

HUANENG POWER INTERNATIONAL INC

Form 20-F

April 28, 2009

HUANENG POWER INTERNATIONAL, INC.

Annual Report On Form 20-F  
2008

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As filed with the Securities and Exchange Commission on April 28, 2009

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, 2008  
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)

WEST WING, BUILDING C, TIANYIN MANSION,

2C, FUXINGMENNAN STREET, 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	9,000,000,000
Overseas Listed Foreign Shares of RMB1.00 each	3,055,383,440

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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 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 <input checked="" type="checkbox"/>	Accelerated filer <input type="checkbox"/>	Non-accelerated filer <input type="checkbox"/>
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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 checked="" 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

\* 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, 2008 of US\$1.00 to RMB6.8346. 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.

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 "power plants" or "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 "power companies" or "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.

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## PART I.

## ITEM 1 Identity of Directors, Senior Management and Advisers

Not applicable.

## ITEM 2 Offer Statistics and Expected Timetable

Not applicable.

## ITEM 3 Key Information

## A. Selected financial data

Our consolidated balance sheet data as of December 31, 2008 and 2007 and the consolidated income statement and cash flow data for each of the years in the three-year period ended December 31, 2008 are derived from the historical financial statements included herein. Our consolidated balance sheet data as of December 31, 2006, 2005 and 2004 and income statement and cash flow data for each of the years in the two-year period ended December 31, 2005, 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.

	2004	2005	Year Ended December 31,		2008	2008
			2006	2007		
RMB and US Dollars in thousands except per share data	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)(1)
<b>Income Statement Data</b>						
<b>IFRS</b>						
Operating revenue	30,150,602	40,190,004	44,301,403	49,767,849	67,563,815	9,885,555
Sales tax	(32,324)	(113,475)	(148,057)	(139,772)	(106,385)	(15,565)
Operating expenses	(23,200,088)	(33,067,563)	(35,594,935)	(41,705,766)	(68,713,379)	(10,053,753)
Profit/ (Loss) from operations	6,918,190	7,008,966	8,558,411	7,922,311	(1,255,949)	(183,763)
Total financial expenses, net	(739,784)	(1,124,391)	(1,471,304)	(1,874,461)	(3,624,421)	(530,305)
Investment income	20,554	60,872	28,415	585,379	51,061	7,471
Gain/ (Loss) on fair value changes	-	-	100,180	87,132	(54,658)	(7,997)
Share of profits of associates	312,037	644,376	790,629	586,323	72,688	10,635
Other income, net	18,666	2,385	10,442	12,617	19,723	2,886
Profit/ (Loss) before tax	6,529,663	6,592,208	8,016,773	7,319,301	(4,791,556)	(701,073)
	(948,734)	(1,044,297)	(1,127,699)	(838,270)	239,723	35,075

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Income tax (expense)/benefit						
Profit/ (Loss) for the year	5,580,929	5,547,911	6,889,074	6,481,031	(4,551,833)	(665,998)
Attributable to:						
Equity holders of the Company	5,323,876	4,871,794	6,071,154	6,161,127	(3,937,688)	(576,140)
Minority interests	257,053	676,117	817,920	319,904	(614,145)	(89,858)
Basic earnings/(loss) per share	0.44	0.40	0.50	0.51	(0.33)	(0.05)
Diluted earnings/(loss) per share	0.44	0.40	0.50	0.51	(0.33)	(0.05)

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RMB and US Dollars in thousands	2004	2005	As of December 31,		2008	2008
	(RMB)	(RMB)	2006 (RMB)	2007 (RMB)	(RMB)	(US\$)(1)
<b>Balance Sheet Data</b>						
<b>IFRS</b>						
Current assets	9,653,653	12,063,175	13,564,516	18,551,059	20,018,177	2,928,946
Property, plant and equipment, net	57,780,410	78,997,297	90,444,225	90,125,919	116,737,198	17,080,326
Available-for-sale financial assets	254,990	1,033,225	1,458,759	3,462,158	1,524,016	222,985
Investments in associates	4,328,307	4,593,984	5,418,213	8,731,490	8,758,235	1,281,455
Land use rights and other non-current assets	1,771,916	2,016,144	2,282,884	2,658,583	3,643,431	533,087
Power generation licence	-	-	-	-	3,811,906	557,737
Deferred income tax assets	97,539	64,075	98,429	211,654	316,699	46,338
Goodwill	376,726	671,796	671,796	555,266	11,108,096	1,625,274
Less: negative goodwill	(1,483,670)	--	--	--	--	--
Total assets	72,779,871	99,439,696	113,938,822	124,296,129	165,917,758	24,276,148
Current liabilities	(16,732,953)	(23,107,142)	(26,842,684)	(31,376,561)	(52,486,200)	(7,679,484)
Non-current liabilities	(16,515,006)	(30,188,367)	(36,487,446)	(40,839,926)	(70,871,605)	(10,369,532)
Total liabilities	(33,247,959)	(53,295,509)	(63,330,130)	(72,216,487)	(123,357,805)	(18,049,016)
Net assets	39,531,912	46,144,187	50,608,692	52,079,642	42,559,953	6,227,132
Total equity	39,531,912	46,144,187	50,608,692	52,079,642	42,559,953	6,227,132

RMB and US Dollars in thousands except per share data	2004	2005	Year Ended December 31,		2008	2008
	(RMB)	(RMB)	2006 (RMB)	2007 (RMB)	(RMB)	(US\$)(1)
<b>Cash Flow Data</b>						
<b>IFRS</b>						
Purchase of property, plant and equipment	(9,877,553)	(13,842,293)	(15,998,575)	(14,223,310)	(27,893,520)	(4,081,222)
Net cash provided by operating activities	9,132,800	10,652,419	14,005,841	12,078,833	5,185,893	758,771
Net cash used in investing activities	(13,650,285)	(15,413,369)	(15,915,542)	(16,257,355)	(47,957,065)	(7,016,806)
Net cash (used in) / provided by financing activities	2,679,588	5,119,559	2,473,002	8,287,893	41,255,291	6,036,240

Other Financial Data  
IFRS

Dividend declared per share	0.25	0.25	0.28	0.30	0.10	0.01
Number of ordinary shares ('000)	12,055,383	12,055,383	12,055,383	12,055,383	12,055,383	12,055,383

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## Note:

(1) The US Dollar data has been translated from RMB solely for convenience at the PBOC Rate on December 31, 2008 of US\$1.00 to RMB6.8346. 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. Although the power sales through competitive bidding in the last few years constituted only a small fraction of our total output, the PRC government is in the process of gradually expanding the program with a view to create a market-oriented electric power industry. Any increased power sales through competitive bidding may reduce our on-grid tariffs and adversely affect our revenue and profits.

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 State Electricity Regulatory Commission (“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. 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 generating 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.

On April 6, 2007, the PRC State Council issued the Opinions on Implementing Further Reform in Power Industry during the “Eleventh Five-Year Plan” period, or the Implementing Opinions, which confirm the direction of reform and present further guidance. According to the Implementing Opinions, the government encourages environment protection and renovation and replacement of outdated generating units. 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 subsidiary, and HIPDC directly hold 8.92% and 42.03% of our total outstanding shares respectively. 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 generating 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”. Primarily due to the significant increase of the coal price in 2008, our fuel cost increased significantly and we recorded a loss attributable to equity holders of the Company of RMB 3.938 billion for the year ended December 31, 2008, compared to a profit attributable to equity holders of the Company of RMB6.161 billion for the year ended December 31, 2007. As of April 22, 2009, due to the existence of price discrepancy between the suppliers and the customers, there was no agreement reached for the key contracts, 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; 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. The People's Republic of China has reduced RMB benchmark lending interest rates for five consecutive times from September to the end of 2008 to counteract the impact of international financial crisis on China's economy. Chinese government is expected to implement appropriately liberated monetary policies during 2009, thus creating a favorable environment for the Company to control financing costs. However, there is no assurance that the lending interest rates would not be raised in the future. 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

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. 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 in 2008 and such rates will be increased in all provinces of China by the end of 2009. 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. 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, foreign invested 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 Tax Bureau, 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 Tax Bureau) was applicable across the country. We applied this rule to all of our wholly owned operating power plants after obtaining the approval of State Tax Bureau. 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 current income tax laws and regulations 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. Regarding our proposed cash dividends to overseas investors relating to the year of 2008, we are currently applying for an exemption of withholding tax because such dividends are derived from the distributable profits accumulated before January 1, 2008. If the exemption application is not approved by the tax authority, the investors of our American Depositary Shares representing our H Shares will be subject to such withholding of the PRC income tax at the rate of 10%.

If there is a devaluation of Renminbi or Singapore dollar, our debt burden will increase and the dividend return to our overseas shareholders may decrease

As a power producer operating mainly in China, we collect 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 US dollars, has historically been set by the People's Bank of China. On July 21, 2005, the PRC government changed its policy of pegging the value of the Renminbi to the US dollar. Under the new policy, the Renminbi is permitted to fluctuate within a band against a basket of certain foreign currencies. This change in policy resulted initially in an approximately 2.0% appreciation in the value of the Renminbi against the US dollar. Since the adoption of this new policy, the value of Renminbi against the US dollar has fluctuated on a daily basis within narrow ranges, but overall has further strengthened against the US dollar. 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 Pte. Ltd. ("SinoSing Power") and its subsidiary, Tuas Power Ltd. ("Tuas Power"), are collected in Singapore dollar. The foreign currency borrowings of SinoSing Power and Tuas Power are denominated in US dollar. The value of Singapore dollar against US dollar has fluctuated along with the international financial market, which exposes SinoSing Power and Tuas Power to exchange rate risk.

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, 2008, 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. Although the majority of productive assets in China are still owned by the PRC government at various levels, in recent years 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

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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

Tuas Power Ltd. ("Tuas Power"), one of our wholly-owned subsidiaries, operates in Singapore. Tuas Power is a power generating company incorporated in Singapore which is engaged in the business of generation, wholesale and retail of power. With two 600 MW oil-fired steam generating units and four 367.5 MW gas-fired combined cycle generating units, Tuas Power has a total generating capacity of 2,670 MW. The total assets and revenue of Tuas Power represented approximately 14% and 15%, respectively, of our total assets and revenue as of and for the year ended December 31, 2008.

The operations of Tuas Power 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 the business, prospects, financial condition and results of operations of Tuas Power.

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

Power demand in Singapore is dependent upon the economic development of Singapore. Due to the impact of the current global financial crisis and economic downturn, Singapore's economy is projected to have a negative growth in 2009, and the power demand is expected to decrease. Significant and sustained adverse changes in Singapore's economy and a material reduction in power demand in Singapore may adversely affect Tuas Power's business, prospects, financial condition and results of operations.

The Singapore electricity industry had traditionally been vertically integrated and owned by the government. Since 1995, much progress has been made to liberalize the electricity industry for greater efficiency and innovation. Steps taken to liberalize the power industry include corporatization of the Public Utilities Board ("PUB") in 1995, establishment of Singapore Electricity Pool in 1998, formation of Energy Market Authority ("EMA") in 2001, commencement of operation of New Electricity Market of Singapore ("NEMS") in 2003, and respective divestment of three major generating companies (Tuas Power, PowerSenoko, PowerSeraya) by Temasek Holdings in 2008 and 2009. The liberalization of Singapore's power market and the further deregulation of its power industry have resulted in more intense competition among the power generating companies in Singapore. Tuas Power is one of the three largest power generating companies in Singapore. If Tuas Power is unable to compete successfully against other power generating companies in Singapore, its business, prospects, financial condition and results of operations may be

adversely affected.

Decrease in the quantity of generating capacity covered by Tuas Power's vesting contracts may further 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 bidding process and vesting contracts. Vesting contracts are a form of bilateral contract imposed/vested on the major power generating companies in Singapore. Vesting contract price is set by the Energy Market Authority (the "EMA"), which is Singapore's power market regulator, at the long run marginal cost and is adjusted by the EMA on a periodical 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 generating companies in the Singapore market such as Tuas Power to a large degree. The

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quantity of each generating company's capacity covered by vesting contracts depends on the proportion of such generating company's capacity to total capacity in the NEMS system. The contract quantity and price are recalculated every three months. For the period from March 25, 2008 to December 31, 2008, 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 will continue as long as the EMA considers that high market concentration persists. Although it is expected that it will take at least eight to ten years for market concentration to be substantially diluted, the Singapore government recently planned to decrease the quantities of capacity covered by vesting contracts. The timetable and details for such plan remain uncertain and Tuas Power is actively communicating with the EMA and requesting a relatively stable policy. 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.

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

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. The increase in fuel price and the appreciation of US dollars against Singapore dollar would increase the fuel cost of Tuas Power and adversely affects its results of operations.

The integration of Tuas Power and implementation of internal controls and procedures in Tuas Power may adversely affect Tuas Power's business and results of operations.

We completed the acquisition of Tuas Power in June 2008 and are in the process of implementing our internal controls and procedures in Tuas Power. The designing, implementing, testing and auditing of internal controls with respect to an acquired entity which had its own management and control systems prior to the acquisition are costly and risk-bearing. We are also subject to a number of special financial and business risks relating to the integration after the completion of acquisition, including, among others, diversion of our management's time, attention and resources, increased costs to improve our coordinated managerial, operational, financial and administrative systems and additional conflicts of interest. In addition, we may be unable to manage an acquired entity profitably or successfully integrate its operations with our own. Any of these factors may adversely affect our business and results of operations.

#### 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 West Wing, Building C, Tianyin Mansion, 2C, Fuxingmennan Street, Beijing, People's Republic of China and our telephone number is (8610) 66491999. 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, 2009, approximately 6.122 billion of our shares, including our shares directly held by Huaneng Group and HIPDC, remained subject to selling restrictions. The reform did not affect the rights of shareholders of our overseas listed foreign shares.

On March 25, 2008, we signed a letter of intent with Huaneng Group on the transfer of the equity of SinoSing Power Pte. Ltd. ("SinoSing Power"), which is a wholly-owned subsidiary of Huaneng Group that was established to acquire 100% equity interest in Tuas Power Ltd. from Temasek Holdings (Private) Limited. Huaneng Group's equity investment in SinoSing Power is US\$985 million. On April 29, 2008, we entered into a transfer agreement with Huaneng Group in this regard, pursuant to which we should pay the consideration in full, of which US\$788 million settled by assignment of debts and the remaining balance of approximately RMB1.572 billion paid in cash in Renminbi. On June 27, 2008, we completed the acquisition of SinoSing Power. Tuas Power Ltd., with a total installed capacity of 2,670MW, became one of our indirectly wholly-owned subsidiaries.

We were approved in 2007 by the extraordinary shareholders general meeting to issue corporate bonds, in different tranches, in an aggregate amount not exceeding RMB10 billion. In 2007, we issued corporate bonds with maturity of 5 years, 7 years and 10 years with face value of RMB1 billion, RMB1.7 billion and RMB3.3 billion bearing annual interest rates of 5.67%, 5.75% and 5.90%, respectively. On May 8, 2008, we issued corporate bonds in an amount of RMB4 billion which are listed and traded at Shanghai Stock Exchange. The bonds have a par value of RMB100, a fixed term of 10 years and an interest rate of 5.20%.

As resolved at the shareholders' meeting held on May 13, 2008, 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 25, 2008, we issued 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 4.83%. On February 24, 2009, we issued the second tranche of the short-term debenture in the amount of RMB5 billion, with a maturity period of 365 days, a unit face value of RMB100 and an interest rate of 1.88%.

In July 2008, we purchased an additional 10% equity interest in Phase I of Rizhao Power Plant for a consideration of approximately RMB135 million, and increased our interest to 44%. In December 2008, we purchased an additional 10% equity interest in Huaiyin Power Plant Phase I for a consideration of approximately RMB67.4 million, and increased our interest to 100%.

On March 31, 2009, we entered into a transfer agreement with Huaneng New Energy Industrial Holding Limited Company ("Huaneng New Energy"), a subsidiary of Huaneng Group, pursuant to which we agreed to acquire from Huaneng New Energy its 65% equity interest in Huaneng Qidong Wind Power Generation Co., Ltd. ("Qidong Wind Power") for a consideration of RMB103 million. Phase I of Qidong Wind Power has a generating capacity of 91.5 MW and commenced operations in March 2009.

On April 21, 2009, we entered into a transfer agreement with Huaneng Group, pursuant to which we agreed to acquire the 55% equity interest in Tianjin Huaneng Yangliuqing Co-generation Limited Liability Company held by Huaneng Group for a consideration of RMB1.076 billion. On the same day, we entered into a transfer agreement with HIPDC, pursuant to which we agreed to acquire the 41% equity interest in Huaneng Beijing Co-generation Limited Liability Company held by HIPDC for a consideration of RMB1.272 billion.

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, 2009, we had controlling generating capacity of 40,939MW, and a total generating capacity of 39,203MW on an equity basis.

### Operations in China

We wholly own 17 operating power plants and have controlling interests in 13 operating power plants and minority interests in 5 operating power companies. Our power plants are located in 12 of China's provinces: Liaoning, Hebei, Shanxi, Shandong, Henan, Fujian, Jiangsu, Zhejiang, Guangdong, Jiangxi, Gansu, Hunan and in Shanghai and Chongqing Municipalities.

The year of 2008 saw the occurrence of freezing rainstorms and snowstorms in China's southern region, the mega earthquake disaster in Sichuan province, the international financial crisis and the deterioration in global economy. These events, directly or indirectly, brought unprecedented difficulties and challenges to our operations,

including but not limited to a decrease in power demand, drastic surge of coal prices and industry-wide losses. Our management and all employees worked together and made every effort to actively deal with the challenges. We achieved new progress in the areas of safe production, energy saving, environmental protection, project development and capital operation.

In the year of 2008, four new coal-fired generating units were put into commercial operations with a total installed capacity of 2,560 MW. In 2008, our total power generation in China reached 184.6 billion kWh, representing an increase of 6.30% from 2007. Although the average utilization hours of our coal-fired generating units decreased to 5,246 hours in 2008 from 5,656 hours in 2007, they were still 335 hours above the industry average and remained at the highest level among coal-fired power generating companies in China. In 2008, the coal purchase under key contracts accounted for 55.4% of our total coal purchases, compared to 63.3% in 2007. Our average unit fuel cost increased by 46.54% from 2007.



We will continue to leverage our relationship with HIPDC, our controlling shareholder, as well as with Huaneng Group, the controlling shareholder of HIPDC, in respect of acquisition and development of power projects. We have a preferential right to purchase equity interests in existing power plants owned by Huaneng Group and HIPDC and the preferential right on all of their respective future power development projects that we may realistically develop. Furthermore, we entered into an Entrusted Management Agreement with Huaneng Group and HIPDC in relation to the management of certain coal-fired power plants of Huaneng Group and HIPDC. By entering into the Entrusted Management Agreement, we will further accumulate management experience as a result of the expansion of our operation scale and set a precedent for large-scale and multi-entities entrusted management in the PRC. Some of these coal-fired power plants could be our potential acquisition targets. Please see "Item 7 — Major Shareholders and Related Party Transactions" for a detailed description of the Entrusted Management Agreement.

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

In 2008, we acquired Tuas Power which is one of the three largest power generating companies in Singapore and had a total generating capacity of 2,670 MW as of March 31, 2009. We have consolidated Tuas Power's results of operations since March 2008. The total power generation of Tuas Power reached 9.841 billion kWh in 2008, representing an increase of 0.06% from 9.835 billion kWh in 2007. Out of the 9.841 billion kWh, 7.584 billion kWh was generated after the date on which Tuas Power's results of operations were consolidated into ours.

#### 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 confirmed by and registered with the relevant department of the central government while non-coal fired power plants will be subject to confirmation and registration by the relevant local government departments. As required by the NDRC, coal-fired power plants will be subject to confirmation by the NDRC.

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 generating 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.

In addition, 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 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.

#### Development of Power Plants in Singapore

The Singapore electricity industry had traditionally been vertically integrated and owned by the government. Since 1995, much progress has been made to liberalize the electricity industry for greater efficiency and innovation. Steps taken to liberalize the power industry include corporatization of the Public Utilities Board (“PUB”) in 1995, establishment of Singapore Electricity Pool in 1998, formation of Energy Market Authority (“EMA”) in 2001, commencement of operation of New Electricity Market of Singapore (“NEMS”) in 2003. Currently, overseeing the activities in the electricity sector is the EMA, which 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 generating 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 is planning 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 generating 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 generating companies to increase their licensed capacity and these generating companies will have to rely on the optimization of their existing capacity within license cap to improve efficiency and forestall new entry.

#### 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 generating 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 generating 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 generating 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, 2008, our generating units installed with desulphurization facilities represented 86.2% of our coal-fired generating units and smoothly passed the first annual desulphurization inspection of the State Ministry of Environmental Protection. We will ensure all the coal-fired generating units will have completed desulphurization transformation by the end of 2009 and that 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 cogeneration, was increased by an average of RMB0.02 per kWh.

The tariff reform will continue in 2009, according to the Government Work Report, to improve the pricing mechanism for the on-grid tariff, transmission and distribution tariff and end-user tariff, and to resolve the discrepancy between coal price and power tariff. 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 consumers 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.

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 generating companies, including Tuas Power, are obliged to hold vesting contracts. Vesting contracts are a form of bilateral contract imposed/vested on the generating 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 generating 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 generating 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 generating 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 generating companies in a fair, transparent and efficient manner. In 2008, most 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.

#### Power market in the Northeastern region

The power market in the northeastern region commenced simulated operation on January 15, 2004, and trial operation of monthly and annual bidding in early 2005. It adopted a model of two-tier tariff system where all the power generated is subject to competitive bidding. Under two-tier tariff system, on-grid tariff includes a capacity tariff and an energy tariff. While the capacity tariff is based on average fixed cost for building a generating unit in the same area and set by the government, the energy tariff is formed by market competition. The northeastern regional power market carried out the trial operation of 2006 annual price bidding in early 2006, and then was suspended. At the end of March 2006, annual price bidding was resumed for a short period of time but was suspended again afterwards. The bidding results in 2006 were not used in actual settlements. As of March 31, 2009, the annual price bidding was not

resumed yet.

We have three power plants in the Northeast region, namely Dalian Power Plant, Dandong Power Plant and Yingkou Power Plant with a total of 10 generating units and an aggregate generating capacity of 3,940 MW. All of these power plants consist of generating units with large-capacity and the management has put in place a strong management team to manage these plants.

To ensure a fair market environment for the three power plants in Liaoning, we will keep ourselves updated on the changes of the relevant rules and will actively support and participate in the establishment of the power market of the Northeast region. We believe that we can optimize our competitive strengths under a fair, reasonable and open market environment.

Power market in the Eastern region

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The power market in the eastern region commenced simulated operation of monthly price bidding and daily price bidding respectively on May 18 and October 28, 2005. It adopted a model of one-tier tariff system where only 10% of the annual power generation will be subject to competitive bidding. In April and December 2006, the eastern regional power market carried out two trial operations of daily price bidding respectively, and the bidding results were used in actual settlements. As of March 31, 2009, the two trial operation of daily price bidding was not resumed yet.

We have 13 power plants in the Eastern region with a total of 40 generating units and an aggregate generating capacity of 16,254 MW.

Most of our power plants in the eastern region are located in regional loading centres of Jiangsu, Shanghai, Zhejiang and Fujian, and consist of individual units with large-capacity and high-performance, together with small number of employees and a strong management team. Under our centralized management, these power plants will closely cooperate with each other to strengthen their competitiveness and strive to achieve good bidding results.

#### Power market in the other regions

The power market in the southern region continued carrying out the simulated operations in 2008. As of March 31, 2009, the power markets in other regions were still under establishment.

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. We believe that this reform will benefit us in the long-term. We will adopt different bidding strategies and fully take advantage of the large scales of our power plants in accordance with the specific circumstances of different power grids and different power plants, thereby maximizing our profits in the power bidding process. We also believe that our large and highly efficient generating units are competitive in a more open, orderly and fair 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, 2008 and the approved power tariff for 2009.

	Year Ended December 31,					
	2004 Average Tariff (1)	2005 Average Tariff (1)	2006 Average Tariff (1)	2007 Average Tariff (1)	2008 Average Tariff (1)	2009 Approved Tariff (1)
Dalian Power Plant	283.62	317.58	315.95	323.27	338.05	361.70
Dandong Power Plant	289.05	301.67	322.76	330.38	340.82	363.50
Yingkou Power Plant	315.48	360.09	334.47	343.37	360.45	375.50 393.80
Fuzhou Power Plant	365.00	367.06	342.46	369.61	401.22	429.80
Shang'an Power Plant	303.25	319.91	340.22	344.47	356.52	387.30 402.30 371.80
Nantong Power Plant	325.18 321.67	343.00 340.65	344.92 345.56	339.47 342.99	385.53 375.47	425.00 425.00

Nanjing Power Plant						
Taicang Power Plant						
Phase I	341.10	360.00	361.64	359.69	401.60	439.00
Phase II	--	--	371.50	358.08	396.48	439.00
Huaiyin Power Plant						
Phase I	330.88	346.43	366.44	--	--	424.5
Phase II	--	373.77	362.26	357.47	396.80	435.8
Phase III	--	--	362.26	357.47	396.80	
Shidongkou						
I	285.43	320.30	358.85	369.54	377.35	435.60
						420.60
Shidongkou						
II	342.56	357.60	357.08	347.93	377.04	425.60

	Year Ended December 31,					
	2004 Average Tariff (1)	2005 Average Tariff (1)	2006 Average Tariff (1)	2007 Average Tariff (1)	2008 Average Tariff (1)	2009 Approved Tariff (1)
Shantou Power Plant						
Phase I	446.86	462.83	487.55	497.7	522.42	548.71
Phase II	--	--	446.54	453.2	472.96	504.20
Dezhou Power Plant(2) (Phases I, II & III)	332.58	349.56	360.68	360.45	394.08	408.90 423.90
Jining Power Plant(2) Phases I, II	299.89	323.41	342.42	310.90	356.56	397.40
Phase III	299.89	323.41	342.42	370.90	384.29	413.40
Weihai Power Plant	394.06	398.93	402.99	403.00	422.78	448.50
Xindian Power Plant(2) Phases I, II	320.83	337.25	350.54	379.71	371.86	413.40
Phase III	--	--	351.90	356.01	370.99	397.40
Changxing Power Plant	351.94	392.83	408.90	428.16	450.86	480.50
Yushe Power Plant						
Phase I	282.10	319.37	316.16	332.53	345.77	359.40
Phase II	282.10	256.00	268.21	274.16	289.32	315.30
Qinbei Power Plant	--	299.77	311.20	311.86	339.85	394.20
Jinggangshan Power Plant	--	353.90	369.87	366.94	379.99	413.00
Yueyang Power Plant						
Phase I	316.52	341.34	360.88	366.49	388.53	425.50
Phase II	--	--	363.38	378.91	398.62	440.50
Luohuang Power Plant						
Phases I, II	286.74	300.90	314.87	308.65	338.27	366.50
Phase III	--	--	337.30	337.30	354.89	379.30
Pingliang Power Plant	--	211.43	216.27	223.31	238.89	275.10
Sichuan Hydropower	--	262.52	266.32	--	--	--
Yuhuan Power Plant	--	--	360.95	415.05	444.92	465.70
Rizhao Power Plant Phase II	--	--	--	--	--	382.40
Jinling Power Plant	--	--	--	481.99	528.73	--

Notes: (1) Includes value-added tax.

(2) For the 2009 approved tariff, some power plants may have several different approved tariffs which will be applied to the different generating units of such plants.

### Power sales in Singapore

As of December 31, 2008, the total installed generating capacity in Singapore was 10,453 MW. In 2008, the peak demand for electricity was 5,955 MW and the annual average load was 4,588 MW. The power market in Singapore is competitive, and power generating companies sell their power output through bidding process and vesting contracts. As of December 31, 2008, power sold through vesting contracts presented approximately 55% of the total power sold by the power generating companies.

Tuas Power sells its electric power output to the NEMS, the power pool market, mainly through vesting contracts and direct sale. In addition, Tuas Power sells part of its power output to the NEMS power pool at the pool price. Pool participants bid into the competitive power pool market of Singapore every half an hour. Pool clearing price and the generation units dispatched are determined by matching the supply and demand curves. 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.

In addition to its power generation business, Tuas Power has a power retail business. A portion of Tuas Power's electricity output is sold through financial arrangements with Tuas Power's retail business. Because the

retail price is linked to the prices at which the generation business sells its output, the retail business of Tuas Power automatically offers a hedge to the price risk faced by its generation business.

According to EMA, for each of the past five years ended December 31, 2008, the average annual pool price per MWh of the NEMS was S\$82.37, S\$109.90, S\$132.42, S\$124.57 and S\$162.53, 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 March 25, 2008 to December 31, 2008, power sold through vesting contracts and retail sales represented approximately 59% of Tuas Power's total power sold for the same period.

#### Fuel supply arrangements

In 2008, 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.

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. Starting from 2004, although such annual coal purchase conferences continue to be held, only key contracts are negotiated and executed at such conferences.

In 2005, coal price increased by a substantial amount compared to the same period in 2004. We purchased 68.08 million tons of coal and consumed 66.03 million tons of coal. Of our total coal purchases, 55% was purchased under the key contracts and medium and long-term agreements, and the remainder was purchased in the open market. The coal purchase price for our company, including transportation costs and miscellaneous expenses, averaged approximately RMB338.03 per ton.

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 generating 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 purchases 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.

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 seven medium and long-term agreements with major coal suppliers to secure stable prices for our coal supplies from 2005 to 2009. At the same time, we also increase the percentage of the key coal supply contracts with coal suppliers at the annual national coal purchase conference, 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 expect the national coal supply and demand will reach equilibrium in 2009. However, due to the existence of the price discrepancy between the suppliers and the customers, there was no agreement reached for the key contracts as of April 22, 2009, which increases the uncertainty of the coal supply and the coal price.

#### Gas

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

Huaneng Jinling Combined Cycle Gas Turbine Power Plant ("Jinling Power Plant") is a gas-fired power plant. The gas supply for Jinling Power Plant 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 Industries.

#### 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, coal-fired generating units are currently operating on a cycle of four to six years. At the end of each operating cycle, an overhaul is carried out. 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
- (iv) a full-scale overhaul is conducted at the end of each operating cycle, which takes approximately 60 days.

#### C. Organizational structure

We are 42.03% 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 an 8.92% equity interest in us either directly or through its wholly-owned subsidiary. 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.

The following organizational chart sets forth the organizational structure of HIPDC and us as of March 31, 2009:

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 8.92% equity interest, 8.75% was directly held by Huaneng Group, and the remaining 0.17% was held by Huaneng Group through its wholly-owned subsidiary, China Hua Neng Hong Kong Company Limited.

For a detailed discussion of the Company's subsidiaries, see Note 13 to the Financial Statements.

## D. Property, plants and equipment

The following table presents certain summary information on our power plants as of March 31, 2009.

Plant or Expansion (Names as defined below)	Province/ Municipality	Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel	
Dalian	Phase I	Liaoning	Unit I: Sep. 1988	2 x 350	100%	700	Coal
			Unit II: Dec. 1988				
	Phase II		Unit III: Jan. 1999	2 x 350	100%	700	Coal
			Unit IV: Jan. 1999				
Dandong		Liaoning	Unit I: Jan. 1999 Unit II: Jan. 1999	2 x 350	100%	700	Coal
Yingkou	Phase I	Liaoning	Unit I: Jan. 1996 Unit II: Dec. 1996	2 x 320	100%	640	Coal
	Phase II		Unit III: Aug. 2007				
			Unit IV: Oct. 2007	1 x 600	100%	600	Coal
Fuzhou	Phase I	Fujian	Unit I: Sep. 1988	2 x 350	100%	700	Coal
	Phase II		Unit II: Dec. 1988				
			Unit III: Oct. 1999	2 x 350	100%	700	Coal
			Unit IV: Oct. 1999				
Shang'an	Phase I	Hebei	Unit I: Aug. 1990	2 x 350	100%	700	Coal
	Phase II		Unit II: Dec. 1990				
			Unit III: Oct. 1997	2 x 300	100%	600	Coal
			Unit IV: Oct. 1997				
	Phase III		Unit V: Jul 2008 Unit VI: Aug 2008	2 x 600	100%	1200	Coal
Nantong	Phase I	Jiangsu	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(4) 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 (3) Phase I		Unit II: Aug. 1994	1 x 220	100%	220	Coal
	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				
Shidongkou I		Unit I: Feb. 1988	1 x 300	100%	1,270	Coal
		Unit II: Dec. 1988	1 x 325			
		Unit III: Sep. 1989	1 x 325			
		Unit IV: May 1990	1 x 320			
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				
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

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Dezhou(1)	Shandong	Units I: 1992	1 x 330	100%	650	Coal
		Unit II: 1992	1 x 320			
		Units III: Jun. 1994	1 x 300	100%	300	Coal
		Unit IV: May 1995	1 x 320	100%	320	Coal
		Units V: Jun. 2002	2 x 700	100%	1,400	Coal

Plant or Expansion (Names as defined below)	Province/ Municipality	Actual In-service Date	Current Installed Capacity (MW)	Ownership %	Attributable Capacity MW	Type of Fuel
Jining	Shandong	Unit VI: Oct 2002	1 x 110	100%	110	Coal
		Unit IV: 1978	2 x 135	100%	270	Coal
		Unit V: Jul. 2003				
		Unit VI: Aug. 2003				
Rizhao Phase II	Shandong	Unit III: Dec 2008	2 x 680	100%	1360	Coal
		Unit IV: Dec 2008				
Weihai(2)	Shandong	Units III: Mar. 1998	2 x 320	60%	384	Coal
		Unit IV: Nov. 1998				
Xindian	Shandong	Unit III: Jan 2002	2 x 225	100%	450	Coal
		Unit IV: Dec 2001				
		Unit V: Sep 2006	2 x 300	95%	570	Coal
		Unit VI: Nov. 2006				
Changxing	Zhejiang	Unit I: Jan. 1992	1 x 135	100%	260	Coal
		Unit II: Aug. 1992	1 x 125			
Yuhuan Phase I	Zhejiang	Unit I: Nov. 2006	2 x 1000	100%	2000	Coal
		Unit II: Dec. 2006				
Phase II		Unit III: Nov. 2007	2 x 1000	100%	2000	Coal
		Unit IV: Nov. 2007				
Tuas Phase I	Singapore	Unit I: Mar. 1999	2 x 600	100%	1200	Oil
		Unit II: Dec 1999				
Phase II		Unit III: Nov 2001	4 x 367.5	100%	1470	Natural Gas
		Unit IV: Jan 2002				
		Unit V: Feb 2005				