

HUANENG POWER INTERNATIONAL INC

Form 20-F

April 18, 2011

HUANENG POWER INTERNATIONAL, INC.

Annual Report On Form 20-F
2010

As filed with the Securities and Exchange Commission on April 18, 2011

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 20-F

(Mark One)

- £ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g)
OF THE SECURITIES EXCHANGE ACT OF 1934
OR
R ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE
SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR
ENDED DECEMBER 31, 2010
OR
£ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE
SECURITIES EXCHANGE ACT OF 1934
OR
£ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

For the transaction period from _____ to _____

Commission file number: 1-13314

HUANENG POWER INTERNATIONAL, INC.

(Exact name of Registrant as specified in its charter)

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

HUANENG BUILDING

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NO.4 FUXINGMENNEI STREET, XICHENG DISTRICT, BEIJING, PEOPLE'S REPUBLIC OF CHINA
(Address of principal executive offices)

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 No

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

Yes No

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

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

Yes No

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

Yes No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

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

U.S. GAAP <input type="checkbox"/>	International Financial Reporting Standards as issued by the International Accounting Standards Board <input type="checkbox"/>	Other <input type="checkbox"/>
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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

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

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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 “US 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 US Dollars are solely for the convenience of the reader. Unless otherwise indicated, any translations from Renminbi to US Dollars or from US Dollars to Renminbi were translated at the average rate announced by the People’s Bank of China (the “PBOC Rate”) on December 31, 2010 of US\$1.00 to RMB6.6227. No representation is made that the Renminbi or US Dollar amounts referred to herein could have been or could be converted into US 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, 2010 and 2009 and the consolidated income statement and cash flow data for each of the years in the three-year period ended December 31, 2010 are derived from the historical financial statements included herein. Our consolidated balance sheet data as of December 31, 2008, 2007 and 2006 and income statement and cash flow data for each of the years in the two-year period ended December 31, 2007, 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,					
	2006	2007	2008	2009	2010	2010
RMB and US Dollars in thousands except per share data	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)(1)
Income Statement Data IFRS						
Operating revenue	44,422,501	49,892,049	67,835,114	76,862,896	104,318,120	15,751,600
Tax and levies on operations	(148,057)	(139,772)	(106,385)	(151,912)	(147,641)	(22,293)
	(35,705,591)	(41,817,349)	(68,964,955)	(67,537,281)	(95,541,488)	(14,426,365)

Operating expenses						
Profit/ (Loss) from operations	8,568,853	7,934,928	(1,236,226)	9,173,703	8,628,991	1,302,942
Interest income	51,910	53,527	83,522	60,397	89,026	13,443
Financial expenses, net	(1,523,214)	(1,927,988)	(3,707,943)	(4,309,325)	(5,194,585)	(784,361)
Other investment income	28,415	585,379	51,061	56,675	60,013	9,062
Gain/ (Loss) on fair value changes	100,180	87,132	(54,658)	(33,638)	11,851	1,789
Share of profits of associates	790,629	586,323	72,688	756,164	568,794	85,886
Profit/ (Loss) before income tax expense	8,016,773	7,319,301	(4,791,556)	5,703,976	4,164,090	628,760
Income tax (expense)/benefit	(1,127,699)	(838,270)	239,723	(593,787)	(842,675)	(127,240)
Net profit/ (loss)	6,889,074	6,481,031	(4,551,833)	5,110,189	3,321,415	501,520
Attributable to:						
Equity holders of the Company	6,071,154	6,161,127	(3,937,688)	4,929,544	3,347,985	505,532
Non-controlling interests	817,920	319,904	(614,145)	180,645	(26,570)	(4,012)
Basic earnings/(loss) per share	0.50	0.51	(0.33)	0.41	0.28	0.04
Diluted earnings/(loss) per share	0.50	0.51	(0.33)	0.41	0.28	0.04

	As of December 31,					
	2006	2007	2008	2009	2010	2010
RMB and US Dollars in thousands	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)(1)
Balance Sheet Data						
IFRS						
Current assets	13,564,516	18,551,059	20,018,177	24,189,765	31,556,149	4,764,847
Property, plant and equipment	90,444,225	90,125,919	116,737,198	140,777,336	155,224,597	23,438,265
Available-for-sale financial assets	1,458,759	3,462,158	1,524,016	2,555,972	2,223,814	335,787
Investments in associates/ a jointly controlled entity	5,418,213	8,731,490	8,758,235	9,568,576	11,973,216	1,807,906
Land use rights and other non-current assets	2,282,884	2,658,583	3,643,431	4,911,678	9,541,540	1,440,732
Power generation licence	-	-	3,811,906	3,898,121	4,105,518	619,916
Deferred income tax assets	98,429	211,654	316,699	374,733	672,475	101,541
Goodwill	671,796	555,266	11,108,096	11,610,998	12,640,904	1,908,723
Total assets	113,938,822	124,296,129	165,917,758	197,887,179	227,938,213	34,417,717
Current liabilities	(26,842,684)	(31,376,561)	(52,486,200)	(59,581,608)	(83,636,880)	(12,628,819)
Non-current liabilities	(36,487,446)	(40,839,926)	(70,871,605)	(87,657,451)	(81,875,861)	(12,362,913)
Total liabilities	(63,330,130)	(72,216,487)	(123,357,805)	(147,239,059)	(165,512,741)	(24,991,732)
Net assets	50,608,692	52,079,642	42,559,953	50,648,120	62,425,472	9,425,985
Total equity	50,608,692	52,079,642	42,559,953	50,648,120	62,425,472	9,425,985

	Year Ended December 31,					
	2006	2007	2008	2009	2010	2010
RMB and US Dollars in thousands except per share data	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)(1)
Cash Flow Data						
IFRS						
Purchase of property, plant and equipment	(15,998,575)	(14,223,310)	(27,893,520)	(22,426,098)	(20,704,224)	3,126,251

Net cash provided by operating activities	14,005,841	12,078,833	5,185,893	14,980,990	18,066,724	2,728,000
Net cash used in investing activities	(15,915,542)	(16,257,355)	(47,957,065)	(24,880,261)	(26,980,538)	(4,073,949)
Net cash provided by financing activities	2,473,002	8,287,893	41,255,291	9,503,886	13,063,323	1,972,507
Other Financial Data						
IFRS						
Dividend declared per share	0.28	0.30	0.10	0.21	0.20	0.03
Number of ordinary shares ('000)	12,055,383	12,055,383	12,055,383	12,055,383	14,055,383	14,055,383

Note:

- (1) The US Dollar data has been translated from RMB solely for convenience at the PBOC Rate on December 31, 2010 of US\$1.00 to RMB6.6227. See "Item 10 Additional Information — Exchange controls for more information on exchange rates between RMB and US 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 2010, 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. The SERC is conducting research on how to effectively combine the energy saving and electricity dispatch with the development of the power market, and the detailed measures are still in the process of drafting. In October 2008, the SERC approved the trial implementation of the policy of energy saving and electricity dispatch in certain pilot provinces. In 2010, 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.

During the “Eleventh Five-Year Plan” period, or the past five year, the PRC government continued the reform in power industry. 2011 is the first year of the “Twelfth Five-Year Plan”, and currently the PRC government is in the process of stipulating development plan for 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 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 14.86% 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 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 operation 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 respond to 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.

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. Since the beginning of 2010, the PRC government started to tighten its monetary policy, and the People's Bank of China, or PBOC, has increased nine times the reserve requirement ratio for the PRC financial institutions from January 1, 2010 to March 31, 2011. In addition, PBOC increased the benchmark one-year lending interest rates by 75 basis points during the same period. We cannot assure you 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. Such increases in the discharge fees and in the environmental protection expenditure will lead to an increase of the 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 which would require additional expenditure on environmental protection.

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 US 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 US 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 operation 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 similar expressions, as they relate to us or our management, are intended to identify forward-looking statement. Such statements reflect the current views of our management with respect to future events and are subject to certain risks, uncertainties and assumptions, including the risk factors described in this document. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as

anticipated, believed, estimated or expected. We do not intend to update these forward-looking statements.

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, 2010, 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 strongly in 2010 from 2009 depressed levels, 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, 2010 to December 31, 2010, power sold through vesting contracts represented approximately 59% 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. Any 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 US dollars, which further exposes Tuas Power to foreign currency risk. Any increase in fuel price due and appreciation of the US 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. As of March 31, 2011, approximately 6.122 billion of our shares in connection with the reform, including our shares directly held by Huaneng Group and HIPDC, remained subject to selling restrictions. Such selling restriction are expected to be released on April 19, 2011. The reform did not affect the rights of shareholders of our overseas listed foreign shares.

As resolved at the 2008 annual general meeting held on June 18, 2009, our company has been given a mandate to issue within the PRC short-term debentures of a principal amount not exceeding RMB10 billion within 12 months

from the date on which the shareholder's approval was obtained. On September 9, 2009, we issued the first tranche of the short-term RMB denominated debenture in the amount of RMB5 billion with a maturity period of 270 days, a unit face value of RMB100 and an interest rate of 2.32%. On March 24, 2010, we issued the second tranche of the short-term debenture in the amount of RMB5 billion, with a maturity period of 270 days, a unit face value of RMB100 and an interest rate of 2.55%. These two tranches of short-term debentures were repaid in June 2010 and December 2010, respectively.

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 March 31, 2011, we have completed the acquisition and the operating results of all the nine entities were consolidated into ours.

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 debentures of a principal amount not exceeding RMB10 billion within 12 months from the date on which the shareholders' approval was obtained. On July 2, 2010, we issued the first tranche of the short-term RMB denominated debentures in the amount of RMB5 billion with a maturity period of 365 days, a unit face value of RMB100 and an interest rate of 3.20%. On January 13, 2011, we issued

the second tranche of the short-term RMB denominated debentures 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%.

In September 2010, we received from Huaneng Group an undertaking on relevant matters for further avoidance of business competition. The principal terms of the undertaking include, among others, that Huaneng Group shall treat us as the only platform for ultimate integration of its conventional energy business. See “Item 7.A. Major shareholders” for details.

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

On December 1, 2010, we entered into a transfer agreement with Huaneng Energy & Communications Holdings Co., Ltd. (“HEC”), a wholly owned subsidiary of Huaneng Group, pursuant to which we agreed to acquire from HEC its 50% equity interest in Shanghai Time Shipping Co., Ltd. (“Time Shipping”) from HEC for a consideration of RMB1.058 billion. On the same day, we entered into a transfer agreement with Huaneng Group, pursuant to which we agreed to acquire a 30% equity interest in Hainan Nuclear Power Co., Ltd. (“Hainan Nuclear”) from Huaneng Group for a consideration of RMB0.174 billion. Hainan Nuclear at present is in the course of constructing two pressurized water reactors of 650MW. In December 2010, we completed the acquisition of 50% equity interest in Time Shipping and 30% equity interest in Hainan Nuclear.

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 the end of 2011.

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, 2011, we had controlling generating capacity of 54,402 MW, and a total generating capacity of 50,935 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 18 provinces, provincial-level municipalities and autonomous regions. We also have a

wholly-owned power plant in Singapore.

In 2010, with the continuous recovery of China's macro economy from the adverse impact of the international financial crisis, power consumption by the downstream industries continued to contribute to the growing power demand. The macro economic conditions of China have provided opportunities for the development of China's power industry and the growth of power generation companies. Meanwhile, coal price in the domestic market increased from the previous year. We adopted various measures including optimizing the coal supply structure, increasing imported coal purchase volume and actively utilizing the internal available resources of Huaneng Group, thus effectively controlled the costs in fuel purchases. In response to the international financial crisis and complicated operating conditions, our management and all employees worked together and made every effort to actively deal with the challenges by grasping the growth trend of the China's economy and the favourable conditions where national electricity consumption continued to increase. We have actively dealt with the changes in power, coal and capital markets and made new progress in the areas of project development, emission reductions, safe production, operation management, energy saving, environmental protection, , capital operation and corporate governance.

In the year of 2010, new generating units with a total installed capacity of 1,800 MW were put into commercial operations. In 2010, our total domestic power generation from all operating power plants on a consolidated basis amounted to 256.950 billion kWh, representing a 26.25% increase from 2009. The annual average utilization hours of our coal-fired generating units reached 5,564 hours, 533 hours above the average

rate of the coal-fired generating units in China. Our fuel cost per unit of power sold by domestic power plants increased by 14.72% from the previous year to RMB247.49 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 Tuas Power represented approximately 12.44% and 14.54%, respectively, of our total assets and revenue as of and for the year ended December 31, 2010.

With two 600 MW oil-fired steam 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, 2010. In 2010, the power generated by Tuas Power in Singapore accounted for 24.7% of the total power generated in Singapore, representing a slight increase from 2009.

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 above 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 the 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 will 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 December 1, 2007, construction and operation of power stations using integrated gasification combined cycle, circulating fluidized bed with a generating capacity of 300MW or above, pressurized fluidized bed combustor with a generating capacity of 100MW or above and other clean combustion technologies belong to the category of encouraged projects. Therefore, 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 and Guidance Catalogue for Structural Adjustment of Industries issued in December 2005, 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 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 evolution of the SEP into the New Electricity Market of Singapore (“NEMS”) in 2003. The EMA is a statutory body responsible for the economic, technical and competition regulation of the gas and electricity industry in Singapore. In carrying out its functions as the regulator of the power sector, EMA is empowered under the Electricity Act to issue and enforce 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 90% 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, 2011, major players including Tuas Power have announced repowering of existing plants and addition of new greenfield capacities. In addition, a new entrant, Island Power, has announced its plans to compete in the Singapore electricity market.

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, 2010, all of our existing coal-fired generating units have installed and operated the desulphurization facilities and all the generating units will meet the standards for environmental protection.

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, 2010, of the areas we operate power plants, Fujian and Liaoning 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.

On May 12, 2010, NDRC, SERC and China National Energy Administration jointly issued the Notice regarding Cleaning up the Preferential Power Tariff provided to High Energy Consumption Companies to terminate the preferential power tariffs provided to high energy consumption companies. On May 19, 2010, NDRC, SERC, China National Energy Administration and several other PRC governmental authorities jointly promulgated the Notice on Immediate National Inspection over Power Tariff, pursuant to which certain practices violating relevant applicable regulations shall be rectified, including the provision of preferential tariffs to high energy consumption companies, the implementation of preferential tariffs by local government beyond its authority and the inexecution of on-grid tariff.

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 2010, 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, 2010, of the areas we operate power plants, Fujian and Liaoning 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 have been experimented in the power market in the Northeastern region and Eastern region. However, during the three years ended December 31, 2010, the use of the bidding method in power sales had not been substantively implemented yet. We believe that this reform will benefit us in the long-term.

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, 2010 and the approved power tariff for 2011.

	Year Ended December 31,					
	2006	2007	2008	2009	2010	2011
	Average Tariff (1)	Average Tariff (1)	Average Tariff (1)	Average Tariff(1)	Average Tariff(1)	Approved Tariff(1)
Liaoning Province						
Dalian Power Plant	315.95	323.27	338.05	368.66	375.44	367.70
Dandong Power Plant	322.76	330.38	340.82	366.30	376.61	378.50
Yingkou Power Plant	334.47	343.37	360.45	383.58	387.78	390.00
Yingkou Co-generation Power Plant	--	--	--	375.00	386.29	390.00
Inner Mongolia Autonomous Region						
Huade Wind Power Plant	--	--	--	--	510.00	510.00
Hebei Province						
Shang’an Power Plant(2)	340.22	344.47	356.52	372.41	378.59	402.30
Gansu Province						
Pingliang Power Plant	216.27	223.31	238.89	261.02	275.91	281.50
Beijing Municipality						
	--	--	--	482.42	474.21	491.80

Beijing Co-generation Power Plant						
Tianjin Municipality						
Yangliuqing Co-generation Power Plant(2)	--	--	--	408.12	407.08	436.80
Shanxi Province						

	Year Ended December 31,					
	2006 Average Tariff (1)	2007 Average Tariff (1)	2008 Average Tariff (1)	2009 Average Tariff(1)	2010 Average Tariff(1)	2011 Approved Tariff(1)
Yushe Power Plant						
Phase I	316.16	332.53	345.77	352.89	336.30	336.30
Phase II	268.21	274.16	289.32	316.62	333.36	336.30
Shandong Province						
Dezhou Power Plant	360.68	360.45	394.08	418.92	417.68	423.90
Jining Power Plant						
Phases I, II	342.42	310.90	356.56	397.40	398.11	401.90
Phase III	342.42	370.90	384.29	408.47	411.16	401.90
Co-generation	--	--	--	397.40	401.90	397.40
Xindian Power Plant						
Phases I, II	350.54	379.71	371.86	--	--	--
Phase III	351.90	356.01	370.99	404.30	405.68	404.30
Weihai Power Plant(2)	402.99	403.00	422.78	459.90	456.31	463.50
Rizhao Power Plant Phase II	--	--	--	394.24	397.60	397.40
Zhanhua Co-generation	--	--	--	--	397.40	397.40
Henan Province						
Qinbei Power Plant	311.20	311.86	339.85	370.47	379.68	391.20
Jiangsu Province						
Nantong Power Plant	344.92	339.47	385.53	401.71	409.06	425.00
Nanjing Power Plant	345.56	342.99	375.47	407.58	414.19	425.00
Taicang Power Plant						
Phase I	361.64	359.69	401.60	412.19	415.37	433.10
Phase II	371.50	358.08	396.48	398.36	414.13	433.10
Huaiyin Power Plant						
Phase I	366.44	--	--	--	--	--
Phase II	362.26	357.47	396.80	415.73	443.17	430.00
Phase III	362.26	357.47	396.80	415.73	443.17	430.00
Jinling Power Plant						
CCGT	--	481.99	528.73	544.97	568.00	568.00
Coal-fired	--	--	--	--	430.00	430.00
Qidong Wind Power Plant	--	--	--	487.70	487.70	487.70
Shanghai Municipality						
Shidongkou I	358.85	369.54	377.35	425.76	435.52	440.60
Shidongkou II	357.08	347.93	377.04	411.80	416.36	425.60
Shanghai CCGT Power Plant	--	--	602.57	629.00	662.00	662.00
Chongqing Municipality						
Luohuang Power Plant						
Phases I, II	314.87	308.65	338.27	365.70	373.30	378.30
Phase III	337.30	337.30	354.89	381.07	388.30	388.30
Zhejiang Province						
Changxing Power Plant	408.90	428.16	450.86	479.71	519.39	--
Yuhuan Power Plant	360.95	415.05	444.92	467.54	459.86	457.00
Hunan Province						
Yueyang Power Plant						

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Phase I	360.88	366.49	388.53	434.39	433.09	440.50
Phase II	363.38	378.91	398.62	434.05	439.92	425.50
Jiangxi Province						
Jinggangshan Power Plant						
Phase I	369.87	366.94	379.99	415.37	427.56	428.00

	Year Ended December 31,					
	2006	2007	2008	2009	2010	2011
	Average	Average	Average	Average	Average	Approved
	Tariff (1)	Tariff (1)	Tariff (1)	Tariff(1)	Tariff(1)	Tariff(1)
Phase II	--	--	--	406.60	408.51	422.00
Fujian Province						
Fuzhou Power Plant(2)	342.46	369.61	401.22	412.24	413.22	429.30
Guangdong Province						
Shantou Power Plant						
Phase I	487.55	497.7	522.42	547.00	540.70	540.71
Phase II	446.54	453.2	472.96	502.23	496.20	496.20
Haimen Power Plant	--	--	--	497.45	496.33	496.20

Notes:

- (1) Includes value-added tax.
- (2) For the 2011 approved tariff, some power plants may have several different approved tariffs which will be applied to the different generating units of such plants. Of Fuzhou Power Plant, Unit 5 has the approved tariff of 399.30. Of Shang'an Power Plant, Units 5 and 6 have the approved tariff of 386.80. Of Weihai Power Plant, Unit 5 has the approved tariff of 397.40. Of Yangliuqing Co-generation Power Plant, Units 7 and 8 have the approved tariff of 382.00.

Power sales in Singapore

According to the latest available update from EMA, the total licensed capacity in commercial operation in Singapore was 10,230MW. In 2010, the peak demand for electricity was 6,294MW and the annual average load was 5,008 MW. The power market in Singapore is competitive, and power generation companies sell their power output through bidding process and vesting contracts. As of December 31, 2010, power sold through vesting contracts presented approximately 55% 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, 2010, the average annual pool price per MWh of the NEMS was S\$132.42, S\$124.57, S\$162.53, S\$109.90 and S\$170.66, 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, 2010 to December 31, 2010, power sold through vesting contracts and retail sales represented approximately 91% of Tuas Power's total power sold for the same period.

Fuel supply arrangements

In 2010, 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 2006, the national supply and demand of coal reached equilibrium. We purchased 67.76 million tons of coal and consumed 68.83 million tons of coal. Of our total coal purchases, 62% 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 RMB343.73 per ton.

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.

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.

We strive to reduce our fuel costs in a number of ways, including seeking to purchase high quality coal at competitive prices directly from coal mines or coal shipment terminals, improving coal storage management and inspection and demanding compensation from suppliers for failure to deliver coal of the specified quantity and quality in accordance with the relevant purchase arrangements. We have also started to experiment in some of our power plants with a method of mixing different types of coal as a measure of cost reduction. In order to address the shortage of coal supplies, we have entered into certain medium and long-term agreements with major coal suppliers to secure stable coal supplies for a term of 3 to 5 years. At the same time, we also increase the percentage of the key coal supply contracts with coal suppliers, the coal purchase price of which is typically lower than the purchase price on open

market. Through these measures, we seek to further strengthen the stable coal supplies for our power plants.

We have secured our coal supply for 2011 by entering into key contracts with coal suppliers. 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

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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”.

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.

Oil

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

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 14.86% 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, 2011:

Notes:

- (1) Huaneng Group indirectly holds 100% equity interests in Pro-Power Investment Limited through its wholly-owned subsidiary, China Hua Neng Hong Kong Company Limited, and Pro-Power Investment Limited in turn holds 5% equity interests in HIPDC. As a result, Huaneng Group indirectly holds additional 5% equity interests in HIPDC.

- (2) Of the 14.86% 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, and the remaining approximately 0.09% was held by Huaneng Group through its wholly-owned subsidiary, Huaneng Capital Services Company 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, 2011.

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 Unit II: Dec. 1988	2 x 350	100%	700	Coal
	Phase II	Unit III: Jan. 1999 Unit IV: Jan. 1999	2 x 350	100%	700	Coal
Dandong		Unit I: Jan. 1999 Unit II: Jan. 1999	2 x 350	100%	700	Coal
Yingkou	Phase I	Unit I: Jan. 1996 Unit II: Dec. 1996	2 x 320	100%	640	Coal
	Phase II	Unit III: Aug. 2007 Unit IV: Oct. 2007	2 x 600	100%	1,200	Coal
Yingkou Co-generation		Unit I: Dec. 2009 Unit II: Dec. 2009	2 x 330	100%	660	Coal
Inner Mongolia Autonomous Region						
Huade		33 turbines: Dec. 2009	49.5	100%	49.5	Wind
Hebei Province						
Shang'an	Phase I	Unit I: Aug. 1990 Unit II: Dec. 1990	2 x 350	100%	700	Coal
	Phase II	Unit III: Oct. 1997 Unit IV: Oct. 1997	2 x 300	100%	600	Coal
	Phase III	Unit V Jul. 2008 Unit VI: Aug. 2008	2 x 600	100%	1,200	Coal
Kangbao Wind Power	Phase I	33 turbines: Jan. 2011	49.5	100%	49.5	Wind

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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 300	65%	195	Coal
		Unit V: Feb. 2010	2 x 600	65%	780	Coal
		Unit VI: March 2010				
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
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						
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				
Shandong Province						
Dezhou	Phase I	Units I: 1992	1 x 330	100%	330	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: 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	Unit III: Dec. 2008	2 x 680	100%	1,360	Coal
		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

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		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	Unit III: Dec. 2009	1,030	60%	618	Coal
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
		Unit II: Dec. 1988				
		Unit III: Sep. 1989				
		Unit IV: May 1990				
Shidongkou II		Unit I: Jun. 1992	2 x 600	100%	1,200	Coal
		Unit II: Dec. 1992				
Shanghai CCGT		Unit I: May 2006	3 x 390	70%	819	Gas
		Unit II: Jun. 2006				
		Unit III: Jul. 2006				

Plant or Expansion (Names as defined below)		Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
Chongqing Municipality						
Luohuang	Phase I	Unit I: Sep. 1991 Unit II: Feb. 1992	2 x 360	60%	432	Coal
	Phase II	Unit III: Dec. 1998 Unit IV: Dec. 1998	2 x 360	60%	432	Coal
	Phase III	Unit V: Dec. 2006 Unit VI: Jan. 2007	2 x 600	60%	720	Coal
Zhejiang Province						
Changxing(1)		Unit I: Jan. 1992 Unit II: Aug. 1992	1 x 135 1 x 125	100%	260	Coal
Yuhuan	Phase I	Unit I: Nov. 2006 Unit II: Dec. 2006	2 x 1,000	100%	2,000	Coal
	Phase II	Unit III: Nov. 2007 Unit IV: Nov. 2007	2 x 1,000	100%	2,000	Coal
Hunan Province						
Yueyang	Phase I	Unit I: Sep. 1991 Unit II: Dec. 1991	2 x 362.5	55%	398.75	Coal
	Phase II	Unit III: Mar. 2006 Unit IV: May 2006	2 x 300	55%	330	Coal
	Phase III	Unit V: Jan. 2011	1 x 600	55%	330	Coal
Jiangxi Province						
Jinggangshan	Phase I	Unit I: Dec. 2000 Unit II: Aug. 2001	2 x 300	100%	600	Coal
	Phase II	Unit III: Nov. 2009 Unit IV: Dec. 2009	2 x 660	100%	1,320	Coal
Fujian Province						

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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 600	100%	600	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				
	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	Natural Gas
		Unit IV: Jan. 2002				
		Unit V: Feb. 2005				
		Unit VI: Sep. 2005				

Note:

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

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, 2008, 2009 and 2010.

Coal-fired Power Plant	Availability factor (%)			Capacity factor (%)		
	2008	2009	2010	2008	2009	2010
Liaoning Province						
Dalian	92.86	92.35	96.67	74.01	68.38	64.51
Dandong	90.35	93.40	98.69	68.45	66.51	63.02
Yingkou	91.19	86.53	99.94	66.42	63.12	61.11
Yingkou Co-generation	-	-	96.57	-	-	63.45
Hebei Province						
Shang'an	94.05	92.66	96.66	53.18	53.99	66.13
Gansu Province						
Pingliang	92.41	93.46	97.39	68.31	48.30	44.66
Beijing Municipality						
Beijing	-	94.80	93.32	-	59.37	63.55
Tianjin Municipality						
Yangliuqing	-	93.99	91.6	-	57.14	61.25
Shanxi Province						
Yushe	88.04	95.35	92.37	70.45	63.69	69.76
Shandong Province						
Dezhou	90.62	92.67	92.16	60.24	63.75	70.05
Jining	89.15	85.91	90.61	68.61	68.23	62.41
Weihai	93.58	93.55	94.05	60.96	66.35	70.59
Xindian	92.42	88.69	91.63	45.98	63.65	69.57
Rizhao II	8.41	91.51	92.16	69.14	61.33	68.42
Z h a n h u a						
Co-generation	-	-	100.00	-	-	83.78
Henan Province						
Qinbei	97.51	93.91	94.69	49.87	59.50	66.41
Jiangsu Province						
Nantong	92.45	92.28	94.61	67.53	63.55	73.44
Nanjing	85.57	90.14	92.98	61.70	65.17	68.94
Taicang	89.60	94.11	88.93	65.71	73.17	69.84
Huaiyin	91.89	90.98	96.76	54.84	54.06	59.66
Shanghai Municipality						
Shidongkou I	89.70	88.04	97.58	60.79	63.81	68.73
Shidongkou II	89.86	93.30	95.21	71.47	63.65	52.15
C h o n g q i n g						
Municipality						
Luohuang	89.28	91.17	96.79	49.62	50.69	54.20
Zhejiang Province						
Changxing	89.68	92.49	93.75	66.38	69.60	73.26
Yuhuan	90.32	91.03	95.61	55.33	56.83	68.30
Hunan Province						
Yueyang	86.64	92.07	98.54	51.69	45.01	49.85

Jiangxi Province						
Jinggangshan	92.12	87.88	97.13	60.76	54.45	49.06
Fujian Province						
Fuzhou	91.53	95.87	97.52	66.11	69.40	61.38
Guangdong Province						
Shantou	88.13	89.84	96.49	66.60	58.96	66.94
Haimen	-	99.57	93.95	-	56.53	66.18

The details of our operating power plants and construction projects as of March 31, 2011 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.

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 2010, Dalian Power Plant obtained 42.29% 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 2010 was RMB543.26 (2009: RMB554.02) 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.

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 2010, Dandong Power Plant obtained 67.57% 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 2010 was RMB556.41 (2009: RMB543.91) 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.

The coal supply for Yingkou Power Plant is mainly obtained from Shanxi Province. In 2010, Yingkou Power Plant obtained 45.34% 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 2010 was RMB570.29 (2009: RMB503.98) per ton. Yingkou Power Plant typically stores 400,000 tons of coal on site.

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

Yingkou Co-generation Power Plant

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

The coal supply for Yingkou Co-generation Power Plant is mainly obtained from Inner Mongolia Autonomous Region. In 2010, Yingkou Co-generation Power Plant obtained all 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 Co-generation Power Plant in 2010 was RMB419.23 per ton. Yingkou Co-generation Power Plant typically stores 140,000 tons of coal on site.

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

Construction Projects in Liaoning Province

Wafangdian Wind Power Plant. The construction of phase I of Dalian Wafangdian Wind Power Plant, which is 100% owned by us, has been approved by Dalian Municipal Commission of Development and Reform in November 2010. The installed capacity of phase I of Dalian Wafangdian Wind Power Plant is 48 MW. The estimated total investment of this project is approximately RMB495 million.

Suzihe Hydropower project. On January 4, 2011, we entered into an equity transfer agreement relating to the acquisition of 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 is the legal owner of a hydropower project with a planned hydropower capacity of 37.5 MW (3 x 12.5 MW), which is under construction and is expected to commence operation by the end of 2011. By completing this acquisition, we entered for the first time the hydropower market in Liaoning Province which was instrumental in improving our power structure in Liaoning Province.

Changtu Taiping Wind Power project. In February 2011, Huaneng Liaoning Changtu Taiping Wind Power project has been approved by Liaoning Provincial Development and Reform Commission of the PRC. We own 100% of the equity interest in this project. This project is planned to install 33 wind power turbines of 1.5 MW each with a planned installed capacity of 49.5 MW. The total investment amount of this project is estimated to be approximately RMB469 million.

Power Plant in Inner Mongolia Autonomous Region

Huade Wind Power Plant

Huaneng Huade Wind Power Plant (“Huade Wind Power Plant”) is located in Huade, Inner Mongolia Autonomous Region. It has an installed capacity of 49.5 MW and consists of 33 wind power turbines which commenced commercial operation in 2009. We own 100% equity interest in this project.

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

Power Plants in Hebei Province

Shang’an Power Plant

Huaneng Shang’an Power Plant (“Shang’an Power Plant”) is located on the outskirts of Shijiazhuang. Shang’an Power Plant has been developed in three separate expansion phases. The Shang’an Power Plant Phase I has an installed capacity of 700 MW and consists of two 350 MW coal-fired generating units which commenced commercial operations in 1990. Shang’an Power Plant Phase II shares with the Shang’an Power Plant Phase I certain facilities, such as coal storage facilities and effluence pipes, which have been built to accommodate the requirements of plant expansions. The Shang’an Power Plant Phase II utilizes two 300 MW coal-fired generating units, which commenced commercial operation in 1997. The Shang’an Power Plant Phase III has an installed capacity of 1200 MW and consists of two 600 MW supercritical coal-fired generating units which commenced commercial operations in July and August 2008, respectively. Unit 5 of Shang’an Power Plant is the first 600MW supercritical air-cooling unit which commenced operation in the PRC.

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

In 2010, Shang'an Power Plant obtained 39.11% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Shang'an Power Plant in 2010 was RMB574.55 (2009: RMB496.76) per ton.

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

Kangbao Wind Power Plant

Huaneng Kangbao Wind Power Plant (“Kangbao Wind Power”) consists of 33 wind power turbines with a total installed capacity of 49.5 MW. In January 2011, the Phase I of Kangbao Wind Power with a total generation capacity of 49.5MW has completed the trial run.

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

Power Plant in Gansu Province

Pingliang Power Plant

Huaneng Pingliang Power Plant (“Pingliang Power Plant”) is located in Pingliang City of Gansu Province. Pingliang Power Plant consists of three 325 MW and one 300 MW coal-fired generating units which commenced commercial operation in 2000, 2001 and June and November 2003 respectively. The installed capacity of Unit I, Unit II and Unit III of Pingliang Power Plant were expanded from 300 MW to 325 MW in January 2010, respectively.

Pingliang Power Plant Phase II consists of two 600 MW generating units with a total installed capacity of 1200 MW, which commenced commercial operation in February 2010 and March 2010, respectively.

The coal supply for Pingliang Power Plant is obtained from local coal mines. In 2010, Pingliang Power Plant obtained 99.40% of its coal supplies from the key contracts. The weighted average cost of coal for Pingliang Power Plant in 2010 was RMB367.28 (2009: RMB358.80) per ton. Pingliang Power Plant typically stores 230,000 tons of coal on site.

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

Construction Projects in Gansu Province

Ganhekou Wind Power Plant II. Huaneng Gansu Ganhekou Wind Power Plant II (“Ganhekou Wind Power Plant II”) is planned to consist of generating units with a total installed capacity of 199.5 MW. We own 100% equity interest in this project.

Qiaowan Wind Power Plant II. Huaneng Gansu Qiaowan Wind Power Plant II (“Qiaowan Wind Power Plant II”) is planned to consist of generating units with a total installed capacity of 201 MW. We own 100% equity interest in this project.

Qiaowan Wind Power Plant III. Huaneng Gansu Qiaowan Wind Power Plant III (“Qiaowan Wind Power Plant III”) is planned to consist of generating units with a total installed capacity of 101 MW. We own 100% equity interest in this project.

Power Plant in Beijing Municipality

Beijing Co-generation Power Plant

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

The coal supply for Beijing Co-generation Power Plant is mainly obtained from Inner Mongolia Autonomous Region. In 2010, Beijing Co-generation Power Plant obtained all of its total consumption of coal pursuant to the key contracts. The weighted average cost of coal for Beijing Co-generation Power Plant in 2010 was RMB551.52 (2009: RMB525.06) per ton. Beijing Co-generation Power Plant typically stores 165,000 tons of coal on site.

Beijing Co-generation Power Plant sold its electricity to North China Electric Power Company in 2010.

Construction Project in Beijing Municipality

Beijing Co-generation Power Plant expansion project. The gas co-generation expansion project of Beijing Co-generation Power Plant is planned to construct one set of “two on one” F-grade gas and steam combined cycle generating unit with a power generation capacity of 923 MW, heat supply capacity of 650 MW and heat supply area of approximately 13,000,000 square metres. High-standard denitrification, noise reduction, water treatment and other environmental protection facilities will be constructed concurrently. In August 2010, the gas co-generation expansion project of Beijing Co-generation Power Plant has been approved by Beijing Municipal Commission of Development and Reform. We own 41% equity interest in this project.

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

Power Plant in Tianjin Municipality

Yangliuqing Co-generation Power Plant

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

The coal supply for Yangliuqing Co-generation Power Plant is mainly obtained from Shanxi Province and Inner Mongolia Autonomous Region. In 2010, Yangliuqing Co-generation Power Plant obtained 53.60% of its total consumption of coal pursuant to the key contracts and the remainders in the open market. The weighted average cost of coal for Yangliuqing Co-generation Power Plant in 2010 was RMB568.81 (2009: RMB520.40) per ton. Yangliuqing Co-generation Power Plant typically stores 300,000 tons of coal on site.

Yangliuqing Co-generation Power Plant sold its electricity to North China Electric Company in 2010.

Power Plant in Shanxi Province

Yushe Power Plant

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

Two 300 MW coal-fired generating units of Yushe Power Plant Phase II commenced commercial operations in November and December 2004, respectively.

The coal supply for Yushe Power Plant is obtained from several coal producers located mostly in Shanxi Province. In 2010, Yushe Power Plant obtained approximately 38.62% of its total consumption of coal from the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Yushe Power Plant in 2010 was RMB486.52 (2009: RMB415.94) per ton. Yushe Power Plant typically stores 500,000 tons of coal on site.

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

Power Plants in Shandong Province

Dezhou Power Plant

Huaneng Dezhou Power Plant (“Dezhou Power Plant”) is located in Dezhou City, near the border between Shandong and Hebei Provinces, close to an industrial zone that is an important user of electric power for industrial and commercial purposes.

Dezhou Power Plant comprises of three phases, with Phase I consisting of one 320MW and one 330MW coal-fired generating units, Phase II consisting of two 300 MW coal-fired generating units, and Phase

III consisting of two 700 MW coal-fired generating units. The installed capacity of Unit IV was upgraded from 300 MW to 320 MW in January 2009.

Dezhou Power Plant is approximately 200 km from Taiyuan, Shanxi Province, the source of the plant's coal supply. The plant is located on the Taiyuan-Shijiazhuang-Dezhou rail line, giving it access to transportation facilities for coal. In 2010, Dezhou Power Plant obtained approximately 53.28% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Dezhou Power Plant in 2010 was RMB564.87 (2009: RMB478.22) per ton. The plant is connected to the main trunk rail line at Dezhou by a dedicated 3.5 km spur line owned by us. Dezhou Power Plant typically stores 400,000 tons of coal on site.

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

Jining Power Plant

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

Jining Power Plant facilities have undergone replacement, renovation and construction as necessary. Jining Power Plant has higher rates of auxiliary power and coal consumption than many larger and newer plants. In 2006, Units I and II of Jining Power Plant with a total capacity of 100 MW were shut down. In 2007 Unit III of Jining Power Plant with the capacity of 115 MW was shut down. In June 2009, Unit IV of Jining Power Plant with the capacity of 110 MW was shut down. As a result, Jining Power Plant currently consists of two coal-fired generating units, with an aggregate installed capacity of 270 MW. In addition, Jining Power Plant (Co-generation) has an installed capacity of 700 MW and consists of two 350 MW generating units which commenced operation in November and December 2009, respectively.

In 2010, Jining Power Plant obtained approximately 31.88% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Jining Power Plant in 2010 was RMB663.97 (2009: RMB520.22) per ton.

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

Xindian Power Plant

Huaneng Xindian Power Plant ("Xindian Power Plant") is located in Zibo City of Shandong Province. Xindian Power Plant has an installed capacity of 450 MW and consists of two 225 MW coal-fired generating units which commenced commercial operations in December 2001 and January 2002, respectively, and were shut down in September 2009. Xindian Power Plant Phase III Expansion consists of two 300 MW generating units with a total installed capacity of 600 MW, which were put into operation in September and November 2006, respectively.

The coal supply for Xindian Power Plant is obtained from several coal producers located mostly in Shanxi Province. In 2010, Xindian Power Plant obtained 18.34% 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 Xindian Power Plant in 2010 was RMB642.77 (2009: RMB535.90) per ton. Xindian Power Plant typically stores 250,000 tons of coal on site.

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

Weihai Power Plant

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

Weihai Power Plant Phase I consists of two 125 MW generating units (Units I and II), and Phase II consists of two 320 MW generating units (Units III and IV). Unit I began commercial operation in May 1994 and was shut down in December 2008, and Unit II began commercial operation in January 1995 and was shut

down in November 2008. Unit III and Unit IV commenced commercial operation in March and November 1998, respectively. Each of the Units III and IV was upgraded from 300 MW to 320 MW in January 2009.

In 2010, Weihai Power Plant obtained approximately 34.33% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Weihai Power Plant in 2010 was RMB647.82 (2009: RMB552.92) per ton. The coal supply for Weihai Power Plant is obtained from Shanxi Province and Inner Mongolia. Weihai Power Plant typically stores 160,000 tons of coal on site.

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

Rizhao Power Plant

Huaneng Rizhao Power Plant (“Rizhao Power Plant”) is located in Rizhao City of Shandong Province. Rizhao Power Plant currently has an aggregate installed capacity of 2,060 MW. As of December 31, 2010, the installed capacity of Rizhao Power Plant attributable to us was 1,668 MW. Rizhao Power Plant Phase I has an installed capacity of 700 MW and consists of two 350 MW coal-fired generating units which commenced commercial operations both in April, 2000. We acquired an additional 10% equity interests in Phase I of Rizhao Power Plant in July 2008 and increased our interest to 44%.

We hold 100% equity interest in Phase II of Rizhao Power Plant, which commenced commercial operation in December 2008 and consists of two 680 MW supercritical coal-fired generating units. The coal supply for Phase II of Rizhao Power Plant is obtained from Shanxi Province. In 2010, Phase II of Rizhao Power Plant obtained 4.28% 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 Phase II of Rizhao Power Plant in 2010 was RMB649.75 (2009: RMB543.70) per ton. Phase II of Rizhao Power Plant typically stores 200,000 tons of coal on site.

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

Zhanhua Co-generation Power Plant

Shandong Zhanhua Co-generation Limited Company (“Zhanhua Co-generation Power Plant”) is located in Zhanhua City of Shandong Province. Zhanhua Co-generation Power Plant currently has an aggregate installed capacity of 330 MW, consisting of two generating units which commenced commercial operations in July 2005. In December 2010, We acquired 100% equity interest in Zhanhua Co-generation Power Plant.

The coal supply for Zhanhua Co-generation Power Plant is mainly obtained from Inner Mongolia Autonomous Region. In 2010, Zhanhua Co-generation Power Plant obtained 39.00% of its total consumption of coal pursuant to the key contracts. The weighted average cost of coal for Zhanhua Co-generation Power Plant in 2010 was RMB653.12 per ton. Zhanhua Co-generation Power Plant typically stores 90,000 tons of coal on site.

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

Power Plant in Henan Province

Qinbei Power Plant

Huaneng Qinbei Power Plant (“Qinbei Power Plant”) is located in Jiyuan City of Henan Province. Its installed capacity is 2,400 MW which consists of four 600 MW supercritical coal-fired generating units. Two units commenced commercial operations in November and December 2004, and the other two units commenced commercial operation

in November 2007.

The coal supply for Qinbei Power Plant is obtained from Shanxi Province. In 2010, Qinbei Power Plant obtained 1.72% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Qinbei Power Plant in 2010 was RMB638.54 (2009: RMB543.48) per ton. Qinbei Power Plant typically stores 270,000 tons of coal on site.

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

Construction Project in Henan Province

Qinbei Power Plant Phase III. In December 2010, one 1,000 MW domestic ultra-supercritical coal-fired generating unit of the Phase III of Qinbei Power Plant has been approved by the National Development and Reform Commission of the PRC. We hold a 60% equity interest in Qinbei Power Plant.

Power Plants and Projects in Jiangsu Province

Nantong Power Plant

Huaneng Nantong Power Plant (“Nantong Power Plant”) is located in the city of Nantong. Nantong Power Plant, including Phase I and Phase II, has an installed capacity of 1,404 MW and consists of two 352 MW and two 350 MW coal-fired generating units which commenced commercial operations in 1989, 1990 and 1999, respectively.

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

In 2010, Nantong Power Plant obtained 85.06% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Nantong Power Plant in 2010 was RMB639.54 (2009: RMB543.16) per ton.

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

Nanjing Power Plant

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

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

In 2010, Nanjing Power Plant obtained approximately 33.53% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Nanjing Power Plant in 2010 was RMB671.44 (2009: RMB612.56) per ton.

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

Taicang Power Plant

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

Plant to 1,900 MW.

The coal supply for Taicang Power Plant is primarily from Shenhua in Inner Mongolia and Datong in Shanxi Province. In 2010, Taicang Power Plant obtained approximately 54.53% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Taicang Power Plant in 2010 was RMB619.25 (2009: RMB561.51) per ton. Taicang Power Plant typically stores 350,000 tons of coal on site.

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

Huaiyin Power Plant

Huaneng Huaiyin Power Plant (“Huaiyin Power Plant”) is located in the Centre of the Northern Jiangsu Power Grid. The plant’s two 220 MW coal-fired generating units commenced operation in November 1993 and August 1994, respectively. In order to reduce energy consumption and increase capacity, one generating unit of Huaiyin Power Plant was upgraded in October 2001, which increased the maximum generating capacity of that unit to 220 MW. In 2002, upgrading of the second generating unit was completed, and the actual generating capacity of Huaiyin Power Plant is 440 MW. In December 2007, Unit I of Huaiyin Power Plant was shut down. The other two 330 MW coal-fired generating units of Huaiyin Power Plant Phase II Expansion have commenced commercial operations in January and March 2005, respectively. Huaiyin Power Plant Phase III consists of two 330 MW coal-fired generating units, and was put into operations in May and September 2006, respectively. In December 2008, we acquired an additional 10% equity interest in Huaiyin Power Plant Phase I and increased our interest to 100%. We hold 63.64% equity interest in Phase II and Phase III of Huaiyin Power Plant. In January 2009, Unit II of Huaiyin Power Plant was shut down.

The coal supply for the Huaiyin Power Plant is primarily from Anhui Province, Henan Province and Shanxi Province. Huaiyin Power Plant typically stores 180,000 tons of coal on site. In 2010, Huaiyin Power Plant obtained approximately 12.64% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Huaiyin Power Plant in 2010 was RMB693.13 (2009: RMB596.98) per ton.

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

Jinling Power Plant

Huaneng Nanjing Jinling Power Plant (“Jinling Power Plant”) is located in Nanjing, Jiangsu. Jinling Power Plant (CCGT) consists of two 390 MW gas-fired generating units, which commenced operation in December 2006 and March 2007, respectively. Jinling Power Plant (Coal-fired) consists of one 1,030 MW domestic ultra-supercritical coal-fired generating unit, which passed the 168-hour trial run in December 2009. We hold 60% equity interest in Phase I and Phase II of Jinling Power Plant. Jinling Power Plant (Coal-fired) obtained approximately 33.94% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Jinling Power Plant (Coal-fired) in 2010 was RMB703.35 per ton.

The gas supply for Jinling Power Plant (CCGT) is transported through the pipeline of “West-East Gas Transport Project”. The coal supply for Jinling Power Plant (Coal-fired) is primarily from Shanxi Province and Inner Mongolia Autonomous Region. Jinling Power Plant (Coal-fired) typically stores 300,000 tons of coal on site.

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

Qidong Wind Power Plant

Huaneng Qidong Wind Power Plant (“Qidong Wind Power Plant”) is located in Nantong City, Jiangsu. Qidong Wind Power Phase I has an installed capacity of 91.5 MW and commenced commercial operation in March 2009. We hold 65% equity interest in Qidong Power Plant. The first stage of the Phase II Project of Qidong Wind Power Plant with a total generation capacity of 50MW passed the trial run in January 2011. As of December 31, 2010, the installed capacity of Qidong Wind Power Plant attributable to us was 92 MW.

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

Construction Project in Jiangsu Province

Taicang Coal Pier project. In December 2010, Suzhou Port Taicang Terminal Zone Huaneng Coal Pier Construction Project has been approved by the National Development and Reform Commission of the PRC. We own 66% equity interest in this project. The project is planned to construct one berth of 100,000 dead weight tonnage (“DWT”) and one berth of 50,000 DWT for coal discharging, four berths of 5,000 DWT each and six berths of 1,000 DWT each for coal loading, as well as corresponding ancillary facilities, with an aggregate annual throughput capacity of 27 million tonnes, comprising discharging capabilities of 13 million tonnes and loading capabilities of 14 million tonnes.

Power Plants in Shanghai Municipality

Shidongkou I

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

The coal supply for Shidongkou I is primarily from Shanxi Province, Anhui Province and Henan Province. In 2010, Shidongkou I obtained 5.47% of its total consumption of coal in the open market. The weighted average cost of coal for Shidongkou I in 2010 was RMB654.62 (2009: RMB607.50) per ton. Shidongkou I Power Plant typically stores 150,000 tons of coal on site.

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

Shidongkou II

Huaneng Shanghai Shidongkou Second Power Plant (“Shidongkou II”) is located in the northern suburbs of Shanghai. Shidongkou II has an installed capacity of 1,200 MW and consists of two 600 MW coal-fired super-critical units which commenced commercial operations in June and December 1992, respectively.

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

In 2010, Shidongkou II obtained 62.57% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Shidongkou II in 2010 was RMB605.90 (2009: RMB562.44) per ton.

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

Shanghai CCGT

Huaneng Shanghai Combined Cycle Gas Turbine Power Plant (“Shanghai CCGT”) is located in Baoshan District of Shanghai Municipality. Shanghai CCGT consists of three 390 MW gas-fired combined-cycle generating units with a total installed capacity of 1,170 MW, which were put into operation in May, June and July 2006, respectively.

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

Power Plant in Chongqing Municipality

Luohuang Power Plant

Huaneng Luohuang Power Plant (“Luohuang Power Plant”) is located in Chongqing Municipality. Each of Phase I and Phase II of Luohuang Power Plant has an installed capacity of 720 MW and consists of two 360 MW coal-fired generating units. The two units in Phase I commenced commercial operation in September 1991 and February 1992

respectively, and the two units in Phase II commenced commercial operation in December 1998. Luohuang Power Plant Phase III consist of two 600 MW coal-fired generating units with an installed capacity of 1,200 MW, which were put into operations in December 2006 and January 2007, respectively.

The coal supply for Luohuang Power Plant is obtained from Chongqing Municipality. In 2010, Luohuang Power Plant obtained 35.66% of its coal supplies from the key contracts and the remainder from the open market. The weighted average cost of coal for Luohuang Power Plant in 2010 was RMB495.02 (2009: RMB397.16) per ton. Luohuang Power Plant typically stores 450,000 tons of coal on site.

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

Power Plants in Zhejiang Province

Changxing Power Plant

Huaneng Changxing Power Plant (“Changxing Power Plant”) is located at the intersection of Zhejiang Province, Jiangsu Province and Anhui Province. Changxing Power Plant is a key power plant in northern Zhejiang area. It has one 125 MW and one 135 MW coal-fired generating units which commence operation in January and August 1992, respectively. In January 2011, we closed down the two generation units with a total generation capacity of 260 MW at Changxing Power Plant.

The coal supply for Changxing Power Plant is primarily from Jungar in Inner Mongolia and Xuzhou in Jiangsu Province. In 2010, Changxing Power Plant obtained approximately 49.43% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Changxing Power Plant in 2010 was RMB623.72 (2009: RMB543.67) per ton. Changxing Power Plant typically stores 80,000 tons of coal on site.

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

Yuhuan Power Plant

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

The coal supply for Yuhuan Power Plant is primarily obtained from Shanxi Province and Inner Mongolia Autonomous Region. In 2010, Yuhuan Power Plant obtained approximately 82.00% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Yuhuan Power Plant in 2010 was RMB689.50 (2009: RMB547.33) per ton. Yuhuan Power Plant typically stores 500,000 tons of coal on site.

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

Power Plant in Hunan Province

Yueyang Power Plant

Huaneng Yueyang Power Plant (“Yueyang Power Plant”) is located in Yueyang City of Hunan Province. Yueyang Power Plant Phase I has an installed capacity of 725 MW and consists of two 362.5 MW sub-critical coal-fired generating units which commenced commercial operation in September and December 1991 respectively. Yueyang Power Plant Phase II consists of two 300MW coal-fired generating units with installed capacity of 600 MW, which were put into operation in March and May 2006, respectively. Huaneng Yueyang Power Plant Phase III (“Yueyang Power Plant Phase III”) is planned to consist of two 600 MW generating units with a total installed capacity of 1,200 MW. In January 2011, Unit 5 of Yueyang Power Plant Phase III, a 600MW coal-fired generating unit, passed the trial run.

The coal supply for Yueyang Power Plant is obtained from Datong in Shanxi Province. In 2010, Yueyang Power Plant obtained 57.85% 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 Yueyang Power Plant in 2010 was RMB627.59 (2009: RMB559.28) per ton.

Yueyang Power Plant typically stores 500,000 tons of coal on site.

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

Construction Projects in Hunan Province

Yongzhou Xiangqi Hydropower Station project. Huaneng Yongzhou Xiangqi Hydropower Station (“Yongzhou Xiangqi Hydropower Station”) is planned to consist of four 20 MW hydraulic generating units with a total installed capacity of 80 MW. We own 100% equity interest in this project.

Yueyang Power Plant Phase III. Huaneng Yueyang Power Plant Phase III (“Yueyang Power Plant Phase III”) is planned to consist of two 600 MW generating units with a total installed capacity of 1,200 MW.

We own 55% equity interest in this project. In January 2011, one 600MW coal-fired generating unit passed the trial run.

Power Plant in Jiangxi Province

Jinggangshan Power Plant

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

The coal supply for Jinggangshan Power Plant is obtained from Henan Province, Anhui Province and Jiangxi Province. In 2010, Jinggangshan Power Plant obtained 64.95% of its total coal consumption pursuant to the key contracts and the remainder in the open market. The weighted average cost of coal for Jinggangshan Power Plant in 2010 was RMB676.89 (2009: RMB595.72) per ton. Jinggangshan Power Plant typically stores 255,000 tons of coal on site.

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

Power Plant in Fujian Province

Fuzhou Power Plant

Huaneng Fuzhou Power Plant (“Fuzhou Power Plant”) is located on the south bank of the Min River, southeast of the city of Fuzhou. Fuzhou Power Plant has been developed in three phases. The Fuzhou Power Plant Phase I and Phase II utilize four 350 MW coal-fired generating units with an installed capacity of 1,400 MW, and commenced commercial operations in 1988 and 1999, respectively. The Fuzhou Power Plant Phase III is planned to consist of two 600 MW generating units with a total installed capacity of 1,200 MW. In July 2010, Unit 5 of Fuzhou Power Plant Phase III, a 600 MW domestic ultra-supercritical coal-fired generating unit, passed the 168-hour trial run.

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

In 2010, the Fuzhou Power Plant obtained 71.14% of its total consumption of coal pursuant to the key contracts and the remainder was obtained in the open market. The weighted average cost of coal for Fuzhou Power Plant in 2010 was RMB690.89 (2009: RMB581.93) per ton.

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

Construction Project in Fujian Province

Fuzhou Power Plant Phase III. Huaneng Fuzhou Power Plant Phase III (“Fuzhou Power Plant Phase III”) is planned to consist of two 600 MW generating units with a total installed capacity of 1,200 MW. We own 100% of the equity interests in this project. In July 2010, one 600 MW domestic ultra-supercritical coal-fired generating unit passed the 168-hour trial run.

Power Plants in Guangdong Province

Shantou Power Plant

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

Shantou Power Plant Phase II consists of one 600 MW coal-fired generating unit and commenced operation in October 2005.

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

In 2010, the Shantou Power Plant obtained 70.49% of its total consumption of coal pursuant to the key contracts and the remainder was purchased in the open market. The weighted average costs of coal for Shantou Power Plant in 2010 was RMB686.08 (2009: RMB583.26) per ton.

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

Haimen Power Plant

Huaneng Haimen Power Plant (“Haimen Power Plant”) is located in Shantou City, Guangdong Province. Haimen Power Plant has an installed capacity of 2,072 MW and consists of two 1,036 MW generating units which commenced operation in July 2009 and October 2009, respectively.

The coal supply for Haimen Power Plant is mainly imported from Indonesia. In 2010, Haimen Power Plant obtained 77.69% of its total consumption of coal pursuant to the key contracts (including certain coal import contracts) and the remainders in the open market. The weighted average cost of coal for Haimen Power Plant in 2010 was RMB673.86 (2009: RMB568.34) per ton. Haimen Power Plant typically stores 400,000 tons of coal on site.

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

Power Plants in Yunnan Province

Diandong Power Plant

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

The coal supply for Diandong Power Plant is mainly obtained from Yunnan and Guizhou Provinces. In 2010, Diandong Power Plant obtained 50.00% of its total consumption of coal pursuant to the key contracts and the remainders in the open market. The weighted average cost of coal for Diandong Power Plant in 2010 was RMB457.09 per ton. Diandong Power Plant typically stores 1,200,000 tons of coal on site.

Diandong Power Plant sells its electricity to Yunnan Electric Power Company.

Yuwang Power Plant

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

The coal supply for Yuwang Power Plant is mainly obtained from Yunnan and Guizhou Provinces. In 2010, Yuwang Power Plant obtained 50.00% of its total consumption of coal pursuant to the key contracts and the remainders in the open market. The weighted average cost of coal for Yuwang Power Plant in 2010 was RMB424.07 per ton. Yuwang Power Plant typically stores 600,000 tons of coal on site.

Yuwang Power Plant sells its electricity to Yunnan Electric Power Company.

Power Plant in Singapore

Tuas Power

Tuas Power is one of the three largest power generation companies in Singapore, which is located at 60 Tuas South Avenue 9 of west coast of Singapore. Its total installed generating capacity is 2,670 MW, representing approximately 26% of the aggregate installed generating capacity of Singapore as of December 31, 2010. Phase I consists of two 600 MW oil-fired steam generating units and commenced commercial operation in 1999. Phase II consists of four units of 367.5 MW Combined Cycle Plants utilizing natural gas. The four units of Phase II commenced commercial operation in 2001, 2002, 2005 and 2005, respectively.

The oil supply of Tuas Power is obtained through auction in the open market. The gas supply is obtained from Gas Supply Pte Ltd and Sembcorp Pte Ltd.

Construction Project in Singapore

Tembusu complex. Tembusu multi-utilities complex is planned to consist of a co-generation plant, a desalination plant and a wastewater treatment facility, with a total installed capacity of 165 MW. Tuas Power Ltd owns 100% equity interest in this project.

Competition and dispatch

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

A number of foreign power developers and foreign companies (including Hong Kong companies), have been pursuing investment opportunities in the PRC electric power industry, which opportunities include the development of power plants (through joint ventures with PRC partners) or the purchase of interests in existing power plants. While we believe that we currently possess advantages over such foreign developers because of our extensive experience in the electric power industry of China and our close relationships with the central and local governments, there can be no assurance that we will not experience increased competition in the future.

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

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

In 2008, with the purpose of improving energy usage efficiency, the government implemented an electricity optimized-dispatch policy in Henan Province, Sichuan Province, Jiangsu Province, Guangdong Province and Guizhou Province on a pilot basis, and plans to roll out to others if the trial operation is successful. In addition, as of December 31, 2010, in all regions in which we operate power plants, the government's power administrative departments take differential power generation plan policies to improve the planned useful hours of the environmental protection and energy convention units.

Competition and Dispatch in Singapore

The Singapore power market is highly concentrated, as the three largest power generation companies account for approximately 90% of total generating capacity. Tuas Power competes in the NEMS using its portfolio of gas fired and oil fired generating units. It was able to achieve a market share of approximately 25.2% in the NEMS for 2010. Its major competitors include Senoko Power which is owned by a Japanese/French consortium led by Marubeni Group, PowerSeraya which is owned by YTL Group of Malaysia, SembCorp Cogen and Keppel Merlimau Cogen. Tuas Power's generating units are relatively new with a track record of steady operation and high reliability. The technical and economic parameters of Tuas Power's units make Tuas Power one of the leaders in Singapore's power industry.

In the NEMS, power generation companies compete to generate and sell electricity every half-hour by offering their capacity (specifying price/quantity pairs). The EMC, the operator of Singapore's wholesale electricity market, determines the least-cost dispatch quantities and the corresponding market-clearing or spot prices based on the offers made by power generation companies. The spot prices in the NEMS reflect the least-cost market solution for the dispatch of energy and provision of operating reserves. In general, this means that each power generation company that submitted an offer below the spot price will be dispatched, and a power generation company that submitted an offer above the spot price will not be dispatched. The spot price that power generation companies receive is a nodal price, which may vary according to their location on the network. Nodal prices would be higher in areas where higher transmission losses are incurred in getting the electricity to the load facilities.

Environmental regulation

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

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

Effective July 1, 2003, all power plants in China became subject to the pollutant discharge levy system, pursuant to which discharge fees are levied based on the actual amount of pollutants discharged. As a result, all of our power plants are now required to pay discharge fees in such manner. Under this new regulation, the discharge fees for sulphur dioxide were increased from RMB0.63 per kilogram in 2006 to RMB1.26 per kilogram in 2009. Discharge fees for nitrous oxide were increased to RMB0.63 per kilogram on July 1, 2004. The discharge fees for the dust have been RMB0.28 per kilogram since July 1, 2003. The discharge fees for waste water were increased gradually. Since 2008, certain provinces have raised the rates of waste disposal fees. In 2008, 2009 and 2010, we paid to the local governments total discharge fees of approximately RMB537 million, RMB431 million and RMB492 million, respectively.

A New Emission Standards of Air Pollutants for Thermal Power Plant has been discussed and consulted with, and will be promulgated in the near future., Upon promulgation, more restrictive standards to control sulfur dioxide and nitrous oxide emissions are applicable to all thermal power plant projects for which environmental impact study reports are yet to be approved. These restrictive standards govern both the total sulfur dioxide and nitrous oxide emissions from the power plant and the emission density of each chimney.

In order to meet with the requirement of the New Emission Standards, we have installed flue gas desulphurization (“FGD”) facilities and denitrification facilities with all of our newly constructed generating units. We have also carried out sulfur disposal reform on the existing generating units. As of the end of 2010, we have installed and operated desulphurization facilities on all our existing coal-fired generating units.

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

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

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

Environmental Regulation in Singapore

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

To address the environmental concerns and regulatory requirements, Tuas Power has in place an environmental management system. All generating units are equipped with pollution control facilities. Stage I steam plants burns low sulfur content fuel oil and employs electro-precipitator to control sulfur dioxide and particulates emission respectively. Stage II combined-cycle plants burns natural gas and are fitted with low-nitrogen oxide burners to control nitrogen oxide emission. Source emission testing is performed annually and the results are submitted to the Pollution Control Department.

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

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

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

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

Insurance

We currently maintain property all risks insurance and machinery breakdown insurance for all of our power plants, and construction all risks insurance or erection all risks insurance for all of our newly built and expansion projects as well as large-scaled upgrading projects. Our current insurance coverage on our property, plant and equipment (including construction all risk insurance) is mainly maintained with Yongcheng Property and Casualty Insurance Company, and co-insured by PICC Property and Casualty Company Ltd. and China Pacific Property Insurance Co.,

Ltd., which amounted approximately RMB250 billion. In July 2010, we renewed the liabilities insurance for our directors and officers with a coverage of US\$10 million.

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

Tuas Power purchases key insurance policies, such as industrial all risks insurance with an insured value of approximately S\$2.27 billion, business interruption insurance, product and public liability insurance, directors' and officers' liability insurance and environment liability insurance. For the Tembusu project, the owner maintained erection/ construction all risks insurance with delay in start-up, third party liability insurance and marine cargo insurance with delay in start-up.

ITEM Unresolved Staff Comments
4A

None

ITEM 5 Operating and Financial Review and Prospects

A. General

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

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

Looking back in 2010, the general recovery of China's economy and increase in power demand has improved the Company's operating conditions. With the strong support of the shareholders and concerted efforts of the employees, as well as its commitment to scientific development and annual operating targets, the Company have actively dealt with the changes in power, coal and capital markets, and achieved effective market expansions and explorations as well as fuels cost controls, completed construction projects as scheduled and additional issuance of shares to designated investors successfully. In the meantime, the Company continued to diligently fulfill its social responsibilities to provide sufficient, reliable and clean electric power and achieved new progress in the areas of energy saving, project construction, generating units transformation and environmental protection.

Critical accounting policies

The Company and its subsidiaries have identified the policies below as critical to our business operations and the understanding of our results of operations. The impact of and any associated risks related to these policies on the business operations are discussed throughout the Operating and Financial Review and Prospects where such policies

affect our reported and expected financial results. For a detailed discussion on the application of these and other accounting policies, see Note 2 to the Financial Statements in Item 17 of this Annual Report on Form 20-F. Note that our preparation of this Annual Report on Form 20-F requires us to make estimates and assumptions that affect the reported amount of assets and liabilities, disclosure of contingent assets and liabilities at the date of our financial statements, and the reported amount of revenue and expenses during the reported periods. There can be no assurance that actual results will not differ from those estimates.

Depreciation of property, plant and equipment

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

	2010
Port facilities	20-40 years
Buildings	8-45 years
Electric utility plant in service	5-35 years
Transportation facilities	6-20 years
Others	3-18 years

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

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

Useful life of power generation licence

The Company and its subsidiaries acquired the power generation licence as part of the business combination with Tuas Power Ltd. (“Tuas Power”). The power generation licence is initially recognized at fair value at the acquisition date. It is of indefinite useful life and is not amortized. It is tested annually for impairment and carried at cost less accumulated impairment loss. Useful life of the power generation licence is reviewed by the Company and its subsidiaries each financial period to determine whether events and circumstances continue to support the indefinite useful life assessment. As of year end, management of the Company and its subsidiaries considered the estimated useful life for its power generation licence as indefinite. This estimate is based on the expected renewal of power generation licence without significant restriction and cost, together with the consideration on related future cash flows generated and the expectation of management in continuous operations. Based on existing knowledge, that outcomes within the next financial period that are different from assumptions could require a change on carrying amount of power generation licence.

Impairment of long-lived assets

Goodwill and power generation licence is tested annually for impairment and carried at cost less any accumulated impairment loss. Impairment loss on goodwill is not reversed. Goodwill is allocated to cash-generating units (“CGUs”) according to synergy effect arising from the business combination. The Company and its subsidiaries allocate goodwill to those CGUs based on operating segments.

Property, plant and equipment, intangible assets with definite useful lives and long-term equity investments not accounted for as financial assets are tested for impairment when there is any impairment indication on balance sheet date. If impairment test result shows that the recoverable amount of asset is less than its book value, that difference is recognized as impairment provision. Recoverable amount is the higher of fair value less cost to sell of the asset and present value of its expected future cash flow. Asset impairment is calculated and recognized on individual asset basis. If it is difficult to estimate recoverable amount for the individual assets, the recoverable amount is determined based on the recoverable amount of the CGU to which asset belongs. CGU is the smallest group of assets that independently generates cash flows.

Key assumptions applied in the impairment tests include the expected tariff rates, demands of electricity in specific regions where these power plants are located and fuel cost. Management determined these key assumptions based on past performance and its expectations on market development. If different judgments were applied, estimates could differ significantly. Actual results could vary materially from these estimates.

Newly adopted accounting policies

The following new standards and amendments to standards are adopted for the first time to the financial year beginning January 1, 2010.

International Accounting Standard (“IAS”) 17 (Amendment), ‘Leases’. The amendment deleted the specific guidance regarding classification of leases of land, so as to eliminate inconsistency with the general guidance on lease classification. This amendment is applied on a retrospective basis. As a result, leases of land should be classified as either finance or operating using the general principles of IAS 17. The Company and its subsidiaries have land use rights in both the PRC and Singapore. Based on assessments, land use rights located in the PRC are classified as operating leases while land use rights located in Singapore are classified as finance leases. All of the land use rights are amortized over time using straight-line method.

IAS 24 (Revised), ‘Related party disclosures’. This revised standard introduces a partial exemption from the disclosure requirements of IAS 24 for transactions with government-related enterprises. Those disclosures are replaced with requirements to disclose the name of related government and the nature of

its relationship with the Company and its subsidiaries, the natures and amounts of any individually-significant transactions, and qualitative or quantitative disclosures for collectively-significant transactions. The Company and its subsidiaries have elected to early adopt the partial exemption described above from January 1, 2010. Please refer to Note 34 to the “Financial Statements” for related revised disclosures.

IAS 27 (Revised), ‘Consolidated and separate financial statements’. The revised standard requires the effects of all transactions with non-controlling interests to be recorded in equity if there is no change in control and these transactions will no longer result in goodwill or gains and losses. The standard also specifies the accounting when control is lost. Any remaining interest in the entity is remeasured to fair value and a gain or loss is recognized in profit or loss. The Company and its subsidiaries apply this standard prospectively to transactions with non-controlling interests from January 1, 2010 onwards. IAS 27 (revised) has no material impact in the current year.

IAS 38 (Amendment), ‘Intangible Assets’. The amendment clarifies guidance in measuring the fair value of an intangible asset acquired in a business combination when it is not traded in an active market. It also permits the grouping of intangible assets as a single asset if each asset has similar economic useful lives. The Company and its subsidiaries apply this amendment prospectively to all business combinations from January 1, 2010 onwards. The amendment did not result in a material impact on the Company and its subsidiaries’ financial statements.

IFRS 3 (Revised), ‘Business combinations’. The revised standard continues to apply the acquisition method to business combinations, with some significant changes. For example, all payments to purchase a business are to be recorded at fair value at the acquisition date, with contingent payments classified as debt subsequently re-measured through the consolidated statement of comprehensive income. It clarifies the reassessment requirements on acquisition date should there be any hedging arrangements existed in the acquirees. There is a choice on an acquisition-by-acquisition basis to measure the non-controlling interests in the acquiree either at fair value or at the non-controlling interests’ proportionate shares of the acquiree’s net assets. All acquisition-related costs should be expensed. Contingent liabilities assumed in a business combination are recognized at the acquisition date even if it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation. After the date of business combination, contingent liabilities are re-measured at the higher of the original amount and the amount under the relevant standard, IAS 37. The Company and its subsidiaries apply this standard prospectively to all business combinations from January 1, 2010 onwards. The Company applied the revised standard for acquisitions effected in 2010. The Company and its subsidiaries have chosen to recognise the non-controlling interest at the non-controlling interest’s proportionate share of the acquiree’s net assets for the acquisitions effected this year. Acquisition-related costs of RMB 6.60 million have been recognised in the profit or loss, which previously would have been included in the consideration of the business combination, which has no material impact on earnings per share.

IFRS 5 (Amendment), 'Non-current assets held for sale and discontinued operations'. The amendment provides clarification that IFRS 5 specifies the disclosures required in respect of non-current assets (or disposal groups) classified as held for sale or discontinued operations. It clarifies that all assets and liabilities of a subsidiary are classified as held for sale if a partial disposal sale plan results in loss of control, and relevant disclosure should be made for this subsidiary if the definition of a discontinued operation is met. The amendment also clarifies that the general requirement of IAS 1 still apply, particularly paragraph 15 (to achieve a fair presentation) and paragraph 125 (sources of estimation uncertainty) of IAS 1. The Company and its subsidiaries apply IFRS 5 (amendment) from January 1, 2010 onwards. The amendment did not result in a material impact on the Company and its subsidiaries' financial statements.

New accounting pronouncements

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

B. Operating results

Our financial statements are prepared under IFRS. The following management's discussion and analysis is based on the financial information prepared under IFRS.

Year ended December 31, 2010 compared with year ended December 31, 2009

	For the Year Ended December 31		Increased/ (Decreased) %
	2010 RMB'000	2009 RMB'000	
Operating revenue	104,318,120	76,862,896	35.72
Tax and levies on operations	(147,641)	(151,912)	(2.81)
Operating expenses			
Fuel	(67,891,547)	(44,861,375)	51.34
Maintenance	(2,302,018)	(2,035,297)	13.10
Depreciation	(10,447,021)	(8,572,103)	21.87
Labor	(4,067,420)	(3,595,340)	13.13
Service fees on transmission and transformer facilities of HIPDC	(140,771)	(140,771)	-
Purchase of electricity	(5,557,219)	(3,639,440)	52.69
Others	(5,135,492)	(4,692,955)	9.43
Total operating expense	(95,541,488)	(67,537,281)	41.46
Profit from operations	8,628,991	9,173,703	(5.94)
Interest income	89,026	60,397	47.40
Financial expenses, net			
Interest expense	(5,282,549)	(4,260,400)	23.99
Exchange gain and bank charges , net	87,964	(48,925)	(279.79)
Total financial expenses, net	(5,194,585)	(4,309,325)	20.54
Share of profits of associates	568,794	756,164	(24.78)
Gain/(Loss) from fair value changes	11,851	(33,638)	(135.23)
Other investment income	60,013	56,675	5.89
Profit before income tax expense	4,164,090	5,703,976	(27.00)
Income tax expense	(842,675)	(593,787)	41.92
Net Profit	3,321,415	5,110,189	(35.00)
Attributable to:			
Equity holders of the Company	3,347,985	4,929,544	(32.08)
Non-controlling interests	(26,570)	180,645	(114.71)

	3,321,415	5,110,189	(35.00)
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For the year ended December 31, 2010, the Company's total power generation on a consolidated basis amounted to 256.950 billion kWh, representing a 26.25% increase from the year ended December 31, 2009. The increase in the Company's power generation was mainly attributable to the newly acquired power plants and the commencement of new generating units. The Company completed its acquisitions of Shandong Zhanhua Co-generation Limited Company, Qingdao Luneng Jiaonan Port Limited Company, Shandong Luneng Sea Transportation Limited Company and Jilin Luneng Biological Power Generation Limited Company in December 2010. These four entities are included in consolidation scope of the Company since then.

The power generation of the Company's domestic power plants for the year ended December 31, 2010 was listed below (in billion kWh):

Domestic Power Plant	Power generation in 2010	Power generation in 2009	Change
Liaoning Province			
Dalian	7.912	8.386	(5.65 %)
Dandong	3.864	4.078	(5.25 %)
Yingkou	9.850	9.402	4.76 %
Yingkou Co-generation	3.669	0.123	2882.93 %
Inner Mongolia Autonomous Region			
Huade Wind Power	0.130	--	N/A
Hebei Province			
Shang'an	14.098	11.824	19.23 %
Gansu Province			
Pingliang	8.945	5.077	76.19 %

Beijing Municipality

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Beijing Co-generation	4.704	4.394	7.06	%
Tianjin Municipality				
Yangliuqing Co-generation	6.439	6.007	7.19	%
Shanxi Province				
Yushe	4.889	4.464	9.52	%
Shandong Province				
Dezhou	16.143	14.910	8.27	%
Jining	5.271	2.044	157.88	%
Weihai	4.212	3.720	13.23	%
Xindian	3.657	3.345	9.33	%
Rizhao Phase II	8.152	7.307	11.56	%
Zhanhua Co-generation(1)	0.206	--	N/A	
Henan Province				
Qinbei	13.961	12.510	11.60	%
Jiangsu Province				
Nantong	8.643	7.816	10.58	%

Nanjing	3.759	3.654	2.87	%
Taicang	11.624	11.537	0.75	%
Huaiyin	8.048	7.293	10.35	%
Jinling CCGT	2.434	2.273	7.08	%
Jinling Coal-fired	6.458	--	N/A	
Qidong Wind Power	0.214	0.153	39.87	%
Shanghai Municipality				
Shidongkou I	7.566	6.847	10.50	%
Shidongkou II	6.510	6.691	(2.71	%)
Shidongkou Power Generation	5.002	--	N/A	
Shanghai CCGT	1.650	0.847	94.81	%
Chongqing Municipality				
Luohuang	12.535	10.843	15.60	%
Zhejiang Province				
Changxing	1.077	1.585	(32.05	%)
Yuhuan	23.440	19.913	17.71	%
Hunan Province				

Yueyang	5.786	5.225	10.74	%
Jiangxi Province				
Jinggangshan	8.252	3.194	158.36	%
Fujian Province				
Fuzhou	8.802	8.511	3.42	%
Guangdong Province				
Shantou Coal-fired	7.036	6.198	13.52	%
Haimen	12.012	3.349	258.67	%

Note:

- (1) Zhanhua Co-generation was newly acquired from Shandong Electric Power corporation and included in consolidation scope of the Company from December 2010 onwards. The power generation included herein represented power generation in December 2010.

In 2010, the annual power generated by Tuas Power in Singapore accounted for 24.70% of the total power generated in Singapore, increased by 0.4% as compared to 24.30% in 2009.

In respect of the tariff, the average tariff of domestic power plants for the year ended December 31, 2010 was RMB421.66 per MWh, an increase of RMB4.43 per MWh from the year ended December 31, 2009.

In respect of fuel supply and cost controls, the increase of coal price contributed to an increase in fuel cost of the Company. Compared to the last year, the Company's fuel cost per unit of power sold increased by 14.72% to RMB247.49 per MWh.

Combining the foregoing factors, the operating revenue of the Company and its subsidiaries for the year ended December 31, 2010 increased by 35.72% from last year. For the year ended December 31, 2010, the Company and its subsidiaries recorded a net profit attributable to equity holders of the Company of RMB3.348 billion, decreased by 32.08% compared to the net profit attributable to equity holders of the Company of RMB4.930 billion for the year ended December 31, 2009. The decrease of profit was primarily due to the increase in fuel price.

Operating revenue

Operating revenue primarily represents amounts receivable or received from power sold. For the year ended December 31, 2010, the consolidated operating revenue of the Company and its subsidiaries amounted to RMB104.318 billion, representing a 35.72% increase from RMB76.863 billion for the year ended December 31, 2009. The increase in operating revenue was primarily attributable to the increased power generations and commencement of operations of new generating units. The operation of new generating units contributed approximately RMB13.238 billion to the increase. The operating revenue of Singapore operations increased by approximately RMB4.664 billion for the year ended December 31, 2010 from last year.

The following table sets forth the average tariff rate of the Company's power plants, as well as percentage changes from 2009 to 2010.

Power Plant	Average tariff rate (VAT inclusive) (RMB/MWh)		
	2010	2009	Change
Liaoning Province			
Dalian	375.44	368.66	1.84 %
Dandong	376.61	366.30	2.81 %
Yingkou	387.78	383.58	1.10 %
Yingkou Co-generation	386.29	375.00	3.01 %
Inner Mongolia Autonomous Region			
Huade Wind Power	510.00	N/A	N/A
Hebei Province			
Shang'an	378.59	372.41	1.66 %
Gansu Province			
Pingliang	275.91	261.02	5.70 %
Beijing Municipality			

Beijing Co-generation	474.21	482.42	(1.70 %)
Tianjin Municipality			
Yangliuqing Co-generation	407.08	408.12	(0.26 %)
Shanxi Province			
Yushe	334.11	320.53	4.24 %
Shandong Province			
Dezhou	417.68	418.92	(0.30 %)
Jining	401.53	406.10	(1.12 %)
Xindian II	405.67	404.30	0.34 %
Weihai	456.31	459.90	(0.78 %)
Rizhao Phase II	397.60	394.24	0.85 %
Zhanhua Co-generation	397.40	N/A	N/A
Henan Province			
Qinbei	379.68	370.47	2.49 %
Jiangsu Province			
Nantong	409.06	401.71	1.83 %
Nanjing	414.19	407.58	1.62 %

Taicang I	415.37	412.19	0.77	%
Taicang II	414.13	398.36	3.96	%
Huaiyin Phase II	443.17	415.73	6.60	%
Jinling	453.38	544.97	(16.81)	%
Qidong Wind Power	487.70	487.70	0.00	%
Shanghai Municipality				
Shidongkou I	435.52	425.76	2.29	%
Shidongkou II	416.36	411.80	1.11	%
Shanghai CCGT	662.00	629.00	5.25	%
Shidongkou Power Generation	445.70	N/A	N/A	
Chongqing Municipality				
Luohuang	382.70	373.42	2.48	%
Zhejiang Province				
Changxing	519.39	479.71	8.27	%
Yuhuan	459.86	467.54	(1.64)	%
Hunan Province				
Yueyang	435.71	434.26	0.33	%
Jiangxi Province				
	413.30	414.16	(0.21)	%

Jinggangshan

Fujian Province

Fuzhou

413.22	412.24	0.24	%
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Guangdong Province

Shantou Coal-fired

521.34	525.38	(0.77	%)
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Haimen

496.33	497.45	(0.23	%)
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Singapore

Tuas Power

927.89	765.31	21.24	%
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Tax and levies on operations

Tax and levies on operations mainly consists of taxes associated with value-added tax surcharges. According to relevant administrative regulations, these surcharges include City Construction Tax and Education Surcharges calculated at prescribed percentages on the amounts of the value-added tax paid. These surcharges also applied to direct foreign investments entities that have been approved by the government since December 2010, and certain power plants of the Company are subject to these taxes since then. For the year ended December 31, 2010, the tax and levies on operations amounted to RMB148 million.

Operating expenses

For the year ended December 31, 2010, the total operating expenses of the Company and its subsidiaries was RMB95.541 billion, representing a 41.46% increase from RMB67.537 billion for the year ended December 31, 2009.

The increase was primarily attributable to the increase in fuel prices and commencement of operation of new generation units. The operation of new generating units contributed RMB11.760 billion to the increase in consolidated operating expenses. Excluding the factor of the operation of new generating units, the operating expenses increased by RMB16.244 billion as compared to the operating expenses for the year ended December 31, 2009. Among this increase, the operating expenses of Singapore operations increased by RMB4.388 billion for the year ended December 31, 2010 from last year.

Fuel

Fuel cost represents the majority of the operating expense for the Company and its subsidiaries. For the year ended December 31, 2010, fuel cost of the Company and its subsidiaries increased 51.34% to RMB67.892 billion from RMB44.861 billion for the year ended December 31, 2009. The increase was primarily attributable to the increase in fuel price and power generated. The operation of new generating units accounted for RMB9.295 billion of the increase in fuel cost. Excluding the factor attributable to the operation of new generating units, the fuel cost increased by RMB13.736 billion as compared to the fuel cost for the year ended December 31, 2009. Among this increase, fuel costs of Singapore operations increased by approximately RMB2.316 billion for the year ended December 31, 2010 from last year.

For the year ended December 31, 2010, the average unit price (excluding tax) of fuel coal was RMB517.20 per ton, representing a 12.23% increase from RMB460.83 per ton for the year ended December 31, 2009. Due to the increase in coal price, the unit fuel cost per unit of power sold of domestic power plants increased 14.72% to RMB247.49 per ton.

Maintenance

For the year ended December 31, 2010, the maintenance expenses of the Company and its subsidiaries amounted to RMB2.302 billion, representing a 13.10% increase from RMB2.035 billion for the year ended December 31, 2009. The operation of new generating units accounted for approximately RMB292 million of the increase. The maintenance expenses of the existing generating units decreased by approximately RMB25 million. The maintenance expenses of Singapore operations increased by approximately RMB26 million.

Depreciation

For the year ended December 31, 2010, depreciation expenses of the Company and its subsidiaries increased by 21.87% to RMB10.447 billion from RMB8.572 billion for the year ended December 31, 2009. The increase was primarily attributable to the Company's expansion.

Labor

Labor costs consist of salaries to employees and contributions payable to relevant state authorities for employees' housing fund, medical insurance, pension and unemployment insurance, as well as training costs and others. For the year ended December 31, 2010, the labor costs of the Company and its subsidiaries amounted to RMB4.067 billion, representing a 13.13% increase from RMB3.595 billion for the year ended December 31, 2009. The operation of new generating units contributed RMB390 million of the increase. The labor costs of Singapore operations increased by approximately RMB37 million.

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

Other operating expenses include environmental protection expenses, land fee, insurance premiums, office expenses, amortization, Tuas Power's purchase of electricity and others. For the year ended December 31, 2010, other operating expenses (including purchase of electricity and service fees paid to HIPDC) of the Company and its subsidiaries was RMB10.833 billion, representing a 27.86% increase from RMB8.473 billion for the year ended December 31, 2009. The operations of new generating units contributed approximately RMB421 million to the increase of other operating expenses for the year ended December 31, 2010. The Singapore operations contributed approximately RMB1.973 billion (among this increase, the purchase of electricity increased by approximately RMB1.918 billion).

Financial expenses

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

Interest expense

For the year ended December 31, 2010, the interest expense of the Company and its subsidiaries was RMB5.283 billion, representing a 23.99% increase from RMB4.260 billion for the year ended December 31, 2009. The increase was primarily attributable to expensing instead of capitalizing interest upon commercial operations of new generating units, which accounted for RMB979 million of the increase. The interest expenses of Singapore operations increased by approximately RMB45 million.

Net exchange differences and bank charges

For the year ended December 31, 2010, the exchange gains less bank charges of the Company and its subsidiaries amounted to RMB88 million, increased by RMB137 million compared to a loss of RMB49 million for the year ended December 31, 2009. For the year ended December 31, 2010, the exchange gains of the Company and its subsidiaries was RMB134 million, representing an increase of approximately RMB93 million from RMB41 million for the year ended December 31, 2009. The net exchange differences and bank charges of Singapore operations increased by approximately RMB160 million.

Share of profit of associates

For the year ended December 31, 2010, the share of profit of associates was RMB569 million, a RMB187 million decrease from RMB756 million for the year ended December 31, 2009. The decrease was primarily due to the decrease of associates' net profit for the year ended December 31, 2010.

Income Tax Expense

For the year ended December 31, 2010, the Company and its subsidiaries recorded an income tax expense of RMB843 million, representing an increase by 41.92% from RMB594 million for the year ended December 31, 2009. The increase was primarily due to the utilization of pre-2009 carried forward unrecognized tax losses last year. The Singapore operations contributed an increase of approximately RMB28 million.

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

For the year ended December 31, 2010, the Company and its subsidiaries achieved a net profit of RMB3.321 billion, representing a decrease of RMB1.789 billion from RMB5.110 billion for the year ended December 31, 2009. The decrease was largely attributable to the increase in fuel price. For the year ended December 31, 2010, the profit attributable to equity holders of the Company was RMB3.348 billion, representing a decrease of RMB1.582 billion from RMB4.930 billion for the year ended December 31, 2009. The profit attributable to equity holders of the Company from Singapore operations increased by RMB105

million to RMB691 million. The loss attributable to non-controlling interests of the Company was RMB27 million for the year ended December 31, 2010, compared to a profit of RMB181 million for the year ended December 31, 2009.

Year ended December 31, 2009 compared with year ended December 31, 2008

	For the Year Ended December 31		Increased/ (Decreased) %
	2009 RMB'000	2008 RMB'000	
Operating revenue	76,862,896	67,835,114	13.31
Tax and levies on operations	(151,912)	(106,385)	42.79
Operating expenses			
Fuel	(44,861,375)	(49,810,275)	(9.94)
Maintenance	(2,035,297)	(1,702,274)	19.56
Depreciation	(8,572,103)	(7,718,773)	11.06
Labor	(3,595,340)	(3,164,613)	13.61
Service fees on transmission and transformer facilities of HIPDC transformer HIPDC	(140,771)	-	-
Purchase of electricity	(3,639,440)	(2,726,028)	33.51
Others	(4,692,955)	(3,842,992)	22.12
Total operating expense	(67,537,281)	(68,964,955)	(2.07)
Profit/(Loss) from operations	9,173,703	(1,236,226)	842.07
Interest income			
Financial expenses, net	60,397	83,522	(27.69)
Interest expense	(4,260,400)	(4,064,779)	4.81
Exchange gain and bank charges , net	(48,925)	356,836	(113.71)
Total financial expenses, net	(4,309,325)	(3,707,943)	16.22
Share of profits of associates	756,164	72,688	940.29
Loss on fair value changes	(33,638)	(54,658)	(38.46)
Other investment income	56,675	51,061	10.99
Profit/(Loss) before income tax expense	5,703,976	(4,791,556)	219.04
Income tax (expense)/benefit	(593,787)	239,723	347.70
Net profit/(loss)	5,110,189	(4,551,833)	212.27

Attributable to:

Equity holders of the Company	4,929,544	(3,937,688)	225.19
Non-controlling interests	180,645	(614,145)	129.41
	5,110,189	(4,551,833)	212.27

For the year ended December 31, 2009, the Company's total power generation on a consolidated basis amounted to 203.520 billion kWh, representing a 10.23% increase from the year ended December 31, 2008. The increase in the Company's power generation was mainly attributable to the newly acquired power plants and the commencement of new generating units. The Company completed its acquisitions of Huaneng Beijing Co-generation Limited Liability Company, Tianjin Huaneng Yangliuqing Co-generation Limited Liability Company and Huaneng Qidong Wind Power Generation Co., Ltd. in September 2009. The three power generation companies mentioned are consolidated into the financial statements of the Company there since.

The power generation of the Company's domestic power plants for the year ended December 31, 2009 was listed below (in billion kWh):

Domestic Power Plant	Power generation in 2009	Power generation in 2008	Change
Liaoning Province			
Dalian	8.386	9.102	(7.87 %)
Dandong	4.078	4.209	(3.11 %)
Yingkou	9.402	10.735	(12.42 %)
Yingkou Co-generation	0.123	-	N/A
Hebei Province			
Shang'an	11.824	9.299	27.15 %

Gansu Province

Pingliang	5.077	7.201	(29.50 %)
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Beijing Municipality

Beijing Co-generation(1)	4.394	4.998 (1)	(12.08 %)
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Tianjin Municipality

Yangliuqing Co-generation(1)	6.007	6.793 (1)	(11.57 %)
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Shanxi Province

Yushe	4.464	4.951	(9.84 %)
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Shandong Province

Dezhou	14.910	14.022	6.33 %
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Jining