
	Zuoquan Power Plant(1)	5.600	400,000,000	-
	Zuoquan Power Plant(1)	5.700	200,000,000	-
	Zuoquan Power Plant(1)	5.600	500,000,000	-
	Zuoquan Power Plant(1)	5.600	200,000,000	-
	Zuoquan Power Plant(1)	5.320	1,270,000,000	-
	Zuoquan Power Plant(1)	5.350	300,000,000	300,000,000
	Zuoquan Power Plant(1)	5.350	600,000,000	600,000,000
	Zuoquan Power Plant(1)	5.350	500,000,000	500,000,000
	Zuoquan Power Plant(1)	5.350	1,000,000,000	1,000,000,000
	Kangbao Wind Power(1)	6.000	15,000,000	-
	Wafangdian Wind Power(1)	5.600	172,500,000	-
	Wafangdian Wind Power(1)	5.350	142,500,000	142,500,000
	Changtu Wind Power(1)	6.000	24,000,000	-
	Changtu Wind Power(1)	5.762	20,000,000	20,000,000
	Changtu Wind Power(1)	5.885	48,000,000	48,000,000
	Changtu Wind Power(1)	5.885	50,000,000	50,000,000
	Changtu Wind Power(1)	5.350	8,000,000	8,000,000
	Changtu Wind Power(1)	5.350	27,000,000	27,000,000
	Haimen Port(1)	5.700	9,000,000	-

Lender	Borrower	Interest Rate	Largest Amount Outstanding in 2014	Outstanding Balance as of December 31, 2014
	Haimen Port(1)	5.700	14,000,000	-
	Haimen Port(1)	5.700	20,000,000	-
	Haimen Port(1)	5.700	15,000,000	-
	Haimen Port(1)	5.700	40,000,000	-
	Haimen Port(1)	5.700	20,000,000	-
	Haimen Port(1)	6.000	120,000,000	-
	Haimen Port(1)	5.700	42,000,000	-
	Haimen Port(1)	5.600	240,000,000	-
	Haimen Port(1)	5.762	160,000,000	160,000,000
	Haimen Port(1)	5.885	24,000,000	24,000,000
	Haimen Port(1)	5.600	10,000,000	-
	Haimen Port(1)	5.350	120,000,000	120,000,000
	Haimen Port(1)	5.600	30,000,000	-
	Haimen Port(1)	5.350	280,000,000	280,000,000
	Rudong Wind Power(1)	5.700	20,000,000	-
	Rudong Wind Power(1)	5.700	10,000,000	-
	Rudong Wind Power(1)	5.700	20,000,000	-
	Rudong Wind Power(1)	5.700	100,000,000	-
	Rudong Wind Power(1)	5.350	100,000,000	100,000,000
	Zhanhua Co-generation(1)	6.000	750,000,000	750,000,000
	Zhanhua Co-generation(1)	6.000	200,000,000	200,000,000
	Zhanhua Co-generation(1)	5.320	300,000,000	300,000,000
	Hualu Sea Transportation(1)	5.700	35,000,000	-
	Hualu Sea Transportation(1)	5.700	130,000,000	-
	Hualu Sea Transportation(1)	5.762	35,000,000	35,000,000
	Hualu Sea Transportation(1)	5.885	130,000,000	130,000,000
	Fujian Port(1)	5.700	43,000,000	-
	Fujian Port(1)	5.700	780,000,000	-
	Fujian Port(1)	5.700	208,800,000	-
	Fujian Port(1)	5.700	90,000,000	-
	Fujian Port(1)	5.700	30,000,000	-
	Fujian Port(1)	5.700	40,000,000	-
	Fujian Port(1)	5.700	50,000,000	-
	Fujian Port(1)	5.700	38,000,000	-
	Fujian Port(1)	5.700	50,000,000	-
	Fujian Port(1)	6.000	132,000,000	132,000,000
	Fujian Port(1)	6.462	70,000,000	70,000,000
	Fujian Port(1)	6.462	780,000,000	780,000,000
	Fujian Port(1)	6.462	303,000,000	303,000,000
	Fujian Port(1)	6.462	246,800,000	246,800,000
	Diandong Energy(1)	5.700	100,000,000	-
	Diandong Energy(1)	5.201	1,000,000,000	1,000,000,000
	Diandong Energy(1)	5.700	60,000,000	-
	Diandong Energy(1)	5.700	60,000,000	-
	Diandong Energy(1)	6.000	175,000,000	-

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Diandong Energy(1)	5.600	100,000,000	-
Diandong Energy(1)	5.600	1,000,000,000	-
Diandong Energy(1)	6.462	200,000,000	-
Diandong Energy(1)	5.762	100,000,000	100,000,000
Diandong Energy(1)	5.885	150,000,000	150,000,000
Diandong Energy(1)	5.885	20,000,000	20,000,000
Diandong Energy(1)	5.350	100,000,000	100,000,000
Diandong Energy(1)	5.350	200,000,000	200,000,000
Diandong Energy(1)	5.350	200,000,000	200,000,000
Diandong Energy(1)	5.350	148,000,000	148,000,000
Diandong Energy(1)	5.350	1,100,000,000	1,100,000,000

Lender	Borrower	Interest Rate	Largest Amount Outstanding in 2014	Outstanding Balance as of December 31, 2014
	Yuwang Energy(1)	5.320	200,000,000	-
	Yuwang Energy(1)	5.320	90,000,000	-
	Yuwang Energy(1)	5.600	500,000,000	-
	Yuwang Energy(1)	5.762	300,000,000	100,000,000
	Yuwang Energy(1)	5.885	40,000,000	40,000,000
	Yuwang Energy(1)	5.350	60,000,000	60,000,000
	Yuwang Energy(1)	5.350	60,000,000	60,000,000
	Yuwang Energy(1)	5.350	60,000,000	60,000,000
	Yuwang Energy(1)	5.885	250,000,000	250,000,000
	Yuwang Energy(1)	5.350	480,000,000	480,000,000
	Suzihe Hydropower(1)	6.000	350,400,000	-
	Suzihe Hydropower(1)	5.350	367,100,000	367,100,000
	Suzihe Hydropower(1)	5.350	33,790,000	33,790,000
	Enshi Maweigou Hydropower(1)	5.700	10,000,000	-
	Enshi Maweigou Hydropower(1)	5.700	5,000,000	-
	Enshi Maweigou Hydropower(1)	5.700	100,000,000	-
	Enshi Maweigou Hydropower(1)	5.700	10,000,000	-
	Enshi Maweigou Hydropower(1)	5.700	5,000,000	-
	Enshi Maweigou Hydropower(1)	6.000	234,000,000	-
	Enshi Maweigou Hydropower(1)	6.000	10,000,000	-
	Enshi Maweigou Hydropower(1)	6.462	5,000,000	-
	Enshi Maweigou Hydropower(1)	6.462	10,000,000	-
	Enshi Maweigou Hydropower(1)	6.462	10,000,000	-
	Enshi Maweigou Hydropower(1)	6.462	10,000,000	-
	Enshi Maweigou Hydropower(1)	6.462	40,000,000	-
	Enshi Maweigou Hydropower(1)	6.600	20,000,000	-
	Tongxiang CCGT(1)	5.700	142,000,000	-
	Tongxiang CCGT(1)	5.700	108,000,000	-
	Tongxiang CCGT(1)	5.600	140,000,000	-
	Tongxiang CCGT(1)	5.600	260,000,000	-
	Tongxiang CCGT(1)	6.462	40,000,000	-
	Tongxiang CCGT(1)	5.350	80,000,000	80,000,000

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

Tongxiang CCGT(1)	5.350	30,000,000	30,000,000
Tongxiang CCGT(1)	5.350	200,000,000	200,000,000
Qingdao Co-generation(1)	5.700	20,000,000	-
Qingdao Co-generation(1)	5.432	50,000,000	50,000,000
Qingdao Co-generation(1)	5.350	20,000,000	20,000,000
Liangjiang CCGT(1)	5.700	150,000,000	-
Liangjiang CCGT(1)	5.700	300,000,000	-
Liangjiang CCGT(1)	5.700	252,000,000	-
Liangjiang CCGT(1)	5.700	5,000,000	-

Lender	Borrower	Interest Rate	Largest Amount Outstanding in 2014	Outstanding Balance as of December 31, 2014
	Liangjiang CCGT(1)	5.700	23,000,000	-
	Liangjiang CCGT(1)	5.700	30,000,000	-
	Liangjiang CCGT(1)	5.700	40,000,000	-
	Liangjiang CCGT(1)	5.600	30,000,000	30,000,000
	Liangjiang CCGT(1)	5.320	200,000,000	200,000,000
	Jiangxi Clean Energy(1)	5.600	20,000,000	-
	Jiangxi Clean Energy(1)	6.031	5,000,000	5,000,000
	Jiangxi Clean Energy(1)	5.762	10,000,000	10,000,000
	Jiangxi Clean Energy(1)	5.762	10,000,000	10,000,000
	Jiangxi Clean Energy(1)	5.350	20,000,000	20,000,000
	Suzhou CCGT(1)	5.600	180,000,000	-
	Suzhou CCGT(1)	5.600	20,000,000	-
	Suzhou CCGT(1)	5.600	20,000,000	-
	Suzhou CCGT(1)	5.762	67,264,000	67,264,000
	Suzhou CCGT(1)	5.350	220,000,000	220,000,000
	Subaoding Wind Power(1)	5.700	20,000,000	-
	Subaoding Wind Power(1)	5.700	52,000,000	-
	Subaoding Wind Power(1)	6.462	20,000,000	-
	Dongshan CCGT(1)	5.600	120,000,000	-
	Dongshan CCGT(1)	5.885	50,000,000	50,000,000
	Dongshan CCGT(1)	5.885	30,000,000	30,000,000
	Dongshan CCGT(1)	5.350	11,000,000	11,000,000
	Dongshan CCGT(1)	5.350	34,000,000	34,000,000
	Dongshan CCGT(1)	5.600	200,000,000	-
	Dongshan CCGT(1)	5.350	120,000,000	120,000,000
	International Fuel(1)	6.462	500,000,000	-
	International Fuel(1)	6.462	500,000,000	-
	Fuyuan Wind Power(1)	5.350	20,000,000	20,000,000
	Fuyuan Wind Power(1)	5.762	30,000,000	30,000,000
	Fuyuan Wind Power(1)	5.885	70,000,000	70,000,000
	Fuyuan Wind Power(1)	5.350	32,000,000	32,000,000
	Fuyuan Wind Power(1)	5.885	30,000,000	30,000,000
	Haimen Power(1)	6.250	1,400,000,000	1,120,000,000
	Haimen Power(1)	6.939	1,000,000,000	-
	Haimen Power(1)	6.250	600,000,000	600,000,000
	Haimen Power(1)	5.350	160,000,000	160,000,000
	Haimen Power(1)	5.350	240,000,000	240,000,000
	Haimen Power(1)	5.350	110,000,000	110,000,000
	Haimen Power(1)	5.350	730,000,000	730,000,000
	Luoyang Co-generation(1)	6.490	20,000,000	20,000,000
	Luoyang Co-generation(1)	6.462	80,000,000	80,000,000
	Yingkou Port(1)	5.885	30,000,000	30,000,000
	Yingkou Port(1)	5.885	50,000,000	50,000,000
	Yingkou Xianrendao Co-generation(1)	5.885	40,000,000	40,000,000

Yingkou Xianrendao			
Co-generation(1)	5.885	16,250,000	16,250,000
Guidong Wind Power(1)	5.762	10,000,000	10,000,000
Guidong Wind Power(1)	5.350	40,000,000	40,000,000
Guidong Wind Power(1)	5.350	60,000,000	60,000,000
Luhe Wind Power(1)	5.762	10,000,000	10,000,000
Luhe Wind Power(1)	5.762	10,000,000	10,000,000

Lender	Borrower	Interest Rate	Largest Amount Outstanding in 2014	Outstanding Balance as of December 31, 2014
	Mianchi Co-generation(1)	5.885	100,000,000	100,000,000
	Mianchi Co-generation(1)	5.885	80,000,000	80,000,000
	Mianchi Co-generation(1)	5.885	20,000,000	20,000,000
	Mianchi Co-generation(1)	5.885	50,000,000	50,000,000
	Mianchi Co-generation(1)	5.885	50,000,000	50,000,000
	Anbei Third Wind Power(1)	6.000	80,000,000	-
	Anbei Third Wind Power(1)	5.350	100,000,000	100,000,000
	Jingling Power(1)	6.000	300,000,000	-
	Panxian Wind Power(1)	5.885	10,000,000	10,000,000
	Panxian Wind Power(1)	5.885	10,000,000	10,000,000
	Panxian Wind Power(1)	5.885	20,000,000	20,000,000
	Panxian Wind Power(1)	5.600	36,000,000	-
	Nanjing CCGT(1)	6.000	400,000,000	400,000,000
	Huaining Wind Power(1)	6.600	10,000,000	10,000,000
	Si'an Photovoltaic(1)	5.350	18,000,000	18,000,000

Note:

(1) These entities are subsidiaries of the Company.

Lease Agreement

Pursuant to a leasing agreement and a supplemental agreement entered into by Huaneng Property Co., Ltd. (formerly known as Beijing Huaneng Mansion Construction and Management Co., Ltd.) and us on April 1, 2010 and July 1, 2011, respectively, Huaneng Construction agreed to lease the designated offices of Huaneng Mansion to us until March 31, 2014. On April 1, 2014, we renewed the leasing agreement with Huaneng Property Co., Ltd. with a total leasing area of 30,428.70 square meters for three years. After renewal, such leasing agreement will expire on March 31, 2017 and the annual rent is RMB116.62 million.

Transactions with Huaneng Group

On December 27, 2013, we entered into the Framework Agreement with Huaneng Group, our ultimate controlling shareholder, for a term commencing on January 1, 2014 and expiring on December 31, 2014. Pursuant to the Huaneng Group Framework Agreement, we will conduct the following transactions with Huaneng Group and its subsidiaries and associates: (i) the purchase of ancillary equipment and parts; (ii) the purchase of coal and transportation services; (iii) the sale of products; (iv) leasing of facilities, land and office spaces; (v) technical services, engineering contracting services and other services; (vi) the provision of entrusted sale services and (vii) trust loans and the entrusted loan. On November 19, 2014, we renewed the Huaneng Group Framework Agreement with Huaneng Group, for a term commencing on January 1, 2015 and expiring on December 31, 2015.

Transactions with Huaneng Finance

On January 5, 2012, we entered into the Huaneng Finance Framework Agreement with Huaneng Finance, a subsidiary of Huaneng Group, for a term commencing on January 1, 2012 and expiring on December 31, 2014. Pursuant to the Huaneng Finance Framework Agreement, we will enter into the following transactions with Huaneng Finance: (i) placing cash deposits by us with Huaneng Finance; (ii) provision of discounting services by Huaneng Finance to us;

and (iii) provision of loan advancement by Huaneng Finance to us. Such transactions will be conducted on an on-going basis and will constitute continuing connected transactions under the Hong Kong Listing Rules. During the period from 2012 to 2014, the maximum outstanding balance of the deposits to be placed with Huaneng Finance under the Huaneng Finance Framework Agreement, on a daily basis, will not exceed RMB6 billion. As of December 31, 2014, we placed with Huaneng Finance current deposits of approximately RMB5,048.72 million, which bore interest rates ranging from 0.35% to 1.35% per annum.

Transactions with Jiangsu Guoxin

On December 27, 2013, we entered into a framework agreement with Jiangsu Province Guoxin Asset Management Group Company Limited (“Jiangsu Guoxin”) for a term commencing on January 1, 2014 and expiring on December 31, 2014, pursuant to which our Company and its subsidiaries will provide entrusted sale services to Jiangsu Guoxin. On November 19, 2014, we renewed the agreement with Jiangsu Guoxin for a term commencing on January 1, 2015 and expiring on December 31, 2015.

Entrusted Management Agreement with Huaneng Group

We have entered into certain entrusted management agreement with Huaneng Group in connection with mutual management of electricity assets. Services under such entrusted management arrangements include preliminary project planning, annual budget and comprehensive planning, power marketing, production management of power plants, construction management, financial management, human resources and labor wages management, administration management, legal service management, assets operation and shareholding management, information disclosure management, related party transaction management, risk and internal control management, comprehensive affairs management and reporting/co-ordination management. By entering into these entrusted management arrangements, we aim to further improve the overall and management efficiency of our electricity assets in several provinces via the province level management system of Huaneng Group.

Coal purchases and service fee occurred for transportation

In 2014, we paid RMB373.88 million, RMB1,569.65 million, RMB84.01 million, RMB1,105.10 million and RMB2,705.87 million, respectively, to Huaneng Energy & Communications Holdings Co., Ltd. and its subsidiaries, Rizhao Power Company, North United Power Coal Transportation and Marketing Co., Ltd., Gansu Huating Coal Power Co., Ltd. and Shanghai Time Shipping for coal purchase and service fees incurred for transportation.

Transactions with Huaneng Group and HIPDC

On October 13, 2014, we entered into certain agreements with Huaneng Group on the transfer of equity interests in certain companies previously owned by Huaneng Group, pursuant to which we acquired from Huaneng Group 91.8% equity interests in Huaneng Hainan Power Inc., 75% equity interests in Huaneng Wuhan Power Generation Co. Ltd., 53.45% equity interests in Huaneng Suzhou Thermal Power Co. Ltd., 97% equity interests in Enshi Qingjiang Dalongtan Hydropower Development Co. Ltd. and 100% equity interests in Huaneng Hualiangting Hydropower Co., Ltd. for the consideration of RMB7,337,647,400.

On October 13, 2014, we entered into certain agreements with HIPDC on the transfer of equity interests in certain companies previously owned by HIPDC, pursuant to which we acquired from HIPDC 60% equity interests in Huaneng Chaohu Power Generation Co. Ltd., 100% equity interests in Huaneng Ruijin Power Generation Co., Ltd., 100% equity interests in Huaneng Anyuan Power Generation Co., Ltd., 100% equity interests in Huaneng Jingmen Thermal Power Co., Ltd. and 100% equity interests in Huaneng Yingcheng Thermal Power Co., Ltd. for the consideration of RMB1,938,178,900.

According to the aforesaid transfer agreements, we paid 50% of the consideration of these transactions to Huaneng Group and HIPDC on January 8, 2015. Upon the completion of these transactions, we increased a total installed operational capacity of 7,087.5 MW, installed attributable operational capacity of 5,737.7 MW, and capacity under construction of 2,300 MW.

Establishing Joint Venture with Hua Neng HK

On November 19, 2014, we entered into a joint venture contract with Hua Neng HK to jointly establish Huaneng Rudong Baxianjiao Offshore Wind Power Company Limited (“Baxianjiao Wind Power”), pursuant to which, Baxianjiao Wind Power shall have registered capital of RMB610 million, we will hold 70% of its equity interest and contribute capital of RMB427 million, and Hua Neng HK will hold 30% of its equity interest and contribute capital equivalent to RMB 183 million by U.S. dollars cash remittance.

For a detailed discussion of related party transactions, see Note 35 to the Financial Statements.

C. Interests of experts and counsel

Not applicable.

ITEM 8 Financial Information

A. Consolidated statements and other financial information

See pages F-1 to F-105.

Legal proceedings

Other than that disclosed under “Item 5. Operating and Financial Review and Prospects – G. Guarantees and pledges on loans and restricted assets”, we are not a defendant in any material litigation or arbitration and no litigation or claim of material importance is known to us or any member of the Board of Directors of us to be pending or threatened against us.

Dividend distribution policy

Our articles of association clearly define our cash dividend policy, i.e. when our earnings and accumulative undistributable profits for the current year are positive, and on the condition that our cash flow can satisfy our normal operation and sustainable development, we shall adopt a cash dividend appropriation policy on the principle that the cash dividend payout will not be less than 50% of the distributable profit realized in the then-current year’s consolidated financial statement.

Our Board of Directors will determine the payment of dividends, if any, with respect to our shares on a per share basis. Any final dividend for a financial year shall be subject to shareholders' approval. The Board may declare interim and special dividends at any time under general authorization by a shareholders' ordinary resolution. A decision to declare or to pay any dividends in the future, and the amount of any dividends, will depend on our results of operations, cash flows, financial condition, future prospects and other factors which our Directors may determine as important.

For holders of our H shares, cash dividend payments, if any, shall be declared by our Board of Directors in Renminbi and paid in HK Dollars. The depositary will convert the HK Dollar dividend payments and distribute them to holders of ADSs in U.S. dollars, less expenses of conversion.

Dividends may be paid only out of our distributable profits (less allocation to the statutory funds of 10% of our net income determined in accordance with PRC GAAP) and may be subject to any applicable PRC withholding tax. Our Articles of Association limit our distributable profits to the lower of the amounts determined in accordance with PRC GAAP, and IFRS. Subject to the above, we expect to carry a positive, balanced and stable dividend distribution policy.

Our board has proposed a cash dividend of RMB0.38 per ordinary share (tax inclusive) for the year ended December 31, 2014, which is equivalent to RMB15.2 per ADS. The total dividend to be paid amounts to approximately RMB5,480 million.

B. Significant changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

ITEM 9 The Offer and Listing

A. Offer and listing details and markets

The Company's ADSs have been listed on the New York Stock Exchange since October 6, 1994. The table below sets forth, for the periods indicated, the high and low closing prices of the ADSs on the New York Stock Exchange.

		Closing Price per ADS	
		High	Low
		(US\$)	(US\$)
2010		25.68	20.77
2011		23.87	15.67
2012		37.15	21.02
2013		49.37	33.83
2014		56.44	31.51
2013	First Quarter	43.95	35.35
	Second Quarter	49.37	33.83
	Third Quarter	43.43	37.22
	Fourth Quarter	44.01	35.58
2014	First Quarter	39.06	31.51
	Second Quarter	45.24	39.17

Edgar Filing: HUANENG POWER INTERNATIONAL INC - Form 20-F

	Third Quarter	49.21	43.66
	Fourth Quarter	56.44	42.65
2015	First Quarter	59.94	44.2
2014	October	49.55	42.65
	November	49.48	44.56
	December	56.44	46.72
2015	January	59.94	52.79
	February	55.83	46.81
	March	50.43	44.2

Source: Reuters

Each ADS represents 40 H shares. As of March 31, 2015, there were 122 registered holders of American Depositary Receipts evidencing ADS.

On January 21, 1998, we listed our H shares on the Hong Kong Stock Exchange. On February 26, 1998, we placed 250 million H Shares at the price of HK\$4.40 per H share or US\$22.73 per ADS. In May 2004, we effected a two-for-one stock split by way of a stock dividend for all our outstanding shares including H shares. The table below sets forth, for the periods indicated, the high and low closing prices of H shares on the Hong Kong Stock Exchange.

		Closing Price per H Share	
		High	Low
		(HK\$)	(HK\$)
2010		5.04	4.10
2011		4.65	3.02
2012		7.19	4.13
2013		9.64	6.21
2014		10.92	6.21
2013	First Quarter	8.54	6.83
	Second Quarter	9.64	6.78
	Third Quarter	8.5	7.13
	Fourth Quarter	8.74	6.87
2014	First Quarter	7.61	6.21
	Second Quarter	8.75	7.57
	Third Quarter	9.52	8.48
	Fourth Quarter	10.92	8.3
2015	First Quarter	11.3	8.54
2014	October	9.52	8.3
	November	9.52	8.56
	December	10.92	8.98
2015	January	11.3	10.28
	February	10.82	9.09
	March	9.75	8.54

As of March 31, 2015, there were 401 registered holders of H Shares.

ITEM 10

Additional Information

A. Share capital

Not applicable.

B. Memorandum and articles of association

The following is a brief summary of certain provisions of our Articles of Association, as amended, the Company Law and certain other applicable laws and regulations of the PRC. Such summary does not purport to be complete. For further information, you and your advisors should refer to the text of our Articles of Association, as amended, and to the texts of the applicable laws and regulations.

Objects and Purposes

We are a joint stock limited company established in accordance with the Standard Opinion for Joint Stock Limited Companies (the “Standard Opinion”) and certain other relevant laws and regulations of the PRC. We are registered with the PRC State Administration for Industry and Commerce with business license number Qi Gu Guo Zi No. 000496. Article 10 of our Articles of Association provides that our scope of businesses includes, among other things, investment, construction, operation and management of power plants; development, investment and operation of other export-oriented enterprises related to power plants; and production and supply of thermal heat.

Directors

Our directors shall be elected at our shareholders’ general meeting. Because the shares do not have cumulative voting rights, a holder of a majority of the shares is able to elect all of the directors. Our directors shall be elected for a term of three years and may serve consecutive terms upon re-election, except that independent directors may only serve a maximum of two consecutive terms of six years. Our directors are not required to hold any shares in us, and there is no age limit requirement for the retirement or non-retirement of our directors.

Where a director is materially interested, directly or indirectly, in a contract, transaction or arrangement (including any proposed contract, transaction or arrangement) with us, he or she shall declare the nature and extent of his or her interests to the board of directors at the earliest opportunity, whether or not such contract, transaction or arrangement is otherwise subject to the approval of the board. A director shall not vote, and shall not be counted in the quorum of the meeting, on any resolution concerning any contract, transaction or arrangement where the director owns material rights or interests therein. A director is deemed to be interested in a contract, transaction or arrangement in which his associate (as defined by Article 133 of the Articles of Association) is interested.

Unless the interested director discloses his interests to the board and the contract, transaction or arrangement in which the director is materially interested is approved by the board at a meeting in which the director neither votes nor is counted in the quorum, such contract, transaction or arrangement may be revoked by us except with respect to a bona fide party thereto who does not have notice of the director's interests.

We are prohibited from making loans or providing guarantees to our directors and their associates except where such loan or guarantee is made or provided under a service contract as approved by our shareholders at the shareholders' general meeting and to meet expenditure requirement incurred or to be incurred by the director for the purposes of the Company or for the purpose of enabling the director to perform his or her duties properly.

Matters relating to the remuneration of our directors shall be determined by the shareholders' general meeting.

Dividends

Distribution of dividends may be proposed by our board of directors for approval by an ordinary resolution of our shareholders at the shareholders' general meeting. The Articles of Association allows for cash dividends, stock dividends and combination of cash and stock dividends.

Dividends may only be distributed after allowance has been made for:

- recovery of losses, if any;
- allocations to the statutory surplus reserve fund; and
- allocations to a discretionary surplus reserve fund.

The allocation to the statutory surplus reserve fund is 10% of our net income determined in accordance with the PRC accounting rules. Where the accumulated statutory surplus reserve fund has reached 50% or more of our registered capital, no allocation is needed.

The Articles of Association require that cash dividends and other distribution with respect of H Shares be declared in Renminbi and paid by the Company in U.S. dollars or Hong Kong dollar in terms of the H Shares listed on the Hong Kong Stock Exchange. The Articles of Association further stipulate that for dividends and other distributions paid in currencies other than Renminbi, we shall use an exchange rate equal to the median closing exchange rate of Renminbi for such currencies announced by the PBOC for two working days in the week preceding the date on which such dividends or other distributions are declared.

We will appoint receiving agents to receive, on behalf of the holders of H Shares, any dividend distributions and all other money owing by us in respect of such shares (Receiving Agents). The Receiving Agents will comply with the laws and regulations of the applicable stock exchanges on which our shares are listed. Any Receiving Agent appointed on behalf of the holders of H Shares listed on the Hong Kong Stock Exchange will be a company registered as a trust

corporation under the Trustee Ordinance of Hong Kong.

Dividends payments may be subject to PRC withholding tax.

Voting Rights and Shareholders' Meetings

Our board of directors shall convene a shareholders' annual general meeting once every year and within six months from the end of the preceding financial year. Our board shall convene an extraordinary general meeting within two months after the occurrence of any one of the following events:

- where the number of directors is less than the number required by the PRC Company Law or two-thirds of the number specified in our Articles of Association;
 - where our unrecovered losses reach one-third of the total amount of our share capital;
 - where shareholder(s) holding 10% or more of our issued shares so request(s);

- whenever our board deems necessary or our supervisory committee so requests; or
- other circumstances as provided in the Articles of Association.

Resolutions proposed by shareholder(s) holding 3% or more of the total number of voting shares shall be included in the agenda for the relevant annual general meeting if (i) they are submitted to the board of directors no later than 10 days before the annual general meeting is to be held and (ii) they are matters which fall within the scope of the functions and powers of shareholders' general meeting and have clear subject and concrete terms to be voted upon. The board of directors shall publish a supplementary notice of annual general meeting specifying the resolutions proposed to other shareholders. Upon publication of the supplementary notice, no alteration to the proposed resolutions or addition of other proposed resolutions will be accepted.

All shareholders' meetings must be convened by our board by written notice given to shareholders not less than 45 days before the meeting. Based on the written replies received by us 20 days before a shareholders' meeting, we shall calculate the number of voting shares represented by shareholders who have indicated that they intend to attend the meeting. When the number of voting shares represented by those shareholders amount to more than one-half of our total voting shares, we shall convene the shareholders' general meeting. Otherwise, we shall, within five days before holding the shareholders' general meeting, inform the shareholders again of the motions to be considered and the date and venue of the meeting by way of a public announcement. After the announcement is made, the shareholders' meeting may be convened. The accidental omission by us to give notice of a meeting to, or the non-receipt of notice of a meeting by, a shareholder will not invalidate the proceedings at that shareholders' meeting.

Shareholders at meetings have the power, among other things, to examine and approve our profit distribution plans and plans to recover losses, the annual budget, an increase or reduction of registered share capital, the reports of our board of directors and supervisory committee, the issuance of debentures, and the plans for merger, division, dissolution or liquidation; to elect or remove our directors and supervisors who are not elected as employees' representatives; and to review and amend our Articles of Association. In addition, the rights of a class of shareholders may not be modified or abrogated, unless approved by a special resolution of shareholders at a general shareholders' meeting and by a special resolution of shareholders of that class of shares at a separate meeting. Our Articles of Association enumerate, without limitation, certain amendments which would be deemed to be a modification or abrogation of the rights of a class of shareholders, including increasing or decreasing the number of shares of such class or the number of shares of a class with voting or distribution rights or privileges equal or superior to the shares of such class, removing or reducing rights to receive dividends in a particular currency, and creating shares with voting or distribution rights or privileges equal or superior to the shares of such class.

Each share is entitled to one vote on all such matters submitted to a vote of our shareholders at the shareholders' general meetings, except for meetings of a special class of shareholders where only holders of shares of the affected class are entitled to vote on the basis of one vote per share of the affected class.

Shareholders are entitled to attend and vote at meetings either in person or by proxy. Proxies must be in writing and deposited at our legal address, or such other place as is specified in the meeting notice, not less than 24 hours before the start of the meeting at which the proxy proposes to vote or the time appointed for the passing of the relevant resolution(s). When the instrument appointing a proxy is executed by the shareholder's attorney-in-fact, such proxy when deposited must be accompanied by a notary-certified copy of the relevant power of attorney or other authority under which the proxy was executed.

Except for those actions discussed below which require supermajority votes ("special resolutions"), resolutions of the shareholders are passed by a simple majority of the voting shares held by shareholders who are present in person or by proxy. Special resolutions must be passed by more than two-thirds of the voting shares held by shareholders who are

present in person or by proxy.

The following decisions must be adopted by special resolution:

- an increase or reduction of our registered share capital or the issuance of shares, including stock distributions, of any class, warrants and other similar securities;
- issuance of debentures;
- our division, merger, dissolution, liquidation and change of the legal form;
- amendments to our Articles of Association;
- acquisition or disposal of material assets or providing a guarantee in the amount exceeding 30% of our most recent audited total assets within one year;
- adjustments to our profit distribution policy; and
- any other matters our shareholders have resolved by way of an ordinary resolution at a general meeting to be of a nature which may have a material impact on us and should be adopted by special resolution.

In addition, amendments to the Articles of Association require the approval and consent of the relevant PRC authorities.

All other actions taken by the shareholders, including the appointment and removal of our directors and supervisors and the declaration of cash dividend payments, will be decided by an ordinary resolution of the shareholders.

Any shareholder resolution which is in violation of any laws or regulations of the PRC will be null and void.

Liquidation Rights

In the event of our liquidation, the ordinary shares held by overseas shareholders will rank *pari passu* with the ordinary shares held by the domestic shareholders, and any of our assets remaining after payments (in order of priority) of (a) the costs of liquidation (b) wages and social insurance fees payable to or for our employees for the past three years prior to the date of liquidation; (c) overdue taxes and tax surcharges, funds and other amounts payable pursuant to the applicable administrative regulations; and (d) bank loans, corporate bonds and other debts, will be divided among our shareholders in accordance with the class of shares and their proportional shareholdings.

Further Capital Call

Shareholders are not liable to make any further contribution to the share capital other than according to the terms, which were agreed to by the subscriber of the relevant shares at the time of subscription.

Increases in Share Capital and Preemptive Rights

The Articles of Association require the approval by a special resolution of the shareholders prior to authorizing, allotting, issuing or granting shares, securities convertible into shares or options, warrants or similar rights to subscribe for any shares or such convertible securities. New issues of shares must also be approved by the relevant PRC authorities.

Shareholders do not have preemptive rights with respect to new issues of shares of the Company.

Reduction of Share Capital and Purchase by Us of Our Shares and General Mandate to Repurchase Shares

We may reduce our registered share capital only upon obtaining the approval of the shareholders by a special resolution and, in certain circumstances, of relevant PRC authorities. The number of H Shares which may be purchased is subject to the Hong Kong Takeovers and Share Repurchase Codes.

Restrictions on Large or Controlling Shareholders

Our Articles of Association provide that, in addition to any obligation imposed by laws and administration regulations or required by the listing rules of the stock exchanges on which our shares are listed, a controlling shareholder shall not exercise his voting rights in a manner prejudicial to the interests of the shareholders generally or of some part of the shareholders:

- (1) to relieve a director or supervisor from his or her duty to act honestly in our best interests;
- (2) to approve the expropriation by a director or supervisor (for his or her own benefit or for the benefit of another person) of our assets in any way, including, without limitation, opportunities which may benefit us; or

(3) to approve the expropriation by a director or supervisor (for his or her own benefit or for the benefit of another person) of the individual rights of other shareholders, including, without limitation, rights to distributions and voting rights (save according to a restructuring of our Company which has been submitted for approval by the shareholders in a general meeting in accordance with our Articles of Association).

A controlling shareholder, however, will not be precluded by our Articles of Association or any laws and administrative regulations or the listing rules of the stock exchanges on which our shares are listed from voting on these matters.

A controlling shareholder is defined by our Articles of Association as a shareholder whose capital contribution represents 50% or more of the total capital of our Company, or a shareholder whose shares represent 50% or more of the total issued share capital of our Company, or a shareholder whose capital contribution or shares are less than 50% but obtains significant voting rights to influence the result of the shareholder's general meeting or the resolutions passed thereby.

Disclosure

The Listing Agreement imposes a requirement on us to keep the Hong Kong Stock Exchange, our shareholders and other holders of our listed securities informed as soon as reasonably practicable of any information relating to us and our subsidiaries, including information on any major new developments which are not public knowledge, which:

- is necessary to enable them and the public to appraise the position of us and our subsidiaries;

- is necessary to avoid the establishment of a false market in its securities; and
- might be reasonably expected to materially affect market activity in and the price of its securities.

There are also requirements under the Listing Rules for us to obtain prior shareholders' approval and/or to disclose to shareholders details of certain acquisitions or disposals of assets and other transactions (including transactions with controlling shareholders).

Sources of Shareholders' Rights

The PRC's legal system is based on written statutes and is a system in which decided legal cases have little precedent value. Prior to the effectiveness of the Company Law, the PRC did not have a comprehensive body of laws governing joint stock limited companies. The rights and obligations of our shareholders are principally contained in our constitutive documents and the Standard Opinion, under which we were established. In December 1993, the Standing Committee of the 8th National People's Congress adopted the PRC Company Law, which superseded the Standard Opinion. In accordance with Article 229 of the Company Law, we must comply with the relevant requirements of the Company Law within an unspecified time period. As a result, we amended our Articles of Association pursuant to the Company Law on June 6, 1995. On October 27, 2005, the Company Law was amended by the Standing Committee of the 10th National People's Congress, and came into force on January 1, 2006.

Currently, the primary sources of shareholder's rights are our Articles of Association, as amended, the PRC Company Law and the Listing Rules of the Hong Kong Stock Exchange, which, among other things, impose certain standards of conduct, fairness and disclosure on us, our directors and our controlling shareholders. To facilitate the offering and listing of shares of PRC companies overseas, and to regulate the behavior of companies whose shares are listed overseas, the State Council Securities Committee and the State Commission for Restructuring the Economic System issued on August 27, 1994 the Mandatory Provisions for Articles of Association of Company Listing Overseas (the "Mandatory Provisions"). These Mandatory Provisions become entrenched in that, once they are incorporated into the Articles of Association of a PRC Company, any amendment to those provisions will only become effective after approval by the State-owned Assets Supervision and Administration Commission of the State Council. The Listing Rules require a number of additional provisions to the Mandatory Provisions to be included in the Articles of Association of PRC companies listing H Shares on the Hong Kong Stock Exchange (the "Additional Provisions"). The Mandatory Provisions and the Additional Provisions have been incorporated into our Articles of Association.

In addition, upon the listing of and for so long as the H Shares are listed on the Hong Kong Stock Exchange, we are subject to the relevant ordinances, rules and regulations applicable to companies listed on the Hong Kong Stock Exchange, including the Listing Rules of the Hong Kong Stock Exchange, the Securities (Disclosure of Interests) Ordinance (the "SDI Ordinance"), the Securities (Insider Dealing) Ordinance and the Hong Kong Codes on Takeovers and Mergers and Share Repurchases (the "Hong Kong Takeovers and Repurchase Codes").

Enforceability of Shareholders' Rights

There has not been any public disclosure in relation to the enforcement by holders of H Shares of their rights under constitutive documents of joint stock limited companies or the Company Law or in the application or interpretation of the PRC or Hong Kong regulatory provisions applicable to the PRC joint stock limited companies.

The Company Law, as amended in October 2005 and effective in January 2006, has granted shareholders with the rights to bring derivative suits. Within the Company Law, shareholders holding more than 1 percent of the shares of the company for more than 180 consecutive days are entitled to request the supervisory committee (in terms of directors and senior management) or the board of directors (in terms of supervisors) to bring legal proceedings, or

bring legal proceedings in their own name on behalf of the company where it is in emergency and the company will be subject to irreparable loss if not to do so, against directors, supervisors or senior management who fail to comply with the laws and regulations or the company's Articles of Association in the course of performing their duties and cause loss to the company;

Our Articles of Association provide that all differences or claims:

- between a holder of H Shares and us;
- between a holder of H Shares and any of our directors, supervisors, general managers or other senior officers; or
- between a holder of H Shares and a holder of domestic ordinary shares, arising from any provision of our Articles of Association, any right or obligation conferred or imposed by the Company Law or any other relevant law or administrative regulation which concerns our affairs

must, with certain exceptions, be referred to arbitration at either the China International Economic and Trade Arbitration Commission in the PRC or the Hong Kong International Arbitration Center. Our Articles of Association provide that such arbitration will be final and conclusive. In June 1999, an arrangement was made between the People's Courts of the PRC and the courts of Hong Kong to mutually enforce arbitration awards rendered in the PRC and Hong Kong according to their respective laws. This new arrangement was approved by the Supreme Court of the PRC and the Hong Kong Legislative Council and became effective on February 1, 2000.

The holders of H Shares will not be able to bring actions on the basis of violations of the Listing Rules and must rely on the Hong Kong Stock Exchange to enforce its rules. The SDI Ordinance establishes certain obligations in relation to disclosure of shareholder's interests in Hong Kong listed companies, the violation of which is subject to prosecution by the Securities and Futures Commission of Hong Kong. The Hong Kong Takeovers and Repurchase Codes do not have the force of law and are the only standards of commercial conduct considered acceptable for takeover and merger transactions and share repurchases in Hong Kong as established by the Securities and Futures Commission and the securities and futures industry in Hong Kong.

We have appointed CT Corporation System, New York, as our agent to receive service of process with respect to any action brought against us in certain courts in New York under the United States federal and New York State's securities laws. However, as the PRC does not have treaties providing for the reciprocal recognition and enforcement of judgments of courts within the United States, the United Kingdom, Japan or most other of the Organization for Economic Cooperation and Development countries, administrative actions brought by regulatory authorities, such as the Commission, and other actions which result in foreign court judgments, could (assuming such actions are not required by PRC law and the Articles of Association to be arbitrated) only be enforced in the PRC on a reciprocal basis or according to relevant international treaties to which China is a party if such judgments or rulings do not violate the basic principles of the law of the PRC or the sovereignty, security and public interest of the society of the PRC, as determined by a People's Court of the PRC which has the jurisdiction for recognition and enforcement of judgments. We have been advised by our PRC counsel, Haiwen & Partners, that there is uncertainty as to the enforceability in the PRC of actions to enforce judgments of United States courts arising out of or based on the ownership of H Shares or ADSs, including judgments arising out of or based on the civil liability provisions of United States federal or state securities laws.

Restrictions on Transferability and the Share Register

As provided in the Articles of Associations we may refuse to register a transfer of H Shares listed on Hong Kong Stock Exchange unless:

- a fee (for each instrument of transfer) of HK dollar 2.50, or any higher fee as agreed by the Hong Kong Stock Exchange, has been paid to us;
- the instrument of transfer only involves H Shares;
- the stamp duty chargeable on the instrument of transfer has been paid;
- the relevant share certificate and upon the reasonable request of the board of directors, any evidence in relation to the right of the transferor to transfer the shares have been submitted;
- if it is intended to transfer the shares to joint owners, then the maximum number of joint owners must not exceed four;
- we do not have any lien on the relevant shares.

We are required to maintain an original share register for holders of H Shares in Hong Kong and a copy of the register at our legal address. Shareholders have the right to inspect and, for a reasonable charge, to copy the share register. No transfers of ordinary shares shall be recorded in our share register within 20 days prior to the date of a shareholders' general meeting or within 5 days prior to the record date established for the purpose of distributing a dividend.

We have appointed Hong Kong Registrars Limited to act as the registrar of our H Shares. This registrar maintains our register of holders of H Shares in Hong Kong and enters transfers of shares in such register upon the presentation of the documents described above.

C. Material contracts

See “Item 7. Major Shareholders and Related Party Transactions — B. Related Party Transactions” for certain arrangements we have entered into with HIPDC and Huaneng Group.

D. Exchange controls

The existing foreign exchange regulations have significantly reduced government foreign exchange controls for transactions under the current account, including trade and service related foreign exchange transactions and payment of dividends. We may undertake current account foreign exchange transactions without prior approval from the State Administration of Foreign Exchange or its local branch offices. The PRC Government has stated publicly that it intends to make the Renminbi freely convertible in the future. However, we cannot predict whether the PRC Government will continue its existing foreign exchange policy and when the PRC Government will allow free conversion of Renminbi to foreign currency.

Foreign exchange transactions under the capital account, under most circumstances, including principal payments in respect of foreign currency-denominated obligations, continue to be subject to significant foreign exchange controls and require the approval of the State Administration of Foreign Exchange or its local branch offices. These limitations could affect our ability to obtain foreign exchange through debt or equity financing, or to obtain foreign exchange for capital expenditures.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the PBOC. On July 21, 2005, the PRC government introduced a floating exchange rate system to allow the value of Renminbi to fluctuate within a regulated band based on market supply and demand and by reference to a basket of foreign currencies. Renminbi appreciated by more than 20% against the U.S. dollar between July 2005 and July 2008. Between July 2008 and June 2010, this appreciation halted and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. On June 19, 2010, the PBOC decided to further promote the reform of the Renminbi exchange rate formation mechanism, and improve the flexibility of the Renminbi exchange rate. Since June 2010, Renminbi has regained steady appreciation against the U.S. dollar, which was reversed by slight depreciation of the Renminbi against the U.S. dollar at the turn to and early 2014. On March 15, 2014, the PBOC announced to further widen the Renminbi's daily trading band against the U.S. dollar from 1% to 2% on either side of the daily reference rate, allowing for greater fluctuations of the exchange rate. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future. There remains significant international pressure on the PRC Government to further liberalize its currency policy, which could result in further fluctuations in the value of the Renminbi against the U.S. dollar. However, there is no assurance that there will not be a devaluation of Renminbi in the future. If there is such a devaluation, our debt servicing cost will increase and the return to our overseas investors may decrease.

The following table sets forth information concerning exchange rates between the Renminbi and the U.S. dollar for the periods indicated:

Period	End	Noon Buying Rate		
		Average(1)	High	Low
		(RMB per US\$1.00)		
2010	6.6000	6.7603	6.6000	6.8330
2011	6.2939	6.4475	6.2939	6.6364
2012	6.2301	6.2990	6.2221	6.3879
2013	6.0537	6.1412	6.0537	6.2438
2014	6.2046	6.1704	6.0402	6.2591
	October	6.1124	6.1251	6.1107
	November	6.1429	6.1249	6.1117
	December	6.2046	6.1886	6.1490
2015	January	6.2495	6.2181	6.1870
	February	6.2695	6.2518	6.2399
	March	6.1990	6.2386	6.1955
	April (through April 10, 2015)	6.2082	6.1989	6.1930

Source: Federal Reserve Statistical Release, Board of Governors of the Federal Reserve System.

Note:

(1) Annual averages are calculated by using the average of the exchange rates on the last day of each month during the relevant year. Monthly averages are calculated by using the average of the daily rates during the relevant month.

E. Taxation

The following is a summary of (i) certain tax consequences from acquiring, owning and disposing of the H Shares and ADSs based on tax laws of the PRC, the United States and the Income Tax Treaty between the PRC and the United States (the “Tax Treaty”) as in effect on the date of this annual report, and is subject to changes in PRC or United States law, including changes that could have retroactive effect, and (ii) the principal PRC taxes to which we are subject. The following summary does not take into account or discuss the tax laws of any countries or regions other than the PRC and the United States, nor does it take into account the individual circumstances of an investor. This summary does not purport to be a complete technical analysis or examination of all potential tax effects relevant to an investment in the H Shares or ADSs and current and prospective investors in all jurisdictions of the H Shares or ADSs are advised to consult their tax advisors as to PRC, United States or other tax consequences of the purchase, ownership and disposition of the H Shares or ADSs. This summary also does not purport to be a complete technical analysis or examination of all potential PRC taxes that may be levied upon us.

PRC tax considerations

Tax on dividends

Individual investors

According to the current PRC tax regulations, dividends paid by PRC companies to individual investors are ordinarily subject to a PRC withholding tax levied at a flat rate of 20%. For a foreign individual who has no domicile or does not stay in the territory of China or who has no domicile but has stayed in the territory of China for less than one year, the receipt of dividends from a company in China is normally subject to a withholding tax of 20% unless reduced or exempted by applicable laws and tax treaties.

Enterprises

In accordance with the New Enterprise Income Tax Law that became effective on January 1, 2008, dividends derived from the revenues accumulated from January 1, 2008 and paid by PRC companies to non-resident enterprises are generally subject to a PRC withholding tax levied at a rate of 10% unless exempted or reduced pursuant to an applicable double-taxation treaty or other exemptions. Dividends paid by PRC companies to resident enterprises, including enterprises established under the laws of non-PRC jurisdictions but whose “de facto management body” is located in the PRC, are not subject to any PRC withholding tax, unless the dividends are derived from the publicly traded shares which have not been held continuously by the resident enterprises for twelve months. According to the Notice on the Issues Concerning Withholding the Enterprise Income Tax on the Dividends Paid by Chinese Resident Enterprise to H Share Holders Which Are Overseas Non-resident Enterprises issued by the State Administration of Taxation on November 6, 2008, Chinese resident enterprises are required to withhold PRC enterprise income tax at the rate of 10% on dividends paid for 2008 and later years payable to their respective H Shares holders who are non-resident enterprises.

Capital gains tax on sales of shares

In accordance with the New Enterprise Income Tax Law, capital gains realized by foreign enterprises which are non-resident enterprises in China upon the sale of overseas shares are generally subject to a PRC withholding tax levied at a rate of 10%, unless exempted or reduced pursuant to an applicable double-taxation treaty or other exemptions. The capital gains realized by resident enterprises, including enterprises established under the laws of non-PRC jurisdictions but whose “de facto management body” is located in the PRC, upon the sales of overseas shares are subject to the PRC enterprise income tax.

Tax treaties

Non-PRC Investors residing in countries which have entered into double-taxation treaties with the PRC may be entitled to a reduction of the withholding tax imposed on the payment of dividends to such Foreign Holders of us. The PRC currently has double-taxation treaties with a number of countries, including Australia, Canada, France, Germany, Japan, Malaysia, the Netherlands, Singapore, the United Kingdom and the United States.

Stamp tax

Under the Provisional Regulations of The People’s Republic of China Concerning Stamp Tax, which became effective in October 1988, PRC stamp tax should not be imposed on the transfer of H Shares or ADSs of PRC publicly traded companies.

Taxation of the Company

Income tax

Prior to January 1, 2008, according to the relevant income tax law, foreign invested enterprises were, in general, subject to a statutory income tax of 33% (30% enterprise income tax and 3% local income tax). If these enterprises are

located in certain specified locations or cities, or are specifically approved by the State Administration of Taxation, a lower tax rate would be applied. Effective from January 1, 1999, in accordance with the practice notes on the PRC income tax laws applicable to foreign invested enterprises investing in energy and transportation infrastructure businesses, a reduced enterprise income tax rate of 15% (after the approval of State Administration of Taxation) was applicable across the country. We applied this rule to all of our wholly owned operating power plants after obtaining the approval of the State Administration of Taxation. In addition, certain power plants were exempted from the enterprise income tax for two years starting from the first profit-making year, after offsetting all tax losses carried forward from the previous years (at most of five years), followed by a 50% reduction of the applicable tax rate for the next three years. The statutory income tax was assessed individually based on each of their results of operations.

On March 16, 2007, the Enterprise Income Tax Law of PRC, or the New Enterprise Income Tax Law, was enacted, and became effective on January 1, 2008. The New Enterprise Income Tax Law imposes a uniform income tax rate of 25% for domestic enterprises and foreign invested enterprises. Therefore, our power plants that were subject to a 33% income tax rate prior to January 1, 2008 are subject to a lower tax rate of 25% starting on January 1, 2008. With regard to our power plants entitled to a reduced enterprise income tax rate of 15% prior to January 1, 2008, their effective tax rate is being gradually increased to 25% within a five-year transition period commencing on January 1, 2008. Accordingly, the effective tax rate of our wholly owned power plants will increase over time. In addition, although our power plants entitled to tax exemption and reduction under the income tax laws and regulations that are effective prior to the New Enterprise Income Tax Law will continue to enjoy such preferential treatments until the expiration of the same, newly established power plants will not be able to benefit from such tax incentives, unless they can satisfy specific qualifications, if any, provided by then effective laws and regulations on preferential tax treatment.

Pursuant to Measures for the Collection and Administration of Consolidated Payment of Enterprises Income Tax on Trans-Regional Operation, effective on January 1, 2013, the Company and its branches calculate and pay income tax on a combined basis according to relevant tax laws and regulations. The income tax of subsidiaries remains to be calculated individually based on their individual operating results.

Value-added tax

Since January 1, 1994, the government has implemented a turnover tax system applicable to FIEs. Under the turnover tax provisions, we have to collect from our electricity customers and pay to the PRC tax authorities a value-added tax (“VAT”) on our sales. The tax rate on sales of electricity by us is 17% of total sales. The amount of VAT payable by us is the VAT on sales reduced by the VAT paid by us on our purchases of coal, fuel and other inputs.

Effective from January 1, 2009, VAT payers are allowed to credit against output VAT in respect of input VAT on fixed assets purchased or self-manufactured based on the relevant VAT credit receipts in accordance with the revised VAT regulations and its implementation rules.

In addition, effective from August 1, 2012, according to the relevant regulations of Ministry of Finance of PRC and State Administration of Taxation, nine pilot regions including Shanghai, Beijing, Tianjin, Jiangsu Province, Anhui Province, Zhejiang Province, Fujian Province, Hubei Province and Guangdong Province have been under the pilot program for the transformation from Business Tax to VAT since January 1, 2012 and all other regions have been since August 1, 2013 for specified industry. The applicable tax rate of VAT for the Company and its subsidiaries in respect of the lease of tangible movable properties, transportation industry and other modern services industries are 17%, 11% and 6%, respectively.

United States federal income tax considerations

The following discussion is a summary of United States federal income tax considerations relating to the ownership and disposition of our H shares or ADSs by a U.S. Holder (as defined below). This discussion is based upon existing United States federal income tax law, which is subject to differing interpretations or change, possibly with retroactive effect. This discussion does not address all aspects of United States federal income taxation which may be important to particular holders in light of their particular circumstances, such as holders subject to special tax rules including: banks or other financial institutions, insurance companies, broker-dealers, traders in securities that elect mark-to-market treatment, partnerships and their partners, regulated investment companies, real estate investment trusts, cooperatives, pension plans, tax-exempt organizations (including private foundations), holders who are not U.S. Holders, holders who own (directly, indirectly, or constructively) 10% or more of the voting power or value of our stock, holders that hold H shares or ADSs as part of a straddle, hedge, conversion, constructive sale, or other integrated transaction for United States federal income tax purposes, holders who acquired their ADSs or H shares pursuant to any employee share option or otherwise as compensation, or holders that have a functional currency other than the United States dollar, all of whom may be subject to tax rules that differ significantly from those summarized below. In addition, this discussion does not address any state, local, non-United States, non-income tax (such as the United States federal gift and estate tax), or alternative minimum tax considerations or the Medicare tax. This discussion only addresses holders that hold their H shares or ADSs as “capital assets” (generally, property held for investment) under the United States Internal Revenue Code of 1986, as amended (the “Code”). U.S. Holders are urged to consult their tax advisors regarding the United States federal, state, local, and non-United States income and other tax considerations relating to the ownership and disposition of our H shares or ADSs.

For purposes of this summary, a U.S. Holder is a beneficial owner of H shares or ADSs that is, for United States federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for United States federal income tax purposes) created in or organized under the laws of the United States or any State thereof or the District of Columbia;

- an estate the income of which is includible in gross income for United States federal income tax purposes regardless of its source; or
- a trust (a) the administration of which is subject to the primary supervision of a United States court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (b) a trust that has otherwise elected to be treated as a United States person under the Code.

If a partnership (including any entity treated as a partnership for United States federal income tax purposes) is a beneficial owner of H shares or ADSs, the tax treatment of a partner in such partnership will depend upon the status of the partner and the activities of the partnership. Partnerships and partners of a partnership holding our H shares or ADSs are urged to consult their tax advisors regarding the United States federal income tax considerations relating to the ownership and disposition of our H shares or ADSs.

For United States federal income tax purposes, it is generally expected that a U.S. Holder of ADSs will be treated as the beneficial owner of the underlying shares represented by the ADSs. The remainder of this discussion assumes that a holder of ADSs will be treated in this manner. Accordingly, deposits or withdrawals of H shares for ADSs will generally not be subject to United States federal income tax.

Passive Foreign Investment Company Considerations

A non-United States corporation, such as our Company, will be a “passive foreign investment Company” (a “PFIC”), for United States federal income tax purposes for any taxable year, if either (a) 75% or more of its gross income for such year consists of certain types of “passive” income or (b) 50% or more of its average quarterly assets as generally determined on the basis of fair market value during such year produce or are held for the production of passive income. For this purpose, cash and assets readily convertible into cash are categorized as passive assets and the Company’s unbooked intangibles are taken into account for determining the value of its assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the stock.

We do not believe that we were classified as a PFIC for the taxable year ending 2014. The determination of whether we will be or become a PFIC will depend, in part, upon the composition of our income and our assets (which are subject to change from year to year) and the market price of our ADSs (of which we cannot control). Although we do not expect that our business plans will change in a manner that will affect our PFIC status, no assurance can be given in this regard. Because there are uncertainties in the application of the relevant rules and PFIC status is a fact-intensive determination made on an annual basis, no assurance may be given with respect to our PFIC status for any taxable year.

The discussion below under “Dividends” and “Sale or Other Disposition” of H shares or ADSs assumes that we will not be classified as a PFIC for United States federal income tax purposes. See the discussion below under the heading “Passive Foreign Investment Company Rules” for a brief summary of the PFIC rules.

Dividends

The gross amount of any cash distributions (including the amount of any tax withheld) paid on our H shares or ADSs out of our current or accumulated earnings and profits, as determined under United States federal income tax principles, will be subject to tax as dividend income on the day actually or constructively received by a U.S. Holder, in the case of H shares, or by the depository bank, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of United States federal income tax principles, any distribution paid will generally be reported as a “dividend” for United States federal income tax purposes. A non-corporate recipient of dividend income will generally be subject to tax on dividend income from a “qualified foreign corporation” at a reduced capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that certain holding period requirements are met.

A non-U.S. corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (i) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information program or (ii) with respect to any dividend it pays on stock which is readily tradable on an established securities market in the United States. There is currently a tax treaty in effect between the United States and the People’s Republic of China (the “U.S.-PRC Treaty”) which the Secretary of Treasury of the United States determined is satisfactory for these purposes and we believe that we are eligible for the benefits of such treaty. Additionally, our ADSs (but not our H shares) trade on the New York Stock Exchange, an established securities market in the United States and the ADSs are expected to be readily tradable for so long as they continue to be listed on the New York Stock Exchange. Thus, while we presently believe that we are a qualified foreign corporation for purposes of the reduced treaty rate, there can be no assurance that the dividends we pay on our H shares or ADSs will meet the conditions required for the reduced tax rate in the current taxable year or future taxable years. Dividends received on H shares or ADSs will not be eligible for the dividends received deduction allowed to corporations. U.S. Holders are

urged to consult their tax advisors regarding the rate of tax that will apply to them with respect to dividends (if any) received from U.S.

Dividends paid in non-United States currency will be includible in income in a United States dollar amount based on the exchange rate prevailing at the time of receipt of such dividends by the depositary, in the case of ADSs, or by the U.S. Holder, in the case of H shares held directly by such U.S. Holder, regardless of whether the non-United States currency is actually converted into United States dollars at that time. Gain or loss, if any, recognized on a subsequent sale, conversion or other disposition of the non-United States currency will generally be United States source income or loss.

Dividends received on H shares or ADSs will generally be treated, for United States foreign tax credit purposes, as foreign source income and generally will constitute passive category income. A U.S. Holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any non-United States withholding taxes imposed on dividends received on H shares or ADSs. U.S. Holders who do not elect to claim a foreign tax credit for foreign income tax withheld may instead claim a deduction, for United States federal income tax purposes, in respect of such withholdings, but only for a year in which the U.S. Holder elects to do so for all creditable foreign income taxes. U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Sale or Other Disposition of H shares or ADSs

A U.S. Holder will generally recognize capital gain or loss upon the sale or other disposition of H shares or ADSs in an amount equal to the difference between the amount realized upon the disposition and the U.S. Holder's adjusted tax basis in such H shares or ADSs. Any capital gain or loss will be long-term if the H shares or ADSs have been held for more than one year and will generally be United States source gain or loss for United States foreign tax credit purposes. If any PRC tax were to be imposed on any gain from the disposition of H shares or ADSs between U.S. Holder that is eligible for the benefits of the U.S.PRC Treaty may elect to treat the gain as non-United States source gain or loss. The deductibility of a capital loss may be subject to limitations. U.S. Holders are urged to consult their tax advisors regarding the tax credit purposes if a non-U.S. withholding tax is imposed on a disposition of our H shares or ADSs, including the availability of the foreign tax credit under their particular circumstances.

U.S. Holders that receive currency other than the United States dollar upon the sale or other disposition of H shares will realize an amount equal to the United States dollar value of the non-United States currency on the date of such sale or other disposition, or if the shares are traded on an established securities market, in the case of cash basis and electing accrual basis taxpayers, the settlement date. U.S. Holders will recognize currency gain or loss if the United States dollar value of the currency received on the settlement date differs from the amount realized. U.S. Holders will have a tax basis in the currency received equal to the United States dollar amount at the spot rate on the settlement date. Generally, any gain or loss realized by U.S. Holders on a subsequent conversion or disposition of such currency will be United States source ordinary income or loss.

Passive Foreign Investment Company Rules

If we were to be classified as a PFIC in any taxable year, a special tax regime will apply to both (a) any "excess distribution" by us to a U.S. Holder (generally, the U.S. Holder's ratable portion of distributions in any year which are greater than 125% of the average annual distribution received by such U.S. Holder in the shorter of the three preceding years or the U.S. Holder's holding period for our H shares or ADSs) and (b) any gain realized on the sale or other disposition of the H shares or ADSs. Under this regime, any excess distribution and realized gain will be treated as ordinary income and will be subject to tax as if (a) the excess distribution or gain had been realized ratably over the U.S. Holder's holding period, (b) the amount deemed realized in each year had been subject to tax in each year of that holding period at the highest marginal rate for such year (other than income allocated to the current period or any taxable period before we became a PFIC, which would be subject to tax at the U.S. Holder's regular ordinary income rate for the current year and would not be subject to the interest charge discussed below), and (c) the interest charge generally applicable to underpayments of tax had been imposed on the taxes deemed to have been payable in those years. In addition, dividends made to a U.S. Holder will not qualify for the lower rates of taxation applicable to long-term capital gains discussed above under "Dividends".

The above results may be eliminated if a "mark-to-market" election is available and a U.S. Holder validly makes such an election. If the election is made, such holder generally will be required to take into account the difference, if any, between the fair market value and its adjusted tax basis in H shares or ADSs at the end of each taxable year as ordinary income or ordinary loss (to the extent of any net mark-to-market gain previously included in income). In addition, any gain from a sale or other disposition of H shares or ADSs will be treated as ordinary income, and any loss will be treated as ordinary loss (to the extent of any net mark-to-market gain previously included in income).

We do not intend to provide information necessary for U.S. Holders to make qualified electing fund elections, which, if available, would result in tax treatment different from (and generally less adverse than) the general tax treatment for PFICs described above.

As discussed above under “Dividends,” dividends that we pay on the ADSs or our H shares will not be eligible for the reduced tax rate that applies to qualified dividend income if we are a PFIC for the taxable year in which the dividend is paid or the preceding taxable year. In addition, if a U.S. Holder owns the ADSs or our H shares during any taxable year that we are a PFIC, such holder would generally be required to file an annual IRS Form 8621. Each U.S. Holder is advised to consult its tax advisors regarding the potential tax consequences to such holder if we are or become a PFIC, including the possibility of making a mark-to-market election.

Information Reporting

U.S. Holders may be subject to information reporting to the United States Internal Revenue Service with respect to dividends on and proceeds from the sale or other disposition of our H shares or ADSs. U.S. Holders are urged to consult their tax advisors regarding the application of the United States information reporting and backup rules to their particular circumstances.

Certain U.S. Holders who hold “specified foreign financial assets”, including stock of a non-U.S. corporation that is not held in an account maintained by a U.S. “financial institution”, whose aggregate value exceeds \$50,000 during the tax year, may be required to attach to their tax returns for the year certain specified information. An individual who fails to timely furnish the required information may be subject to a penalty. U.S. Holders are urged to consult their tax advisors regarding their reporting obligations under this legislation.

F. Dividends and paying agents

Not applicable.

G. Statement by experts

Not applicable.

H. Documents on display

We are subject to the information reporting requirements of the Securities Exchange Act of 1934 (the “Exchange Act”) and, in accordance with the Act, file certain reports and other information with the SEC. You may read and copy any report, statement or other information filed by us at the SEC’s public reference rooms in Washington, D.C., New York and Chicago, Illinois. Please call the SEC at 1-800-0330 for further information on the public reference rooms. Our reports and other information filed with the SEC are also available to the public from commercial document retrieval services and the website maintained by the SEC at <http://www.sec.gov>.

I. Subsidiary information

Not applicable.

ITEM 11 Quantitative and Qualitative Disclosures About Market Risk

Our primary market risk exposures are fluctuations of fuel prices, foreign exchange rates and interest rates.

Equity price risk

The available-for-sale financial assets and trading securities of the Company and its subsidiaries are exposed to equity security price risk. The trading securities were disposed of in 2014.

Detailed information relating to the available-for-sale financial assets is disclosed in Note 10 to the financial statements. The Company has a supervisor in the supervisory committee of the most significant investment in available-for-sale financial assets (China Yangtze Power Co., Ltd.) and exercises influence in safeguarding its interest. The Company also closely monitors the pricing trends in the open market in determining its long-term strategic stakeholding decisions.

The Company and its subsidiaries are 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 to the financial statements for details.

Foreign exchange rate risk

A portion of our Renminbi revenues are converted into other currencies to (i) repay our debts denominated in currencies other than RMB, and (ii) pay for imported equipment.

The exchange rate of Renminbi to foreign currencies may fluctuate and is affected by, among other things, changes in China’s political and economic conditions. The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the PBOC. On July 21, 2005, the PRC government introduced a floating exchange rate system to allow the value of Renminbi to fluctuate within a regulated band based on market supply and demand and by reference to a basket of foreign currencies. Renminbi appreciated by more than 20% against the U.S. dollar between July 2005 and July 2008. Between July 2008 and June 2010, this appreciation halted and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. On June 19, 2010, the PBOC decided to further promote the reform of the Renminbi exchange rate formation mechanism, and improve the flexibility of the Renminbi

exchange rate. Since June 2010, the Renminbi has regained steady appreciation against the U.S. dollar, which was reversed by a slight depreciation of Renminbi against the U.S. dollar at the turn to and early 2014. On March 15, 2014, the PBOC announced to further widen the Renminbi's daily trading band against the U.S. dollar from 1% to 2% on either side of the daily reference rate, allowing for greater fluctuations of the exchange rate. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future. There remains significant international pressure on the PRC Government to further liberalize its currency policy. We cannot assure you that any future movements in the exchange rate of the Renminbi against the U.S. dollar and other currencies will not adversely affect our results of operations and financial conditions.

SinoSing Power and its subsidiaries are exposed to foreign exchange risk on fuel purchases that is denominated primarily in U.S. dollars. They use forward exchange contracts to hedge almost all of their estimated foreign exchange exposure in respect of forecast fuel purchases over the following three months. The Company and its subsidiaries account for their forward foreign currency contracts as cash flow hedges.

The following table provides information, by maturity date, regarding our foreign currency sensitive financial instruments, which consist of bank balances and cash, short-term and long-term debt obligations, capital commitments and forward exchange contracts as of December 31, 2014 and average interest rates for the year ended December 31, 2014.

(RMB expressed in millions, except interest rate and exchange rate)

As of December 31, 2014

	Expected Maturity Date						Total Carrying Amount	Fair Value
	2015	2016	2017	2018	2019	Thereafter		
On-balance sheet financial instruments								
Bank balances and cash:								
In U.S. Dollar	753	-	-	-	-	-	753	753
In Japanese Yen	0.004	-	-	-	-	-	0.004	0.004
In Hong Kong Dollar	2,445	-	-	-	-	-	2,445	2,445
Debts								
Fixed rate bank loans								
(U.S. Dollar)	16	-	-	-	-	-	16	16
Average interest rate	6.360	-	-	-	-	-	—	—
Fixed rate bank loans(Euro)								
	70	70	70	63	44	115	432	373
Average interest rate	2.065	2.065	2.065	2.071	2.102	2.137	—	—
Variable rate bank and other loans								
(U.S. Dollar)	408	389	389	389	389	1334	3,298	3,298
Average interest rate	1.696	1.740	1.740	1.740	1.740	1.740	—	—
Gas purchase commitments (U.S. Dollar)								
	6,247	6,247	6,336	6,336	6,336	33,529	65,031	65,031

As of December 31, 2014

Expected Maturity Date