HUANENG POWER INTERNATIONAL INC
Form 20-F
April 19, 2012

HUANENG POWER INTERNATIONAL, INC.

Annual Report On Form 20-F
2011

As filed with the Securities and Exchange Commission on April 19, 2012

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

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FORM 20-F

(Mark One)

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

OR

R ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2011

OR

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

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 form _____ 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
NO.4 FUXINGMENNEI STREET, XICHENG DISTRICT, BEIJING, PEOPLE'S REPUBLIC OF CHINA

_____

(Address of principal executive offices)

Mr. Gu Biquan
HUANENG BUILDING,
NO.4 FUXINGMENNEI STREET, XICHENG DISTRICT, BEIJING, PEOPLE'S REPUBLIC OF CHINA
Tel: +86 (10) 6322 6999 Fax: +86 (10)6322 6666

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(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
Ordinary American Depositary Shares	New York Stock Exchange
Overseas Listed Foreign Shares of RMB1.00 each	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 Shares of RMB1.00 each	10,500,000,000
Overseas Listed Foreign Shares of RMB1.00 each	3,555,383,440

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

Yes R 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 R

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 R 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 R 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 R 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 R

(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

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 30, 2011 of US$1.00 to RMB6.3009. 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 annual national coal purchase conference. At the end of each year subsequent to 2008, 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 Ministry of Railways, secures the railway transportation capacity for the coal purchased thereunder.

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 "our power companies" are to the power companies in which we hold minority 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, 2011 and 2010 and the consolidated income statement and cash flow data for each of the years in the three-year period ended December 31, 2011 are derived from the historical financial statements included herein. Our consolidated balance sheet data as of December 31, 2009, 2008 and 2007 and income statement and cash flow data for each of the years in the two-year period ended December 31, 2008, 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,					
RMB and U.S. Dollars in thousands except per share data	2007 (RMB)	2008 (RMB)	2009 (RMB)	2010 (RMB)	2011 (RMB)	2011 (US$)(1)
Income Statement Data IFRS						
Operating revenue	49,892,049	67,835,114	76,862,896	104,318,120	133,420,769	21,174,875
Tax and levies on operations	(139,772)	(106,385)	(151,912)	(147,641)	(484,019)	(76,817)
Operating expenses	(41,817,349)	(68,964,955)	(67,537,281)	(95,541,488)	(124,189,148)	(19,709,748)
Profit/ (Loss) from operations	7,934,928	(1,236,226)	9,173,703	8,628,991	8,747,602	1,388,310
Interest income	53,527	83,522	60,397	89,026	166,183	26,374
Financial expenses, net	(1,927,988)	(3,707,943)	(4,309,325)	(5,194,585)	(7,659,712)	(1,215,654)
	585,379	51,061	56,675	60,013	93,460	14,833

Other investment income						
Gain/ (Loss) on fair value changes	87,132	(54,658)	(33,638)	11,851	(727)	(115)
Share of profits of associates / jointly controlled entities	586,323	72,688	756,164	568,794	703,561	111,660
Profit/ (Loss) before income tax expense	7,319,301	(4,791,556)	5,703,976	4,164,090	2,050,367	325,408
Income tax (expense)/benefit	(838,270)	239,723	(593,787)	(842,675)	(868,927)	(137,905)
Net profit/ (loss)	6,481,031	(4,551,833)	5,110,189	3,321,415	1,181,440	187,503
Attributable to:						
Equity holders of the Company	6,161,127	(3,937,688)	4,929,544	3,347,985	1,180,512	187,356
Non-controlling interests	319,904	(614,145)	180,645	(26,570)	928	147
Basic earnings/(loss) per share	0.51	(0.33)	0.41	0.28	0.08	0.01
Diluted earnings/(loss) per share	0.51	(0.33)	0.41	0.28	0.08	0.01

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RMB and U.S. Dollars in thousands	As of December 31, 2007 (RMB)	2008 (RMB)	2009 (RMB)	2010 (RMB)	2011 (RMB)
Balance Sheet Data IFRS					
Current assets	18,551,059	20,018,177	24,189,765	31,556,149	36,417,33
Property, plant and equipment	90,125,919	116,737,198	140,777,336	155,224,597	177,968,00
Available-for-sale financial assets	3,462,158	1,524,016	2,555,972	2,223,814	2,301,16
Investments in associates / jointly controlled entities	8,731,490	8,758,235	9,568,576	11,973,216	13,588,01
Land use rights and other non-current assets	2,658,583	3,643,431	4,911,678	9,541,540	8,820,72
Power generation licence	-	3,811,906	3,898,121	4,105,518	3,904,05
Deferred income tax assets	211,654	316,699	374,733	672,475	526,39
Goodwill	555,266	11,108,096	11,610,998	12,640,904	13,890,17
Total assets	124,296,129	165,917,758	197,887,179	227,938,213	257,415,87
Current liabilities	(31,376,561)	(52,486,200)	(59,581,608)	(83,636,880)	(96,597,620
Non-current liabilities	(40,839,926)	(70,871,605)	(87,657,451)	(81,875,861)	(101,260,501
Total liabilities	(72,216,487)	(123,357,805)	(147,239,059)	(165,512,741)	(197,858,121
Total equity	52,079,642	42,559,953	50,648,120	62,425,472	59,557,75

RMB and U.S. Dollars in thousands except per share data	Year Ended December 31, 2007 (RMB)	2008 (RMB)	2009 (RMB)	2010 (RMB)	2011 (RMB)	2011 (US$)(1)
Cash Flow Data IFRS						
Purchase of property, plant and equipment	(14,223,310)	(27,893,520)	(22,426,098)	(20,704,224)	(16,673,632)	(2,646,230)
Net cash provided by operating activities	12,078,833	5,185,893	14,980,990	18,066,724	20,949,155	3,324,788
Net cash used in investing activities	(16,257,355)	(47,957,065)	(24,880,261)	(26,980,538)	(21,664,831)	(3,438,371)
Net cash provided by financing	8,287,893	41,255,291	9,503,886	13,063,323	69,648	11,054

activities						
Other Financial Data						
IFRS						
Dividend declared per share	0.30	0.10	0.21	0.20	0.05	0.01
Number of ordinary shares (‘000)	12,055,383	12,055,383	12,055,383	14,055,383	14,055,383	14,055,383

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Note:

(1) The U.S. Dollar data has been translated from RMB solely for convenience at the PBOC Rate on December 30, 2011 of US$1.00 to RMB6.3009. See “Item 10 Additional Information — Exchange controls” for more information on exchange rates between RMB and U.S. Dollars.

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 compliance with power grid control and dispatch directives and environment protection. 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. Prior to April 2001, the on-grid tariffs of 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 started to gradually implement 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. 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 in 1999 to experiment with a program 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 recent few years, power sales through competitive bidding were not effected in any province where we operate our power plants. Nevertheless, we can not assure that the PRC government will not expand the program in the future. 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 company 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 2011, the PRC government continued the reform in the area of direct power purchase by large power end-users. 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 centres of the local grid companies.

The dispatch of electric power generated by a power plant is controlled by the dispatch centre 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 centres will dispatch the full amount of the planned generation of our power plants. A reduction by the dispatch centre 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, General Office of the State Council issued a notice, providing that the energy saving and electricity dispatch shall consolidate with the development of the power market, which optimize the power market. In October 2008, the SERC approved the trial implementation of the policy of energy saving and

electricity dispatch in certain pilot provinces. In 2011, the PRC government continued promoting the policy of energy saving and electricity dispatch. There can be no assurance that such implementation will not results in any decrease in the amount of the power dispatched of any of our power plants.

The power industry reform may affect our business

PRC government in 2002 announced and started to implement measures to further reform the power industry, with the ultimate goal to create 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. It is uncertain how these reform measures and any further reforms are going to be implemented and how they will impact our business.

2011 is the first year of the "Twelfth Five-Year Plan", and the PRC government continued the reform in power industry. It is expected that the PRC government will continue to promote the reform in power industry during the "Twelfth Five-Year Plan" period. The further reform will not only bring opportunities to power industry but also 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 through its wholly-owned subsidiaries, holds 15.87% of our total outstanding shares, and HIPDC directly holds 36.05% 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. We have obtained coal for our power plants through a combination of purchases pursuant to the key contracts and purchases in the open market. We have not experienced shutdowns or reduced electricity generation caused by inadequate coal supply or transportation services, 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. Since 2003, the continuous increase of coal price has increased our costs substantially and caused our profits to decline. 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 of coal price, the implementation of the mechanism involves significant uncertainties. There is no assurance that we will be able to adjust our power tariff to pass on the increase of coal price to our customers. For a detailed discussion of the coal-electricity price linkage mechanism, see "Item 4 Information of the Company-B. Business Overview – Pricing Policy". Starting from 2009, in furtherance of the coal purchase reform, NDRC ceased to coordinate annual coal purchase conference and will no longer make allocation of coal supply to power companies, although coal price may still be influenced by measures implemented by NDRC and other government authorities. The price and amount of coal supply will be determined based on free negotiation between power companies, coal suppliers and railway authorities, which increases the uncertainty of the coal supply and the coal price and may adversely affect our operations.

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, the PRC Government approval requirements and procedures for thermal power plant are increasingly stringent, due to national policies and related regulations promoting environmental friendly energy.

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. The PRC economy experienced high inflation in 2010 and 2011. 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. Since the beginning of 2011, the PRC Government continued to tighten its monetary policy, and the People's Bank of China, or PBOC, has increased six times the reserve requirement ratio by 300 basis points for the PRC financial institutions from January 1, 2011 to November 30, 2011. In addition, to curb the accelerating inflation, the PBOC raised the benchmark one-year lending interest rates three times by 75 basis points from January 1, 2011 to March 31, 2012. Though the PBOC announced the decrease of the reserve requirement ratio for the PRC financial institutions by 100 basis points on December 5, 2011 and February 24, 2012, respectively, there is no assurance that the lending interest rate will not further increase in the future if the PRC government decides to further tighten its monetary policy. As a result, we may not be able to carry out our expansion plans due to the failure to obtain financing or the increase of 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 of 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, like all 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 amount of discharge fees shall be 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 2011, the PRC Government promulgated new and more stringent standards on discharge of

polluting substances by thermal power plants, which also require thermal power plants to equip all units with denitrification facilities. 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 like ours 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 the company 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.

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 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 currently entitled to tax exemption and reduction under the income tax laws and regulations that are effective prior to the 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 are 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, and (iii) 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 People's Bank of China. 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. Since June 2010, Renminbi has appreciated slowly against the U.S. dollar again. 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 a further and more significant appreciation 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 and its subsidiaries are collected in Singapore dollar. However, commencing from 2008, the operating results of SinoSing Power and its subsidiaries are consolidated into our financial statements, which use Renminbi as the functional currency and presentation currency. As a result, we are exposed to foreign exchange fluctuations between Renminbi and Singapore dollar. Appreciation of Renminbi against Singapore dollar may cause a foreign exchange loss upon conversion of SinoSing Power and its subsidiaries' operating results denominated in Singapore dollar into Renminbi, which may have adverse impact on our operation results.

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 simila 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.

Risks relating to the PRC

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

As of December 31, 2011, 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, level of development, economy growth rate, 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. The PRC government has implemented economic reform measures emphasizing utilization of market forces in the development of the economy of China and a high level of management autonomy. Some of these measures will benefit the overall economy of China, but may have a negative effect on us. 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. Since 1979, the PRC government has been developing a comprehensive system of commercial laws, and considerable progress has been made in introducing laws and regulations dealing with economic matters such as foreign investment, corporate organization and governance, commerce, taxation and trade. However, because these laws and regulations are relatively new, and because of the limited volume of published cases and judicial interpretation and their lack of force as precedents, interpretation and enforcement of these laws and regulations involve significant uncertainties. In addition, as the PRC legal system develops, we cannot assure that changes in such laws and regulations, and their interpretation or their enforcement will not have a material adverse effect on our business operations.

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 Company Law and these regulations, in general, and the provisions for protection of shareholders' rights and access to information, in particular, are less developed than those applicable to companies incorporated in Hong Kong, the US, the UK and other developed countries or regions. Such limited investor protections are compensated for, to a certain extent, by the Mandatory Provisions for the Articles of Association of Companies to be Listed Overseas and certain additional requirements that are imposed by the Listing Rules of The Hong Kong Stock Exchange with a view to reduce the magnitude of differences between the Hong Kong Company Law and PRC Company Law. The articles of association of all PRC companies listed in Hong Kong must incorporate such Mandatory Provisions and these additional requirements. Although our Articles of Association have incorporated such provisions and requirements, there can be no assurance that our shareholders will enjoy protections to which they may be entitled in other jurisdictions.

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 market 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. While power demand recovered moderately in 2011 from 2010, this growth is expected to be moderate going forward and is highly dependent on sustained recovery in the Singapore's and global economy. 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.

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 EMA. 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 Energy Market Authority (the "EMA"), which is Singapore's power market regulator. 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 total capacity in the NEMS system. The contract quantity and price are recalculated every three months. For the period from January 1, 2011 to December 31, 2011, power sold through vesting contracts represented approximately 61% 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. In December 2011, EMA released a consultation paper on a possible regulatory framework for the import of power into Singapore. Any regulatory change of the vesting regime or significant decrease in the quantity of capacity covered by Tuas Power's vesting contracts will further expose Tuas Power to electricity price volatility and may have an adverse impact on its business and results of operations.

Volatility in fuel cost and disruption in fuel supply and its transportation may adversely affect the operation results of Tuas Power.

The fuel for Tuas Power consists of oil and gas. Since the procurement price of gas is closely linked to oil price, the fuel cost of Tuas Power is exposed to the volatility of international oil price. 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 due and appreciation of the U.S. dollar against the Singapore dollar will translate into an increase in fuel cost for Tuas Power. Some of such increase can be pass through electricity 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. Although Tuas Power has further contracted to buy liquefied natural gas for its incremental needs in the future. There can be no assurance that, in the event of fuel supply shortfalls, 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, No.4 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 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 have been 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. After these non-public issuances, we have a total share capital of approximately 14.06 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, 2010, the operating results of four of the nine entities were consolidated into ours. As of December 31, 2011, we have completed the acquisition and 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), which is under construction and is expected to commence operation by 2012.

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.

As resolved at the 2009 annual general meeting held on June 22, 2010, our company has been given a mandate to issue within the PRC short-term notes of a principal amount not exceeding RMB10 billion (in either one or multiple tranches) within 12 months from the date on which the shareholders' approval was obtained. On January 13, 2011, we issued one tranche of short-term notes in the amount of RMB5 billion with a maturity period of 365 days, a unit face value of RMB100 and an interest rate of 3.95%.

On August 9, 2011, we entered into a capital increase agreement with 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.

As resolved at the 2010 annual general meeting held on May 17, 2011, our company has been given a mandate to issue within the PRC short-term notes of a principal amount not exceeding RMB10 billion (in either one or multiple tranches) within 12 months from the date on which the shareholders' approval was obtained. On September 19, 2011, we issued one tranche of short-term notes in the amount of RMB5 billion with a maturity period of 366 days, a unit face value of RMB100 and an interest rate of 6.04%.

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 would make 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.

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 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%.

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, 2012, we had controlling generating capacity of 60,375.0 MW, and a total generating capacity of 55,350.0 MW 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 19 provinces, provincial-level municipalities and autonomous regions. We also have a wholly-owned power plant in Singapore.

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

In the year of 2011, new generating units with a total installed capacity of 4,761.5 MW were put into commercial operations. In 2011, our total domestic power generation from all operating power plants on a consolidated basis amounted to 313.554 billion kWh, representing a 22.03% increase from 2010. The annual average utilization hours of our thermal generating units reached 5,552 hours, 258 hours above the average rate of the thermal generating units in China. Our fuel cost per unit of power sold by domestic power plants increased by 9.24% from the previous year to RMB270.37 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 and made available to us through our relationship with HIPDC and Huaneng Group.

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 group ("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 comprises of Tuas Power Ltd ("TPL"), the investment holding company, and seven subsidiaries. Among those subsidiaries, Tuas Power Generation Pte Ltd ("TPG") is the electricity generation company that owns 100% of Tuas Power Supply Pte Ltd ("TPS"), which is the retail arm of TPG. We have consolidated Tuas Power's results of operations since March 2008. The total assets and revenue of Singapore operations represented approximately 11.96% and 16.01%, respectively, of our total assets and revenue as of and for the year ended December 31, 2011.

With two 600 MW oil-fired generating units and four 367.5 MW gas-fired combined cycle generating units, TPG has a total generating capacity of 2,670 MW as of December 31, 2011. In 2011, the power generated by Tuas Power in Singapore accounted for 27.12% of the total power generated in Singapore, representing an increase of 1.91 percentage points from 2010.

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 must 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 obove shall be subject to confirmation and registration with the relevant department of the central government while wind power project 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, or "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 fluided bed combustor with a generating capacity of 100MW or above and other clean combustion technologies belong to the category of encouraged projects. Therefore, 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 belong to an encouraged category of investments, and therefore 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 various rational management techniques and structure its plant bonus program to reward efficient and cost-effective operation of the plant in order to ensure the safety, stability and high level of availability 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 corporatization 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 evolvement 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 licences, codes of practices and performance standards. Energy Market Company Pte Ltd. (the "EMC"), a subsidiary of the EMA, 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 to be 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.

By most measures of market power, the Singapore market is highly concentrated as the three largest power generation companies account for approximately 80% of total power capacity. Although such high

market concentration is expected to decrease over time, it is expected to remain as a concern for at least the next decade. Therefore, it is 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 cap to improve efficiency and forestall new entry.

As of March 31, 2012, major players including Tuas Power, as well as new players, have announced repowering of existing plants and addition of new greenfield capacities.

Pricing policy

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 started to gradually implement 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 to regulate and supervise power tariffs in light of the principles of efficiency, incentives, and investment encouragement and taking into consideration of affordability.

In December 2004, the NDRC proposed and the State Council approved to establish 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 target 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 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 annual basis. As of December 31, 2011, all of our existing coal-fired generating units have installed and operated the desulphurization facilities and enjoyed deslphurization 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 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 tariff. 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, 2011, of the areas we operate power plants, Fujian, Liaoning and Jiangsu provinces 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 transprovincial 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 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 resulted from increases in thermal 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 addition, to encourage denitrification efforts, NDRC provided a RMB0.008 per kWh denitrification premium in certain regions for those coal-fired generating units equipped with denitrification facilities.

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

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 start of the 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 electricity that retailers on-sell to contestable consumers (currently defined as customers with average monthly usage of 10,000kWh and above) has to be purchased from the NEMS. 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.

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 2011, all 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 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 will speed 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 transaction 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 purchase by large power end-users. However, since the detailed implementation rules governing the program at local level are different among the regions in terms of market entrance condition, scope of experiment, and price and method of direct power purchase, these rules are subject to approvals by relevant central governmental authorities. As of December 31, 2011, of the areas we operate power plants, Fujian, Liaoning and Jiangsu provinces are approved by the NDRC to implement the direct power purchase by large power end-users.

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 bidding process in small amounts have been experimented in the power market in the Northeastern region and Eastern region. However, during the three years ended December 31, 2011, 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 electricity optimized-dispatch 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, 2011 and the approved power tariff for 2012.

	Year Ended December 31,					
	2007 Average Tariff (1)	2008 Average Tariff (1)	2009 Average Tariff(1)	2010 Average Tariff(1)	2011 Average Tariff(1)	2012 Approved Tariff(1)
Liaoning Province						
	323.27	338.05	368.66	375.44	382.84	414.20

Dalian Power Plant						
Dandong Power Plant	330.38	340.82	366.30	376.61	383.08	414.20
Yingkou Power Plant	343.37	360.45	383.58	387.78	394.82	414.20
Yingkou Co-generation Power Plant	--	--	375.00	386.29	391.92	414.20
Wafangdian Wind Power Plant	--	--	--	--	610.00	610.00
Inner Mongolia Autonomous Region						
Huade Wind Power Plant	--	--	--	510.00	528.45	510.00
Hebei Province						
Shang'an Power Plant	344.47	356.52	372.41	378.59	408.20	
Phase I						445.50
Phase II						430.00

	Year Ended December 31,					
	2007	2008	2009	2010	2011	2012
	Average Tariff (1)	Average Tariff (1)	Average Tariff(1)	Average Tariff(1)	Average Tariff(1)	Approved Tariff(1)
Gansu Province						
Pingliang Power Plant	223.31	238.89	261.02	275.91	306.36	334.30
Jiuquan Wind Power Plant	--	--	--	--	--	520.60
Beijing Municipality						
Beijing Co-generation Power Plant	--	--	482.42	474.21	481.35	511.30
Tianjin Municipality						
Yangliuqing Co-generation Power Plant	--	--	408.12	407.08	414.23	
Phase III						466.60
Phase IV						411.80
Shanxi Province						
Yushe Power Plant						
Phase I	332.53	345.77	352.89	336.30	336.30	--
Phase II	274.16	289.32	316.62	333.36	363.66	396.70
Zuoquan Power Plant	--	--	--	--	--	385.70
Shandong Province						
Dezhou Power Plant	360.45	394.08	418.92	417.68	443.20	473.40
Jining Power Plant						
Phases I, II	310.90	356.56	397.40	398.11	--	--
Phases III	370.90	384.29	408.47	411.16	418.76	451.40
Co-generation	--	--	397.40	401.90	423.82	451.40
Xindian Power Plant						
Phases I, II	379.71	371.86	--	--	--	--
Phase III	356.01	370.99	404.30	405.67	426.77	453.80
Weihai Power Plant	403.00	422.78	459.90	456.31	435.52	513.00
Rizhao Power Plant Phase II	--	--	394.24	397.60	420.06	446.90
Zhanhua Co-generation	--	--	--	397.40	419.76	446.90
Henan Province						
Qinbei Power Plant	311.86	339.85	370.47	379.68	412.75	439.20
Jiangsu Province						
Nantong Power Plant	339.47	385.53	401.71	409.06	425.97	455.00
Nanjing Power Plant	342.99	375.47	407.58	414.19	442.54	455.00
Taicang Power Plant						
Phase I	359.69	401.60	412.19	415.37	424.09	458.10
Phase II	358.08	396.48	398.36	414.13	429.44	458.10
Huaiyin Power Plant						
Phase I	--	--	--	--		--
Phase II	357.47	396.80	415.73	443.17	438.72	455.00

Phase III	357.47	396.80	415.73	443.17	438.72	455.00
Jinling Power Plant						
CCGT	481.99	528.73	544.97	568.00	587.53	581.00
Coal-fired	--	--	--	430.00	417.99	463.00
Qidong Wind Power Plant						
Phases I	--	--	487.70	487.70	519.08	487.70
Phases II	--	--	--	--	--	610.00
Shanghai Municipality						
Shidongkou I	369.54	377.35	425.76	435.52	441.11	467.10
Shidongkou II	347.93	377.04	411.80	416.36	422.25	452.10
Shidongkou power plant	--	--	--	445.70	457.20	477.30
Shanghai CCGT Power Plant	--	602.57	629.00	662.00	665.00	665.00

	Year Ended December 31,					
	2007	2008	2009	2010	2011	2012
	Average Tariff (1)	Average Tariff (1)	Average Tariff(1)	Average Tariff(1)	Average Tariff(1)	Approved Tariff(1)
Chongqing Municipality						
Luohuang Power Plant						
Phases I, II	308.65	338.27	365.70	373.30	409.95	449.10
Phase III	337.30	354.89	381.07	388.30	411.91	449.10
Zhejiang Province						
Changxing Power Plant(2)	428.16	450.86	479.71	519.39	--	--
Yuhuan Power Plant	415.05	444.92	467.54	459.86	462.49	482.00
Hunan Province						
Yueyang Power Plant						
Phase I	366.49	388.53	434.39	433.09	467.74	501.40
Phase II	378.91	398.62	434.05	439.92	467.74	501.40
Phase III	--	--	--	--	461.98	501.40
Hubei Province						
Enshi Hydro	--	--	--	--	437.03	360.00
Jiangxi Province						
Jinggangshan Power Plant						
Phase I	366.94	379.99	415.37	427.56	448.30	491.20
Phase II	--	--	406.60	408.51	446.55	485.20
Fujian Province						
Fuzhou Power Plant	369.61	401.22	412.24	413.22	425.38	
Phase I						460.30
Phase II						467.30
Phase III						452.80
Guangdong Province						
Shantou Power Plant						
Phase I	497.7	522.42	547.00	540.70	546.51	565.51
Phase II	453.2	472.96	502.23	496.20	501.76	521.00
Haimen Power Plant	--	--	497.45	496.33	498.77	529.00
Yunnan Province						
Diandong	--	--	--	--	345.43	360.60
Yuwang	--	--	--	--	345.31	360.60

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Notes:

(1) Includes value-added tax.

(2) The Unit I and Unit II of Changxing were shut down in January 2011.

Power sales in Singapore

According to the latest available update from EMA, the total licensed capacity in commercial operation in Singapore was 9,892MW. In 2011, the peak demand for electricity was 6,312MW and the annual average load was 5,035 MW. The power market in Singapore is competitive, and power generation companies sell their power output through bidding process and vesting contracts. For the year ended December 31, 2011, power sold through vesting contracts presented approximately 60% of the total power sold by the power generation companies.

Tuas Power is required to sell a substantial portion of its electric power output to the NEMS through a competitive bidding process. The gas-fired combined cycle units of Tuas Power enjoy advantages in the competitive biddings of the pool market given their relatively low cost and high efficiency. Tuas Power in turn receives the price cleared in the market for its output. The uncertainty of the revenue associated the sale of electricity in the NEMS is effectively hedged via vesting contracts and direct retail sales which is carried out through a Tuas Power's subsidiary. According to EMA, for each of the past five years ended December 31, 2011, the average annual pool price per MWh of the NEMS was S$124.57, S$162.53, S$109.90, S$170.66 and S$214.52, respectively. Tuas Power sells all its electricity output into the NEMS, but the actual settlement tariffs deviate from the pool prices due to the effect of vesting contracts and retail sales. For the period from January 1, 2011 to December 31, 2011, power sold through vesting contracts and retail sales represented approximately 88% of Tuas Power's total power sold for the same period.

Fuel supply arrangements

In 2011, the majority of our power plants were fueled by coal, gas or oil.

Coal

Most of the coal supply for our coal-fired power plants is obtained from numerous coal producers in Shanxi Province, Inner Mongolia Autonomous Region and Gansu Province.

In recent 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 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 2007, the power generation companies and coal suppliers were permitted to negotiate coal price and execute coal purchase contracts. The government will take temporary interventional measures to regulate coal price only in exceptional circumstances. In 2007, we purchased 76.72 million tons of coal and consumed 77.20 million tons of coal. Of the coal purchases in 2007, 63.3% 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 RMB417.77 per ton. Our average unit fuel cost in 2007 increased by 10.04% from that in 2006.

In 2008, the average of coal price increased significantly, which adversely affected our results of operations. In 2008, we purchased 88.2 million tons of coal and consumed 85.15 million tons of coal. Of the coal purchases in 2008, 55.4% 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 RMB584.94 per ton. Our average unit fuel cost in 2008 increased by 46.54% from that in 2007. In 2008, we managed to secure the coal supply by enhancing the coordination between purchase and transportation to stabilize the main supply channel and exploring coal supply resources outside China.

In 2009, the average of coal price decreased significantly. In 2009, we purchased 85.92 million tons of coal and consumed 89.07 million tons of coal. Of the coal purchased in 2009, 56.7% 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 RMB525.14 per ton. Our average unit fuel

cost in 2009 decreased by 13.50% from that in 2008. In 2009, we managed to secure coal supply by expanding our coal import from coal supply resources outside China, which also attributed to a decrease in our average unit fuel cost in 2009.

In 2010, the average of 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 of 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 threholds 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 November 2011, the PRC Government issued certain policies to control coal price. The restrictive measures include, but not limited to, that (i) the increase in coal price under key contracts during 2012 shall not

exceed 5% of the contract price of prior year, and (ii) since January 1, 2012, the exit price of 5,500 kcal/kg thermal coal at main ports at Bohai Rim, such as Qinhuangdao Port, shall not exceed RMB800 per ton.

For coal supply in 2012, we have entered into key contracts with coal suppliers at the beginning of 2012; and we have also entered into coal import contracts to supplement the coal supply for our power plants located in coastal regions, which is expected to further stabilize our fuel cost. However, due to the uncertainties in the coal market and coal transportation capacity, new challenges may arise with respect to the price and supply of coal, thus creating pressure on our cost control.

Gas

Huaneng Shanghai Combined Cycle Gas Turbine Power Plant ("Shanghai CCGT") is a gas-fired power plant. The gas supply for Shanghai CCGT is transported through the pipeline of "West-East Gas Transport Project".

Huaneng Jinling Combined Cycle Gas Turbine Power Plant ("Jinling CCGT") is a gas-fired power plant. The gas supply for Jinling CCGT is transported through the pipeline of "West-East Gas Transport Project".

The gas co-generation expansion project of Beijing Co-generation Power Plant ("Beijing CCGT") is a gas-fired power plant. The gas supply for Beijing CCGT is transported through the Shanganning pipeline.

Tuas Power has four 367.5 MW gas-fired combined cycle generating units. The gas supply for Tuas Power is provided by Gas Supply Pte Ltd and Sembcorp Pte Ltd in Singapore.

Oil

Tuas Power has two 600 MW oil-fired generating units. The oil supply for Tuas Power is purchased from open market in Singapore.

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 36.05% 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 15.87% equity interest in us either directly or through its wholly-owned subsidiaries. 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 the development, investment, construction, management and operation of energy related projects as well as the production and sale of electricity. In addition to this core business, Huaneng Group also engages in the development, investment, construction, production and sale of projects and products in the information, transportation, new energy source and environmental industries.

HIPDC was established in 1985 as a joint venture with 51.98% of its equity interests currently 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, 2012:

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 15.87% equity interest, 11.06% was directly held by Huaneng Group, 3.70% was held by Huaneng Group through its wholly-owned subsidiary, China Hua Neng Hong Kong Company Limited, 0.09% was held by Huaneng Group through its wholly-owned subsidiary, Huaneng Captial Services Company Limited, and the remaining approximately 1.02% 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, 2012.

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	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		Unit I: Jan. 1999	2 x 350	100%	700	Coal
		Unit II: Jan. 1999				
Yingkou	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
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	Phase I	Unit I: Aug. 1990	2 x 350	100%	700	Coal
		Unit II: Dec. 1990				
	Phase II		2 x 300	100%	600	Coal

		Unit III: Oct. 1997				
		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						
Pingliang		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(1)	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
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	75	41%	30.75	Coal
Beijing 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
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
Shanxi Province	

21

Plant or Expansion (Names as defined below)		Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
Yushe	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		Unit I: Dec. 2011	2 x 673	80%	1,076.8	Coal
		Unit II: Jan. 2012				
Shandong Province						
Dezhou	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	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	Phase III	Unit V: Sep 2006	2 x 300	95%	570	Coal
		Unit VI: Nov. 2006				
Weihai	Phase II	Units III: Mar. 1998	2 x 320	60%	384	Coal
		Unit IV: Nov. 1998				
Rizhao	Phase I	Unit I: Apr. 2000	2 x 350	44%	308	Coal
		Unit II: Apr. 2000				
	Phase II		2 x 680	100%	1,360	Coal

		Unit III: Dec. 2008				
		Unit IV: Dec. 2008				
Zhanhua		Unit I: Jul. 2005	2 x 165	100%	330	Coal
		Unit II: Jul. 2005				
Henan Province						
Qinbei	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				
Jiangsu Province						
Nantong	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				
Nanjing		Unit I: Mar. 1994	2 x 320	100%	640	Coal
		Unit II: Oct. 1994				
Taicang	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				
Huaiyin	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	CCGT	Unit I: Dec. 2006	2 x 390	60%	468	Gas
		Unit II: Mar. 2007				
	Coal-fired		1,030	60%	618	Coal

		Unit III: Dec. 2009				
Qidong	Phase I	61 turbines: Mar. 2009	91.5	65%	59.5	Wind
	Phase II	25 turbines: Jan. 2011	50.0	65%	32.5	Wind
Shanghai Municipality						
Shidongkou I		Unit I: Feb. 1988	4 x 325	100%	1,300	Coal

Plant or Expansion (Names as defined below)		Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
		Unit II: Dec. 1988				
		Unit III: Sep. 1989				
		Unit IV: May 1990				
Shidongkou II	Phase I	Unit I: Jun. 1992	2 x 600	100%	1,200	Coal
		Unit II: Dec. 1992				
	Phase II	Unit I: Oct. 2011	2 x 660	50%	660	Coal
		Unit II: Oct. 2011				
Shanghai CCGT		Unit I: May 2006	3 x 390	70%	819	Gas
		Unit II: Jun. 2006				
		Unit III: Jul. 2006				
Chongqing Municipality						
Luohuang	Phase I	Unit I: Sep. 1991	2 x 360	60%	432	Coal
		Unit II: Feb. 1992				
	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				
Zhejiang Province						
Changxing(2)		Unit I: Jan. 1992	1 x 135	100%	260	Coal
		Unit II: Aug. 1992	1 x 125			
Yuhuan	Phase I	Unit I: Nov. 2006	2 x 1,000	100%	2,000	Coal
		Unit II: Dec. 2006				
	Phase II		2 x 1,000	100%	2,000	Coal

		Unit III: Nov. 2007				
		Unit IV: Nov. 2007				
Hunan Province						
Yueyang	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
		Unite IV: May 2006				
	Phase III	Unit V: Jan. 2011	1 x 600	55%	330	Coal
Xiangqi Hydro		Unit I: Dec. 2011	1 x 20	100%	20	Hydro
Hubei Province						
Enshi Hydro		Unit I: Dec. 2011	3 x 5	100%	15	Hydro
		Unit II: Dec. 2011				
		Unit III: Dec. 2011				
Jiangxi Province						
Jinggangshan	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				
Fujian Province						
Fuzhou	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	1 x 660(3)	100%	660	Coal
		Unit VI: Oct. 2011	1 x 660	100%	660	Coal
Guangdong Province						
Shantou	Phase I	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				
Yunnan Province						
Diandong	Phase I	Unit I: Feb. 2006	2 x 600	100%	1,200	Coal
		Unit II: Jul. 2006				

Plant or Expansion (Names as defined below)		Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
	Phase II	Unit III: Nov. 2006	2 x 600	100%	1,200	Coal
		Unit IV: May 2007				
Yuwang	Phase I	Unit I: Jul. 2009	2 x 600	100%	1,200	Coal
		Unit II: Feb. 2010				
Singapore						
Tuas	Phase I	Unit I: Mar. 1999	2 x 600	100%	1,200	Oil
		Unit II: Dec. 1999				
	Phase II	Unit III: Nov. 2001	4 x 367.5	100%	1,470	Gas
		Unit IV: Jan. 2002				
		Unit V: Feb. 2005				
		Unit VI: Sep. 2005				

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Notes:

(1) The installed capacity of Unit IV of Pingliang was expanded to 330MW since January 2012.

(2) The Unit I and Unit II of Changxing were shut down in January 2011.

(3) The installed capacity of Unit V and Univ VI of Fuzhou was expanded to 660MW since January 2012.

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, 2009, 2010 and 2011.

Coal-fired Power Plant	Availability factor (%)			Capacity factor (%)		
	2009	2010	2011	2009	2010	2011
Liaoning Province						
Dalian	92.35	96.67	97.63	68.38	64.51	55.49
Dandong	93.40	98.69	96.51	66.51	63.02	52.25
Yingkou	86.53	99.94	98.15	63.12	61.11	53.84
Yingkou Co-generation	--	96.57	86.78	--	63.45	54.25

Hebei Province						
Shang'an	92.66	96.66	95.86	53.99	66.13	66.05
Gansu Province						
Pingliang	93.46	97.39	92.52	48.30	44.66	56.33
Beijing Municipality						
Beijing	94.80	93.32	95.27	59.37	63.55	66.02
Tianjin Municipality						
Yangliuqing	93.99	91.6	91.13	57.14	61.25	66.17
Shanxi Province						
Yushe	95.35	92.37	95.24	63.69	69.76	59.65
Shandong Province						
Dezhou	92.67	92.16	95.46	63.75	70.05	62.07
Jining	85.91	90.61	97.92	68.23	62.41	38.89
Weihai	93.55	94.05	93.38	66.35	70.59	57.92
Xindian	88.69	91.63	93.73	63.65	69.57	63.04
Rizhao II	91.51	92.16	98.52	61.33	68.42	70.55
Zhanhua Co-generation	--	100.00	94.44	--	83.78	54.91
Henan Province						
Qinbei	93.91	94.69	92.69	59.50	66.41	72.04
Jiangsu Province						
Nantong	92.28	94.61	97.10	63.55	73.44	75.79
Nanjing	90.14	92.98	94.56	65.17	68.94	71.02
Taicang	94.11	88.93	96.26	73.17	69.84	75.53
Huaiyin	90.98	96.76	95.99	54.06	59.66	63.74
Jinling II	--	--	87.83	--	--	70.56
Shanghai Municipality						
Shidongkou I	88.04	97.58	100.00	63.81	68.73	75.96
Shidongkou II	93.30	95.21	95.41	63.65	52.15	64.66

Coal-fired Power Plant	Availability factor (%)			Capacity factor (%)		
	2009	2010	2011	2009	2010	2011
Chongqing Municipality						
Luohuang	91.17	96.79	91.81	50.69	54.20	67.28
Zhejiang Province						
Changxing(1)	92.49	93.75	-	69.60	73.26	-
Yuhuan	91.03	95.61	93.24	56.83	68.30	76.39
Hunan Province						
Yueyang	92.07	98.54	97.49	45.01	49.85	63.66
Jiangxi Province						
Jinggangshan	87.88	97.13	87.46	54.45	49.06	56.39
Fujian Province						
Fuzhou	95.87	97.52	94.39	69.40	61.38	72.89
Guangdong Province						
Shantou	89.84	96.49	91.95	58.96	66.94	67.40
Haimen	99.57	93.95	93.15	56.53	66.18	74.22
Yunnan Province						
Diandong	--	--	93.28	--	--	55.40
Yuwang	--	--	95.34	--	--	55.30

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Note:

(1) The Unit I and Unit II of Changxing were shut down in January 2011.

The details of our operating power plants and construction projects as of March 31, 2012 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 commercial 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 2011, Dalian Power Plant obtained 41.0% of its total consumption of coal pursuant to the key contracts and the remainder in the open market. The weighted average cost of coal for Dalian Power Plant in 2011 was RMB510.07 (2010: RMB543.26) 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 2011, Dandong Power Plant obtained 67.3% of its total consumption of coal pursuant to the key contracts and the remainder in the open market. The weighted average cost of coal for Dandong Power Plant in 2011 was RMB517.07 (2010: RMB556.41) 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 commercial 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 2011, Yingkou Power Plant obtained 26.8% of its total consumption of coal pursuant to the key contracts and the remainder in the open market. The weighted average cost of coal for Yingkou Power Plant in 2011 was RMB531.75 (2010: RMB570.29) per ton.

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

Yingkou Co-generation Power Plant