



# Management's Discussion and Analysis

Our core business is to invest, construct and operate power plants and provide sustainable and stable electricity supply to users through local grid companies.

# **OPERATING AND FINANCIAL REVIEWS AND PROSPECTS**

## **Summary**

Huaneng Power International, Inc. is one of the largest independent power generation enterprises in China. As at 31st December, 2004, the Company wholly owned 16 operating coal-fired power plants, had controlling interests in 8 operating coal-fired power companies and minority interests in 4 power companies. These power plants and power companies are widely located covering the Northeast grid (Liaoning), the Northern China grid (Hebei, Shanxi and Shandong), the Central China grid (Henan, Hunan and Chongqing), the Eastern China grid (Shanghai, Jiangsu, Zhejiang and Fujian) and the Southern China grid (Guangdong).

In January, 2005, the Company obtained a controlling interest in a hydro power generation company covered by the Sichuan grid located in Southwest China (60% equity interest of Sichuan Huaneng Hydropower Development Corporation, Ltd. (the "Sichuan Hydropower")) and one coal-fired power company covered by the Northwest grid (65% equity interest of Gansu Huaneng Pingliang Power Generation Limited Liability Company (the "Pingliang Power Company")) located in Northwest China through acquisitions.

# A. Operating results

 In 2004, the Company has achieved expected operating results and the board of directors was satisfied with such operating results.

Comparing 2004 against prior year, the increase in average power generation hours, the overall expansion of the Company and its subsidiaries and the stable increase in average tariff rates contributed to the significant increase in output and revenue. However, the high level of coal prices, which in turn led to the increase in unit fuel costs, has offset the increase in revenue and the decrease in other costs.



Huang Yongda, President

# Overcoming difficulties, seizing opportunities and achieving good operating results

In 2004, the rapid development of the national economy has resulted in a strong demand for electricity. The growth rate of the generation and consumption of electricity exceeded that of the GDP in the PRC. All of these events provided favorable external factors for the Company and its subsidiaries to generate more power.

Because of the rapid development of the national economy and the strong demand for electricity, there was a shortage in coal supply and in railway, marine and river transportation. These have led to an insufficient coal storage, an increase in coal price and a lowering of the quality of coal acquired, which in turn created a tremendous challenge for the Company and its subsidiaries to ensure an adequate coal supply for the stable generation of electricity and to maintain cost control and achieve, targeted profit.

All of our staff worked hard to strengthen our management over coal supply. Through various means, we were able to secure an adequate supply of coal to avoid a shut down of any of our plants due to a shortage of coal. Taking advantage of our advanced technological facilities, we increased our output, maintained our market share and created marginal profit that partially offset the increase in coal cost.

For the year ended 31st December, 2004, the total power generation of our operating power plants has increased by 23.37 billion kWh or 25.70% from 90.91 billion kWh in the prior year to 114.28 billion kWh, of which 10.58 billion kWh was attributable to newly acquired power plants, 1.41 billion kWh was attributable to new generators that were put into commercial operation this year and 11.38 billion kWh was attributable to increased utilization rate.

The increase in utilization rate is primarily due to the following factors:

 The rapid growth of the national economy in 2004, which resulted in a significant increase in the demand for electricity and caused, in general, a proportionate increase in the generation of our power plants;

- 2) Arrangement of the overhaul programmes. The power plants planned their overhaul programmes, to the extent possible, around the off-peak period and without compromising on the quality of performance, reduced the duration period of the overhaul programme to increase the utilization rate on the generators; and
- 3) Technological improvements in our skill sets and facilities have ensured an increase in our generation.

# Strive hard and exceeded planned construction projects

In 2004, the Company focused on large-scale construction projects and its mission was to ensure commencement of commercial operations of many new generators. The Company strengthened its construction management through improving the coordination of equipment delivery, design, construction work and generator inspection. Through the hard work of all staff and the cooperation of other participating parties, the Company has met its two targets of commencing commercial operation at both the Yushe Phase II and the Qinbei power plants, achieving an additional generation capacity of 1,800 MW which surpassed the annual plan of achieving an additional generation capacity of 1,200 MW. Currently, all the Company's projects are proceeding smoothly. There are 8 projects underway with an expected generation capacity of up to 8,960 MW. The progress, quality and investments of all these projects were well managed.

# Breakthrough in acquisitions



In July, 2004, the Company acquired all the assets and liabilities of the Yingkou Power Plant (in Liaoning Province) and the Jinggangshan Power Plant (in Jiangxi Province), 55% equity interest in Huaneng Hunan Yueyang Power Generation Limited Liability Company (the "Yueyang Power Company" in Hunan Province), 60% equity interest in Huaneng Chongqing Luohuang Power Generation Limited Liability Company (the "Luohuang Power Company" in Chongqing) and 40% equity interest in Hebei Hanfeng Power Generation Limited Liability Company (the "Hanfeng Power Company" in Hebei Province) and paid a total consideration of RMB4.575 billion. These acquisitions were in line with our market development strategy to consolidate our positions in the coastal regions and to expand into central China.

Prospects for 2005-the Company and its subsidiaries' missions of achieving better results and maintaining strong development will face difficulties. There will be both opportunities and challenges.



Electricity demand in the PRC power market is expected to grow throughout 2005 providing more market capacity for the stable power generation of the Company and its subsidiaries. The acquired power plants and the new generators that were put into commercial operations in 2004 will provide a positive contribution. However, the large-scale increase in power generation construction and operation in the PRC during the last two years presents certain difficulties

to the Company and its subsidiaries in achieving a higher growth rate in power generation.

The establishment of the "coal-electricity price linkage mechanism" will benefit the Company and its subsidiaries with an increase in tariff rates. However, shortage of coal supply may continue and coal prices may remain at a high level which will bring challenges for the coal purchase and cost control of the Company and its subsidiaries in 2005.

The continuous rapid growth in China's national economy and living standards will provide great opportunity for the expansion of the PRC power market. Macroeconomic controls and restraints on illegal construction projects will enhance the development of the power industry, which will provide opportunity for the Company and its subsidiaries to develop properly. These favorable external factors will help the Company and its subsidiaries in developing new projects and enlarging the scale of their operations. However, large-scale power construction projects will also bring challenges to project management and financing.

We are confident in seizing opportunities and facing the challenges. In terms of cost controls, the Company and its subsidiaries will seek to achieve a stable long-term coal supply and to effectively control the level of increase in unit fuel costs. In terms of power construction, the Company and its subsidiaries will increase the pace of lower-costs power generation construction projects while maintaining high quality. In terms of power generation, the Company and its subsidiaries will ensure more power generated in a safe and stable manner. In order to minimize fuel and geographical risks, the Company and its subsidiaries will adjust the structure of power generation location and the energy resources structure through construction and acquisitions. The Company and its subsidiaries will also aim for greater competitive advantages through the use of advanced, efficient and environmentally friendly power generation facilities and technologies, proper corporate governance, experienced management and high quality staff, sufficient funding and strong reputation. The Company and its subsidiaries are confident in maintaining their leadership position among independent power producers in the PRC.

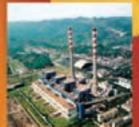
On the basis of consolidating its development in the coastal areas, the Company gradually expanded towards the central-western regions where the power markets are rapidly growing. After entering into the coal supply bastion of Henan Province and Shanxi Province in 2003, the Company entered into China's central-western regions in 2004 through the acquisitions of Jinggangshan Power Plant in Jiangxi Province, Luohuang Power Plant in Chongqing Province, Yueyang Power Plant in Hunan Province and Pingliang Power Plant in Gansu Province. This has much enhanced the Company's power plants distribution, allowing it to enjoy the varied opportunities in electricity growth offered by both developed areas and developing areas. In addition, the newly acquired power plants such as Luohuang Power Plant and Hanfeng Power Plant are close to the coal mines and Pingliang Power Plant is a minemouth power plant, which means the lower fuel costs obtained from these areas will contribute to lowering the overall fuel cost of the Company.













# Comparative analysis of operating results

# 2.1 Net operating revenue

The average tariff rate (inclusive of VAT) and the net operating revenue of our operating power plants are as follows:

plants are as it	ollows:							
		Average tariff r		Net operating				
		(inclusive of VA		revenue				
	(RMB/MWh)					(RMB million)		
			Increase/			Increase/		
Operating			(Decrease)			(Decrease)		
power plants	2004	2003	(%)	2004	2003	(%)		
Dalian	283.62	272.69	4.01%	2,225	1,900	17.11%		
Fuzhou	365.00	331.82	10.00%	3,047	2,390	27.49%		
Nantong	325.18	312.52	4.05%	2,507	2,147	16.77%		
Shang'an	303.25	307.94	(1.52%)	2,107	2,008	4.93%		
Shantou								
Oil-Fired	604.08	672.14	(10.13%)	155	178	(12.92%)		
Shantou	446.86	435.17	2.69%	1,631	1,522	7.16%		
Dandong	289.05	276.95	4.37%	1,117	927	20.50%		
Shidongkou II	342.56	332.85	2.92%	2,367	2,250	5.20%		
Nanjing	321.67	307.31	4.67%	1,146	1,027	11.59%		
Dezhou	332.58	333.34	(0.23%)	3,519	3,206	9.76%		
Weihai	394.06	386.50	1.96%	1,494	1,340	11.49%		
Jining	299.89	274.66	9.19%	648	453	43.05%		
Shidongkou I	285.43	256.64	11.22%	1,907	1,623	17.50%		
Taicang	341.10	321.80	6.00%	1,256	1,105	13.67%		
Changxing	351.94	320.57	9.79%	565	454	24.45%		
Huaiyin	330.88	317.21	4.31%	772	652	18.40%		
Xindian <sup>1</sup>	320.83	342.41	(6.30%)	609	150	306.00%		
Yushe <sup>1</sup>	282.10	200.63	40.61%	444	57	678.95%		
Yingkou <sup>2</sup>	315.48	N/A	N/A	584	N/A	N/A		
Jinggangshan²	325.67	N/A	N/A	531	N/A	N/A		
Luohuang <sup>2</sup>	286.74	N/A	N/A	871	N/A	N/A		
Yueyang <sup>2</sup>	316.52	N/A	N/A	588	N/A	N/A		
Qinbei³	273.11	N/A	N/A	29	N/A	N/A		
Total	327.88	318.68	2.89%	30,118	23,388	28.78%		

Note1: Since November, 2003, we have held a more than 50% equity interest in the Xindian Power Plant and the Yushe Power Company.

Note<sup>2</sup>: Since July, 2004, we have held a more than 50% equity interest in the Yingkou Power Plant, the Jinggangshan Power Plant, the Luohuang Power Company and the Yueyang Power Company.

Note<sup>3</sup>: The two generators of the Qinbei Power Company commenced production in November and December 2004 respectively.

The average tariff rate of the Company and its subsidiaries increased by approximately 2.89% from RMB318.68 per MWh in 2003 to RMB327.88 per MWh. The major reason was the implementation of an adjustment on the tariff for electricity sold and the related operating hours of the power plants in accordance with instructions from National Development and Reform Commission ("NDRC").

Net operating revenue represents operating revenue net of value-added tax and amounts received in advance. For the year ended 31st December, 2004, the consolidated net operating revenue of the Company and its subsidiaries amounted to RMB30.118 billion, representing an increase of approximately 28.78% over the RMB23.388 billion in the prior year. The increase of the net operating revenue is mainly due to the increase of generation capacity, operating hours of the power plants and the average tariff rates. The increase of generation capacity was mainly attributable to the acquired power plants in the current year which contributed approximately RMB2.573 billion net operating revenue to the Company and its subsidiaries. Excluding the impact of acquisitions, the increase in the utilization rate and average tariff rates contributed approximately RMB3.392 billion and RMB765 million net operating revenue to the Company and its subsidiaries in the current year respectively.

## 2.2 Operating expenses

The total operating expenses of the Company and its subsidiaries increased by 42.20% from approximately RMB16.315 billion in 2003 to approximately RMB23.2 billion in 2004. Such an increase was attributable to the expansion of the scale of operations and the increase in fuel costs. The power plants acquired in 2004 accounted for RMB2.074 billion of the operating expenses. Excluding the impact from the power plants acquired in 2004, the increase in operating expenses amounted to approximately RMB4.811 billion.

The growth of operating expenses outweighed both the growth of power generation and net operating revenue. The significant increase in fuel costs is considered to be the primary reason for such an increase. The economies of scale as a result of enhancing utilization rates brought about a slower increase in fixed costs (such as depreciation) when compared with that of power generation, however, could not fully offset the impact of higher rate of increase in fuel costs. Hence, the rate of growth of operating expenses of the Company and its subsidiaries was greater than that of power generation. As net operating revenue is determined by power generation and tariff rates and given the limited increase in average tariff rate, the growth of operating expenses was also higher than that of net operating revenue.

#### 2.2.1 Fuel

Fuel costs represented the major operating expenses of the Company and its subsidiaries, which has increased by approximately 67% from prior year. The increase in coal consumption as a result of increasing power generation of the Company and its subsidiaries and the increase in fuel price contributed to an increase in fuel costs. There was an increase of approximately 32.97% of unit fuel cost from prior year in 2004.

#### 2.2.2 Maintenance

The maintenance expense of the Company and its subsidiaries amounted to approximately RMB808 million in 2004, representing a decrease of approximately 12.36% from approximately RMB922 million in the prior year. The decrease in the maintenance expense was mainly due to two factors: 1) enhanced utilization rate of equipment and minimized duration of maintenance projects through the careful scheduling of maintenance programmes; and 2) the improvement of the operating condition of the equipment as a result of continuous technological improvement.

#### 2.2.3 Depreciation

Depreciation expenses of the Company and its subsidiaries have increased by approximately 14.32% from prior year. Newly acquired power plants in 2004 contributed to an increase of approximately 12.34%.

## 2.2.4 Labour

Labour costs of the Company and its subsidiaries amounted to approximately RMB1.877 billion in 2004, representing an increase of approximately 30.40% from approximately RMB1.440 billion in 2003. The labour cost of the original power plants increased to approximately RMB1.744 billion, representing an increase of approximately 21.14% compared to prior year, among which, the full year impact from the Xindian Power Plant and the Yushe Power Company acquired in October, 2003 contributed approximately RMB112 million. The newly acquired Yingkou Power Plant, the Jinggangshan Power Plant, the Yueyang Power Company and the Luohuang Power Company contributed additional labour costs of approximately RMB133 million in 2004.

# 2.2.5 Service fees to HIPDC

The service fees paid to HIDPC refer to fees paid for use of its grid connection and transmission facilities based on reimbursement of cost plus a profit.

The service fees paid to HIPDC amounted to approximately RMB134 million in 2004, representing a decrease of 37.78% compared to approximately RMB215 million in 2003. The decrease of service fee rate upon the conclusion of a supplementary agreement with HIPDC represented the primary reason for this decrease.

#### 2.2.6 Enterprise income tax ("EIT")

Pursuant to the relevant tax regulations, the Company is treated as a Sino-foreign equity joint venture that enjoys a preferential income tax treatment. This allows the power plants of the Company to be exempted from EIT for two years starting from the first profit-making year after covering the accumulated deficits. This is followed by a 50% reduction of the applicable tax rate for the next three years. In addition, as confirmed by the State Tax Bureau, the wholly-owned power plants pay their respective EIT to local tax authorities, even though they are not separate legal entities. The consolidated EIT of the Company and its subsidiaries amounted to approximately RMB1.014 billion in 2004 which represented a decrease of approximately 11.76% from approximately RMB1.149 billion in prior year. The main reason for such a decrease was the decreased net profit and the increasing ratio of the profit from the power plants with lower applicable tax rates. This contributed to the effective tax rate decreasing from approximately 16.99% in 2003 to approximately 15.38% in 2004.

#### 2.2.7 Other operating expenses

Other operating expenses of the Company and its subsidiaries amounted to approximately RMB606 million in 2004, representing an increase of approximately 1.63% from approximately RMB597 million in 2003. The major reason for this increase was the full year impact from the Xindian Power Plant, the Yushe Power Company and the Qinbei Power Company acquired in October, 2003 and the sixmonth contribution from the Yingkou Power Plant, the Jinggangshan Power Plant, the Yueyang Power Company and the Luohuang Power Company acquired in July, 2004. The other operating expenses of the original power plants accounted for approximately RMB542 million, representing a decrease of approximately 9.20% from approximately RMB597 million in prior year.

# 2.2.8 Net profit before financial expenses

The increasing fuel costs contributed to a decrease of net profit before financial expenses of approximately 2.19% from approximately RMB7.073 billion in 2003 to approximately RMB6.918 billion in 2004.

#### 2.2.9 Financial expenses

The net financial expenses of the Company and its subsidiaries totalled approximately RMB740 million for the year 2004 which represented an increase of approximately 35.92% from approximately RMB544 million. The original power plants accounted for approximately RMB554 million, representing an increase of approximately 1.80% from the prior year. The financial expenses of the Yingkou Power Plant, the Jinggangshan Power Plant, the Yueyang Power Company and the Luohuang Power Company acquired in 2004 accounted for approximately RMB186 million.

## 2.3 Net profit

The 2004 consolidated net profit of the Company and its subsidiaries was RMB5.324 billion, which represented a decrease of approximately 1.96% from approximately RMB5.430 billion in the prior year. This decrease was primarily due to the increased operating expenses of the Company and its subsidiaries in 2004. A significant increase in power output, the average tariff rates and the respective full year and half year profit impacts from the acquisition of the Xindian Power Plant and the Yushe Power Company in October, 2003 and the acquisition of the Yingkou Power Plant, the Jinggangshan Power Plant, the Yueyang Power Company, the Luohuang Power Company and the Hanfeng Power Company in July, 2004 have brought about increases in the net operating revenue and net profit respectively. However, all the factors described above could not fully offset the increased operating expenses caused by the increase in fuel costs. Hence, the consolidated net profit of the Company and its subsidiaries has decreased slightly when compared with the prior year. The consolidated net profit of the Company and its subsidiaries, excluding the impact of newly acquired power plants in the current year was approximately RMB4.927 billion in current year, which represented a decrease of 9.28% compared to RMB5.430 billion in 2003.

## 2.4 Comparison of financial positions

As at 31st December, 2004, total assets of the Company and its subsidiaries amounted to approximately RMB72.780 billion, which represented an increase of approximately 35.76% from approximately RMB53.610 billion in the prior year. Non-current assets increased by approximately 39.33% to approximately RMB63.126 billion while current assets increased by approximately 16.26% to approximately RMB9.654 billion. Acquisitions and capital expenditure on construction projects primarily accounted for these increases with the total assets being obtained through acquisitions in the current year amounting to approximately RMB13.251 billion, including non-current assets of approximately RMB10.735 billion as at 31st December, 2004.

Total capital expenditure (primarily spending on construction projects), amounted to approximately RMB10.036 billion, with its main source of financing being from bank borrowings.

In accordance with the schedule of development plans, the capital expenditure of the Company and its subsidiaries will remain at a high level in 2005 and the Company expects there will be continued increases in both total assets and liabilities. Other so far unplaned acquisitions will also have a certain impact on the financial position of the Company and its subsidiaries.

As at 31st December, 2004, total liabilities of the Company and its subsidiaries amounted to approximately RMB33.248 billion, representing an increase of approximately 79.73% from approximately RMB18.499 billion in the prior year. Non-current liabilities were increased by approximately 78.41% to approximately RMB16.515 billion while current liabilities were increased by approximately 81.05% to approximately RMB16.733 billion. The increase in liabilities is mainly caused by the increase in bank borrowings as a result of acquisitions and capital expenditure on construction projects.

## Primary financial ratios

	The Company and its subsidiaries		
	2004	2003	
Current ratio	0.58	0.90	
Quick ratio	0.49	0.81	
Ratio of liabilities and owners' equity	0.92	0.54	
Multiples of interest earned	7.29	12.03	

Calculation formula of the financial ratios:

Current ratio	=	balance of current assets at the end of the year/balance of current liabilities at the end of the year
Quick ratio	=	(balance of current assets at the end of the year - net amount of inventories at the end of the year)/balance of current liabilities at the end of the year
Ratio of liabilities and owners' equity	=	balance of liabilities at the end of the year/balance of owners' equity at the end of the year
Multiples of interest earned	=	(profit before tax + interest expense)/interest expenditure (including capitalized interest)

The current ratio and quick ratio of the Company and its subsidiaries decreased significantly compared to the prior year, which was mainly due to increased capital expenditure and the cash consideration paid during acquisitions. These factors contributed to a significant increase in short-term borrowings as at the year end.

Similarly, the significant increases in short-term and long-term borrowings, arising from the reasons discussed above, contributed to the significant increase in the ratio of liabilities and owners' equity.

The multiples of interest earned of the Company and its subsidiaries decreased from that of the prior year mainly due to the lower interest expenses (including capitalized interest) on loans borrowed to finance construction and acquisitions.

During 2004, a significant portion of the Company and its subsidiaries' funding requirements for capital expenditure was met by short-term borrowings. This was due partly to the use of low-interest short-term borrowings rather than the high-interest long-term borrowings in order to minimize interest expense. Consequently, as at 31st December, 2004, the Company and its subsidiaries had a negative working capital balance of approximately RMB7.1 billion. Based on the successful financing history of the Company and its subsidiaries, the significant amount of undrawn banking facilities (See Note B 2.2) available to the Company and the stable operating results, the Company and its subsidiaries believe that they are able to meet their liabilities as and when they fall due and meet the capital required for operations.

# B. Liquidity and cash resources

# 1. Liquidity

	2004	2003	Variance
	RMB billion	RMB billion	%
Net cash provided by operating			
activities	8.163	9.533	(14.37)
Net cash used in investing activities	(13.650)	(5.225)	161.24
Net cash provided by/(used in)			
financing activities	3.654	(3.182)	214.83
Net (decrease)/increase in cash			
and cash equivalents	(1.833)	1.126	262.79
Cash and cash equivalents,			
beginning of year	4.129	3.003	37.5
Cash and cash equivalents, end of year	2.296	4.129	(44.39)

Net cash provided by operating activities is the main source of cash for the Company and its subsidiaries. The net cash provided by operating activities amounted to RMB8.163 billion in 2004 which was lower than that of the prior year. The significant increase in fuel costs primarily contributed to the lower level of cash from operations.

The Company and its subsidiaries expect that the operating activities will continue to provide sufficient and sustained cash flows in the future.

Net cash used in investing activities mainly consisted of capital expenditure for the purchase of property, plant and equipment and cash paid for acquisitions of power plants.

Net cash flows from financing activities consisted mainly of drawdown of loans less repayments of loans and dividend payments.

In 2003, the Company and its subsidiaries repaid loans of approximately RMB3.198 billion, paid dividends of approximately RMB2.197 billion and took out new loans of approximately RMB2.135 billion.

In 2004, the Company and its subsidiaries repaid loans of approximately RMB8.317 billion, paid dividends of approximately RMB3.173 billion and took out new loans of approximately RMB14.468 billion.

In 2005, the Company and its subsidiaries will enter into a comparatively concentrated period of capital expenditure for construction projects. In order to minimize the cost of capital, the newly developed projects will be financed by borrowings. The Company and its subsidiaries are confident in managing the scale of liabilities and financial risks.

As at 31st December, 2004, the interest-bearing liabilities of the Company and its subsidiaries totalled approximately RMB25.6 billion, including both long-term borrowings (inclusive of current portion) and short-term borrowings. Within which, approximately RMB7.6 billion was from foreign borrowings.

# 2. Capital expenditure and cash resources

# 2.1 Capital expenditure

## 2.1.1 Capital expenditure on acquisitions

Cash payments for acquisitions during 2004 amounted to approximately RMB4.575 billion when the Company acquired all the assets and liabilities of the Yingkou Power Plant and the Jinggangshan Power Plant, 55% equity interest in the Yueyang Power Company, 60% equity interest in the Luohuang Power Company and 40% equity interest in the Hanfeng Power Company.

Cash payments for acquisitions during 2003 amounted to RMB2.940 billion.

In January, 2005, the Company paid a cash consideration of RMB2.025 billion to acquire a 65% equity interest in the Pingliang Power Company and a 60% equity interest in Sichuan Hydropower. These power plants are located in Gansu and Sichuan Provinces in Western China. The acquisition enabled the Company to enter a fast growing power market in Western China, achieving the marketing development strategy of "consolidating our positions in the coastal regions, expanding into Central China and entering into Western China". This is also one of the milestones of the Company in realizing the development strategy of "combining hydro and coal-fired power", and represents a continuation of the established strategy of a balance between development and acquisitions. While considering scale, geography or energy type, the acquisition undoubtedly enabled the Company to be the largest Asian integrated power generation enterprise. Given strong demand for electricity in the PRC and intense coal supply, improving the energy mix through acquiring a hydropower generation company and lowering fuel costs through acquiring power plants close to coal mines (the Pingliang Power Company) should enable the Company and its subsidiaries to improve profitability and effectively control fuel costs.

The Company and its subsidiaries will continue to follow the construction and acquisition strategy by proactively seeking new acquisition opportunities to ensure the sustainable growth of profitability and shareholders' value. Since there are uncertainties associated with acquisition projects, the amount of capital expenditure required is also uncertain. However, the significant cash flows from operating activities and the available undrawn borrowing facilities should provide the Company with a sufficient level of cash to support acquisition projects.

# 2.1.2 Capital expenditure on construction and renovation

The capital expenditure for construction and renovation in 2004 amounted to approximately RMB10.036 billion, including approximately RMB1.632 billion for the Qinbei Phase I project, approximately RMB1.219 billion for the Yushe Phase II project, approximately RMB1.566 billion for the Taicang Phase II project, approximately RMB1.199 billion for the Yuhuan Phase I project, approximately RMB228 million for the Shantou Phase II project, approximately RMB1.216 billion for the Huaiyin Phase II project, approximately RMB126 million for the Shidongkou II Phase II project, approximately RMB281 million for the Xindian project, approximately RMB451 million for the Luohuang Phase III project, approximately RMB446 million for the Yueyang Phase II project, approximately RMB2 million for the Jinggangshan project. Other expenditure consists mainly of approximately RMB24 million of prepaid construction, approximately RMB361 million for settlement of a construction payable in respect of the Dezhou Phase III and approximately RMB364 million for the acquisition of property, plant and equipment and routine renovation expenditure.

Capital expenditure for construction and renovation in 2003 amounted to approximately RMB3,607 million, including approximately RMB355 million for the Jining Phase III expansion construction, approximately RMB439 million for the Yuhuan Phase I project, approximately RMB215 million for the



Shantou Phase II project, approximately RMB497 million for the Huaiyin Phase II project, approximately RMB240 million for the Qinbei Phase I project, approximately RMB177 million for the Yushe Phase II project, approximately RMB80 million for the Xindian expansion construction, approximately RMB144 million for the renovation of the Shidongkou I Power Plant and approximately RMB459 million for the renovation of the Taicang Power Plant. Other items mainly consist of approximately RMB349 million for the settlement of a construction payable of the Dezhou Power Plant Phase III and approximately RMB214 million of construction payable for the Nantong Phase II.

The above capital expenditure items amounted to mainly financed by long-term borrowings and cash from operations.



The Company and its subsidiaries will continue to incur significant capital expenditure in 2005. The construction projects of the Company in 2005 include two 1,000MW ultra super critical coal-fired generator units for the Yuhuan Power Plant Phase I project, two 300MW coal-fired generator units for the Yueyang Phase II project, two 600MW coal-fired generator units of the Taicang Power Plant Phase II, two 600MW coal-fired generator units for

the Luohuang Phase III project and one 600MW coal-fired generator unit for the Shantou Phase II project. Planned construction items mainly include two 1,000 ultra super critical coal-fired generator units for the Yuhuan Power Plant Phase II project; two 600MW coal-fired generator units for the Yingkou Power Plant Phase II project, two 600MW coal-fired generator units for the Qinbei Phase II project, two 600MW coal-fired generator units for the Shang'an Phase III project, three 350MW gas-fueled generator units for the Shanghai Ranji and three 350MW gas-fueled generator units for the Jinling Power Plant. The Company and its subsidiaries will also proactively promote the construction of disulphuric facilities. The Company and its subsidiaries will actively monitor the progress of the above projects based on commercial feasibility principles and engage in new project developments for the long-term. The Company expects to finance such projects through internal funding, available undrawn borrowing facilities and cash flows provided by operating activities.

# 2.2 Cash resources and anticipated financing cost

The Company and its subsidiaries expect the cash resources for capital expenditure for construction and acquisitions to be principally generated from internal funds, cash flows from operating activities and future debt and equity financing.

Through years of successful operations, the market image and "brand" of the Company and its subsidiaries have continuously enhanced. Standard & Poors upgraded the credit rating on the Company to BBB+, outlook of the rating was stable in February, 2004. Good operating results and good credit status give the Company strong financing capabilities. As at 31st December, 2004, the Company and its subsidiaries had available unsecured borrowing facilities from banks of approximately RMB30 billion (included in these undrawn borrowing facilities are medium to long-term loan facilities of RMB20 billion with the drawdown subject to application and approval procedures). These unsecured borrowing facilities from PRC banks provide the Company and its subsidiaries with a sufficient level of available cash and raise the level of liquidity and repayment capabilities of the Company and its subsidiaries effectively.

Despite the acquisitions of the Yingkou Power Plant, the Jinggangshan Power Plant, the 55% equity interest of the Yueyang Power Company, the 60% equity interest of the Luohuang Power Company, the 40% equity interest in the Hanfeng Power Company in July, 2004 and the 65% equity interest in the Pingliang Power Company and the 60% equity interest in the Sichuan Hydropower in January, 2005, the Company and its subsidiaries have maintained a strong level of ability to service their debts.

As at 31st December, 2004, short-term borrowings of the of Company and its subsidiaries amounted to approximately RMB8.099 billion with interest charged between 4.30% and 5.02% per annum (2003: approximately RMB1.6 billion with interest charged between 4.54% and 5.05% per annum).

As at 31st December, 2004, the total long-term bank borrowings of the Company and its subsidiaries amounted to approximately RMB16.112 billion (2003: approximately RMB10.715 billion). These loans include bank borrowings denominated in Renminbi of approximately RMB8.805 billion (2003: approximately RMB4.064 billion); US dollar of approximately US\$778 million (2003: approximately US\$803 million) and Euro of approximately €77 million (2003: N/A). Included in these borrowings were approximately US\$67 million of floating-rate borrowings. For the year ended 31st December, 2004, these borrowings bore interest that ranged from 1.225% to 6.97% (2003: from 1.18% to 6.60%) per annum. The Company and its subsidiaries have entered into interest rate swap contracts with PRC banks to reduce the floating interest rate risk. As at 31st December, 2004, current portion of these long-term bank loans, bank loans between 1 to 2 years, between 2 to 5 years and over 5 years amounted to RMB1,257 million, RMB1,363 million, RMB7,639 million and RMB5,853 million, respectively.

As at 31st December, 2004, the total long-term shareholders' loan to the Company and its subsidiaries amounted to RMB800 million (2003: approximately RMB420 million). The loans are denominated in Renminbi (2003: denominated in Renminbi of approximately RMB32 million and US dollar of approximately US\$47 million). Included in these borrowings were approximately RMB200 million of floating-rate borrowings. For the year ended 31st December, 2004, these borrowings bore interest that ranged from 3.60% to 5.76% (2003: 3.62% to 5.76%) per annum. All these borrowings from a shareholder will mature 5 years later.

As at 31st December, 2004, the total other long-term loans of the Company and its subsidiaries amounted to approximately RMB587 million (2003: approximately RMB1.06 billion). These loans include borrowings denominated in Renminbi of approximately RMB310 million (2003: approximately RMB745 million), US dollar of approximately US\$19 million (2003: approximately US\$21 million) and Japanese Yen of approximately JPY1.548 billion (2003: approximately JPY1.786 billion). All these foreign currency borrowings were at floating rates. For the year ended 31st December, 2004, these borrowings bore interest that ranged from 1.70% to 5.93% (2003: from 4.94% to 6.21%) per annum. The Company will closely monitor the foreign exchange market and cautiously assess the exchange rate and interest rate risks. As at 31st December, 2004, current portion of these other long-term loans, other long-term loans between 1 to 2 years, between 2 to 5 years and over 5 years amounted to RMB286 million, RMB109 million, RMB128 million and RMB64 million, respectively.

Combining the current development of the power industry and the growth of the Company and its subsidiaries, the Company and its subsidiaries will make continuous efforts to not only meet cash requirements of daily operations, construction and acquisition, but also establish an optimal capital structure to minimize the cost of capital and manage financial risk through effective financial management activities thereby maintaining stable returns to the shareholders.

# 2.3 Other financing requirements

The objective of the Company and its subsidiaries is to bring long-term, stable and growing returns to the shareholders. In line with this objective, the Company follows a proactive, stable and balanced dividend policy. In 2005, in accordance with the income appropriation plan of the board of directors of the Company (subject to the approval of the shareholders' meeting), the Company expects to pay a cash dividend of approximately RMB3.014 billion.



#### C. Trend information

## 1. Impact of demand and supply

Restrictions on power supply and demand in 2005 are expected to be somewhat relaxed but the overall power supply and demand will still be tense with some restrictions on power consumption during peak season in certain regions. In 2006 the power supply and demand in the PRC will hopefully be balanced. As a result of good functionality of the generators of the Company and its subsidiaries, whilst there maybe some short-term decline in utilization hours, the Company and its subsidiaries are confident in maintaining high utilization hours in the long-term.

## 2. Impact of the electricity pricing policy

# 2.1 The Electricity Pricing Reform Scheme

The State Council approved the Electricity Pricing Reform Scheme on 3rd July, 2003, which defined the short-term and long-term objectives of the power pricing reform. The specific implementation methods are still being established.

The short-term objectives for the electricity pricing reform are to establish an appropriate on-grid price setting mechanism to accommodate a reasonable level of competition in power generation; to establish a preliminary pricing mechanism for transmission and distribution to facilitate the healthy development of the power grids; to link the retail prices with the on-grid prices; to optimize the structure of the retail price; and to pilot-run the practice for high voltage users to directly make purchases from the power generation companies based on a reasonable price for transmission and distribution.

The long-term objective for the electricity pricing reform is to establish a standardized and transparent tariff setting mechanism, classifying the electricity prices into the on-grid price, the transmission price, the distribution price and the end-user retail price, and to allow the on-grid prices and retail prices to be determined through market competition. The transmission and distribution prices are to be regulated by the government.

The tariff rate level will be comparatively stable at the initial stage of reform in order to ensure the smooth transition between the old and new tariff setting system.



## 2.2 Coal-electricity price linkage mechanism

In December, 2004, the NDRC established a coalelectricity price linkage mechanism through issuing a circular, "Notice related to opinion on setting up coalelectricity price linkage mechanism". Truck-loading price in late May, 2004 was being used as the base price upon its first application whereby this base price is compared against the average truck-loading prices

between June and November, 2004 before applying the pricing formula to adjust the respective tariffs for electricity generation plants and retail tariffs. The power generation enterprises have to absorb the first 30% of the increase of coal prices. The tariff rate of hydro power plants will also adjust accordingly upon the pricing adjustments being applied to the coal-fired power plants while tariff rates of other power generation enterprises shall remain unchanged. A period of 6 months is being set as a single cycle in applying coal-electricity price linkage mechanism. Should the average coal prices within a cycle is 5% higher than that of last cycle, pricing adjustment will be made accordingly; should the change is within 5%, this change will be brought forward to the next cycle until the accumulated change be equalled to or is above 5%. At which point, a pricing adjustment will be made. The State Council has authorized NDRC to take price intervening measures when there is a significant fluctuation in coal prices. The formal implementation plan proposed by NDRC is in the progress of approval by the State Council and is expected to be issued in the second quarter of 2005.

Upon the formal issuance of the coal-electricity price linkage mechanism plan, the tariff rates of the power plants of the Company is expected to adjust accordingly.

# 3. Impact of the environmental protection policies

2004 is the second implementation year of both the "Regulations on the Administration of the Levy and Usage of Emission Fee" and the "Rules on the Administration of the Levy Standards of Emission Fees". Pursuant to the relevant regulations, emission fee charged on discharging sulphur dioxide increased from RMB0.21/kg to RMB0.42/kg while a new charge was created on nitric oxides materials discharge at RMB0.63/kg from 1st July, 2004 onwards. The Company paid a total of approximately RMB170.32 million of emission fees to local governments in 2004.

The government has continuously strengthened the enforcement of environmental protection regulations and issued stricter benchmarks on pollutants emitted by the coal-fired power plants. These policies benefit the society and nation as a whole, but have created pressure on the operations of the Company.



The Company and its subsidiaries are determined to support the strengthened government policies and steadily implement the theory of balanced and sustainable development. It is confident in both satisfying the environmental protection requirements of the government through implementing measures for enhancing the environmental protection standards and through effectively controlling the operating costs of newly setup power plants. Given its competitive advantage as a result of the new generators, advanced equipment and effective control over pollution discharge, the Company and its subsidiaries will step up the installation of desulphuric facilities and NOx emission reduction facilities, proactively lobby for discharge fee refund for renovation item and the enactment of a pollution discharging fee-electricity price linkage mechanism.

# 4. Impact of power market pilot

In June, 2003, NDRC started a pilot programme to establish a regional power market in both the Northeast China and the Eastern China.

On 15th January, 2004, the power market formally commenced in Northeast China and after several rounds of simulated operations, the market was formally established on 13th December, 2004 and has initiated the bidding practice for the year 2005 (not yet completed).

From the results of simulated operations and trial runs, the "Transaction Regulations for the Northeast China power market" was not yet mature and currently its monthly bidding practice has been suspended while opinions are being gathered from each participant in order to amend and improve the regulation. During this period, all the tariff rates for individual power plants will follow those in effect in 2004. In this region, the Company owns three power plants, namely, the Dalian Power Plant, the Dandong Power Plant and the Yingkou Power Plant with eight 300,000kW generators, total operating capacity of 2.74 million kW and all are located in the demanding areas within Liaoning Province.

The Company and its subsidiaries will pay attention to the amendments of the regulation, proactively support and take part in the construction of a power market in Northeast China and ensure that all three of the Company's power plants in Liaoning Province can compete in a "fair" market environment. The Company is confident in maintaining its competitive advantage in this fair market.

Pursuant to the regulation, "Proposal of pilot activities in Eastern China power market", approximately 85% and 15% of power transactions will be confirmed through agreements and the bidding practice respectively in the first stage of this power market. The bidding practice is on a monthly basis with price setting at a day before spot market.

The Eastern China power market started the simulated operations on 18th May, 2004 and there were eight monthly simulated bidding rounds to date. From the results of these simulations, there are rooms for improvement. Simulated operations using price setting at a day before spot market should be ready by the second half of 2005.

The Company currently owns eight power plants, including 22 generators with operating capacity totaling 7.14 million kW which accounted for approximately 15% of total operating capacity in Eastern China. These power plants are mainly located in Jiangsu, Shanghai and Fujian where demand for electricity is relatively high and most of them are within the high loading centre. With high individual operating capacity, good functionalities, smaller head count and high quality management, these power plants will be more competitive under the centralized management and coordination of the Company.

Given that the bidding practice will only be partially implemented in the Eastern China power market and because of the fast growing electricity consumption in the region which is expected to continue to have a power shortage within the next two years according to a forecast, there should be no material impact on the Company upon the full implementation of a competitive bidding market.

# 5. Importance of both construction and acquisitions

In 2005, one of the focuses is to continuously and proactively work on construction projects to establish a strong foundation for the long term development of the Company. The Company will also proactively seek new acquisition opportunities to ensure the sustainable growth of profitability and shareholders' value.

## D. Performance of significant investments and their prospects

On 22th April, 2003, the Company acquired a 25% equity interest in SEG with a cash consideration of approximately RMB2.39 billion. This investment brought the Company and its subsidiaries a net profit of approximately RMB209 million in 2004 under IFRS. SEG is the largest power generation supplier in Shenzhen and its power plants are located in one of the prosperous provinces - Guangdong Province. With strong demand for electricity in that region, such an investment will bring stable returns to the Company and its subsidiaries in the future.

In July, 2004, the Company acquired 40% equity interest in the Hanfeng Power Company with a cash consideration of approximately RMB1.375 billion. This investment brought the Company and its subsidiaries a net profit of approximately RMB126 million in 2004 under IFRS. The Hanfeng Power Company is located in Hebei Province in Northern China and there is strong demand for electricity in that region. Through this acquisition, the Company and its subsidiaries increased the equity share of production capacity in Hebei Province from 1,300MW to 1,828MW or approximately 40.6%. The Company and its subsidiaries expect this investment will contribute stable returns in the future.

#### E. Employee benefits

As at 31st December, 2004, the Company and its subsidiaries had 22,129 employees. For the year ended 31st December, 2004, total staff costs incurred amounted to approximately RMB1.88 billion. The Company and its subsidiaries provided the employees competitive remuneration and pegged such remuneration to operating results as working incentives for the employees. Currently, the Company and its subsidiaries do not have any non-cash remuneration packages.

Based on the development plans of the Company and its subsidiaries and the requirements of individual positions, together with consideration of specific characteristic of individual employees, the Company and its subsidiaries tailor made various training programmes on management skills, technical skills and promotion skills. These programmes enhanced both the knowledge of the employees and the standards of operations.

## F. Related party transactions

The Company and its subsidiaries entered into various transactions with Huaneng Group, HIPDC and their group companies during daily operations, including operating leases on land use rights and property, electricity transmission and fuel purchases, etc. Such transactions were for daily operations at prices no different from transactions conducted with other third parties. Huaneng Group, HIPDC and the minority shareholders of subsidiaries of the Company have also committed or agreed through contracts to provide guarantees on loans of the Company and its subsidiaries.

In addition, pursuant to relevant agreements, the Company rendered management services to those power plants owned by Huaneng Group and HIPDC at a standard fee covering its costs and a reasonable profit. For the year ended 31st December, 2004, such transactions amounted to approximately RMB57.54 million which was below 1% of net operating revenue.

Please refer to Note 7 to the financial statements prepared under IFRS for details of related party transactions.

#### G. Guarantees on loans

As at 31st December, 2004, the Company provided guarantees on long-term bank borrowings of certain subsidiaries and an associated company totalling approximately RMB1.735 billion. These included guarantees granted to the Weihai Power Company, the Qinbei Power Company, the Yushe Power Company and the Rizhao Power Company amounting to RMB30 million, RMB740 million, RMB660 million and RMB305 million respectively. The Company had no contingent liabilities other than those described above.

As at 31st December, 2003, the Company succeeded the original loan guarantee granted by Shandong Huaneng Power Development Company Limited ("Shandong Huaneng") on the Weihai Power Company and the Rizhao Power Company and the original guarantee granted by Huaneng Group on the Taicang Power Company amounting to approximately RMB330 million, RMB339 million and RMB1.114 billion respectively. The Company also provided guarantees on long-term borrowings of the Huaiyin Power Company, the Qinbei Power Company and the Yushe Power Company amounting to approximately RMB10 million, RMB905 million and RMB101 million respectively. The Company had no contingent liabilities other than those described above.