# Management's Discussion and Analysis



### **RESULTS OF OPERATIONS**

Year Ended 31st December, 2001 Compared to Year Ended 31st December, 2000

### General

Since 1st January, 2001, former Shandong Huaneng owned Dezhou Power Plant (100% interest), Jining Power Plant (75% interest), Weihai Power Plant (60% interest) and Rizhao Power Plant (25.5% interest) have all been merged into the Company. Operating results of Dezhou Power Plant are combined into the Company, and those of Jining Power Plant and Weihai Power Plant are consolidated as controlled subsidiaries into the financial statements of the Company. Shandong Rizhao Power Plant's results are accounted for by using the equity method. The acquisition of Shandong Huaneng enables the Company to increase its total installed capacity to 10,813.5 MW from 8,700 MW, which enhanced the geographic advantage in business, increased the shares in the power market and made the Company in a better position in competition.

In 2001, the power sale of the Company and its controlling subsidiaries increased by 28.81% to 54.1053 billion KWh from 42.0079 billion KWh in 2000 (the total power generation will be 558.6

KWh, increased by 26.5% than last years, if the power generation of Jining, Weihai and Rizhao are calculated in according to the respective equity ratio). Accordingly, net operating revenues and net profit have bigger increase than the year 2000. In addition, due to the consistently strict control over the cost and expenses by the Company, the power sale cost per unit decreased 3.22% than 2000, despite of the price increase in the primary fuels.

Net Operating Revenues Net operating revenues increased 25.79% to Rmb15.7914 billion in 2001 from Rmb12.5533 billion in 2000.

The big increase in net operating revenues was primarily due to the business expansion following the acquisition of Shandong Huaneng. Among the original nine Power Plants in Dalian, Fuzhou, Shangan, Nantong, Shantou Coal-Fired, Shantou Oil-Fired, Dandong, Shanghai and Nanjing, the output of Nantong and Nanjing Power Plants in 2001 increased 13.35% and 5.19%, respectively, from those of 2000, the output of Shantou Oil-Fired Plant returned to recovery, and other six Power Plant's output decreased in different levels due to the weather conditions and more generating unit's being in operation in some regions, however, the total output of such nine Power Plants is approaching to the best level in history created last year.



Dalian Power Plant's net operating revenues decreased 7.39% to Rmb1.5065 billion in 2001 from 1.6266 billion in 2000. Under the increased competition in the Power market in the Liaoning region, Dalian Power Plant adopted flexible competition strategy and obtained more unplanned generation. Its power generation in 2001 is almost equal to that of 2000, which retained its market share. Although the settlement price of the unplanned generation is lower than the approved price, it is higher than the marginal cost, which made a marginal contribution. The total output of Dalian Power Plant in 2001 was 6.049 billion KWh, among which the sales through bidding process was 0.465 billion KWh, which was 7.69% of the total output, and the bidding revenues was Rmb80.8 million. The average tariff rate was Rmb291.38 per MWh, which declined 6.36% from Rmb311.16 per MWh in 2000.

Fuzhou Power Plant's net operating revenues declined 17.13% to Rmb1.634 billion from Rmb1.9717 billion in 2000. This decline was primarily due to the plentiful rainfall in 2001 in Fujian Province, which increased the hydro power, and the general decrease of generation of coalfired generating units within the grid. Due to this impact, the output of Fuzhou Power Plant decreased 11.77% in 2001 than that in 2000.

Fuzhou Power Plant's Phase I net operating revenue declined 9.21% to Rmb0.9115 million in 2001 from that of 2000. Fuzhou Power Plant Phase I's output declined 10.53% to 2.9831 billion KWh in 2001 from that of 2000. Fuzhou Power Plant's Phase II net operating revenues was Rmb722.5 million, 25.34% declined from that of 2000. Fuzhou Power Plant Phase II's total output in 2001 was 2.4208 billion KWh, 13.25% declined from that of 2000.

Shangan Power Plant's net operating revenues increased 1.12% to Rmb1.9561 billion in 2001 from Rmb1.9345 billion

in 2000. Shangan Power Plant's power generation in 2001 was relatively lower than that of 2000, which was the best in its history. Due to the enhancement of management, the output in 2001 increased 0.13% than that of 2000, in the meanwhile, Shangan Power Plant's weighted average tariff rate increased 0.99% to Rmb328.95 MWh from Rmb325.73 MWh in 2000, which increased the tariff rate revenues.

Shangan Power Plant Phase I's net operating revenues increased 0.19% to Rmb942.2 million in 2001 from Rmb940.5 million in 2000.

Shangan Power Plant Phase II's net operating revenues increased 2.00% to Rmb1.0139 billion in 2001 from Rmb994 million in 2000.

Nantong Power Plant's net operating revenues increased 11.47% to Rmb1.8598 billion in 2001 from Rmb1.6685 billion in 2000. The social power usage in Jiangsu Province increased rapidly in 2001, through which, Nantong Power Plant's total output increased 13.35% to 6.8435 billion KWh from that the 2000 (among which, the sales through bidding process was 684.4 billion KWh, which was 10.00% of the total output sold, and generated Rmb0.1072 billion revenues), therefore, the output revenues increased a lot. The weighted average tariff rate was Rmb318.38 per MWh, which declined 1.53% from Rmb323.33 per MWh in 2000. Shantou Oil-Fired Power Plant's net operating revenues increased 4.65% to Rmb99.5 million in 2001 from Rmb95.1 million in 2000. This is primarily due to the decrease of the oil price and the recovery of generation and output.

Shantou Coal-Fire Power Plant's net operating revenues declined 1.96% to Rmb1.4397 billion in 2001 from Rmb1.4685 billion in 2000. Shantou Coal-Fire Power Plant's power generation in 2001 was relatively lower than that in 2000. It benefited from the continuous economic development in Guangdong, its annual generation hours still reached 6,400 hours. The weighted average tariff rate per MWh was Rmb473.85.

Shanghai Power Plant's net operating revenues declined 1.87% to Rmb2.1612 billion in 2001 from Rmb2.2025 billion in 2000. The output was 7.0879 billion KWh, which declined 0.31% than that of 2000, among which sale through bidding process was 0.7786 billion KWh, which was 10.98% of the total output, and generated Rmb210.2 million revenues.

Dandong Power Plant's net operating revenues declined 13.57% to Rmb678.3 million in 2001 from Rmb784.8 million in 2000. The output was 2.6547 billion KWh, which declined 11.45% than the previous year, in which, sales through the bidding process were 0.4387 billion KWh, which was 16.53% of the total output sold, and generated Rmb76 million revenue.

Nanjing Power Plant's net operating revenues increased 2.82% to Rmb823.7 million in 2001 from Rmb801.1 million in 2000. The social power usage in Jiangsu Province increased rapidly in 2001, through which, Nanjing Power Plant's output increased 5.19% to 3.0271 billion KWh (in which, sales through bidding process were 0.4284 billion KWh, which was 14.15% of the total output). Subject to the impact of the tariff rate's decrease, Nanjing Power Plant's average tariff rate declined 2.17% to Rmb318.60 per MWh from Rmb325.68 per MWh in 2000. Dezhou Power Plant's net operating revenue was Rmb1.8842 billion in 2001. The total output was 6.4829 billion KWh, and the average tariff rate was Rmb340.33 per MWh.

The Company owns 75% interests in Jining Power Plant, and Jining Power Plant's net operating revenues was Rmb0.3997 billion. The total output was 1.7685 billion KWh, and the average tariff rate was Rmb267.31 per MWh.

The Company owns 60% interests in Weihai Power Plant, and Weihai Power Plant's net operating revenues was Rmb1.3486 billion in 2001. The total output was 4.0872 billion KWh, and the average tariff rate was Rmb390.72 per MWh.

Operating Expenses Total operating expenses of the Company and its subsidiaries increased 24.65% to Rmb10.7773 billion in 2001 from Rmb8.6464 billion in 2000. The increase resulted primarily from the business expansion following the acquisition of Shandong Huaneng, but the increase in total operating expenses was lower than the increase in the output, which indicated the synergy from the merger.

Fuel costs were the most significant operating expenses for the company and its subsidiaries, representing 47.76% of the total operating expenses and 32.60% of the net operating revenues, and the total was Rmb5.1474 billion in 2001. The cost of coal for all power plants excluding Shantou Oil-Fired Plant accounted for 98.6% of the total fuel cost in 2001. The remaining balance of total fuel costs represented cost of oil, which were largely consumed as the fuel by the Shantou Oil-Fired Plant. Due to the increase in coal Price, the original nine plants' weighted average unit price of natural coal increased 4.07% to Rmb229.90 per ton in 2001 from Rmb220.91 per ton in 2000. The unit fuel cost per MWh increased 4.81% to Rmb95.8 accordingly. The unit prices of Dezhou and Jining Power Plant's raw coal were relatively low, the average price of which were Rmb165.78 per ton in 2001 and Rmb169.65 per ton in 2001, and such price was far lower than the previous price level of the Company, therefore, the unit fuel costs following the merger, which was Rmb95.1 per MWh, were lower than the average level of the original nine Power Plant in 2001. Such situation also reflects the positive impact on the Company's integral business and competition advantages imposed by successful acquisition of Shandong Huaneng.

Maintenance expense The maintenance expense of the Company and its subsidiaries in 2001 (including the provision for major repairs and maintenance reserved on the basis of 1% of fixed asset value and expenses for ordinary repairs and maintenance) was Rmb0.7657 billion, in which the total expenses for the original nine Power Plant's and the Company's headquarter were Rmb0.6315 billion (including the provision for major repairs and maintenance reserved on the basis of 1% of fixed asset value and expenses for ordinary repairs and maintenance), and such expenses declined 5.89% from Rmb0.671 billion in 2000, which indicated the effectiveness of cost control. Maintenance expenses for the former Shandong Huaneng owned Dezhou Power Plant, Jining Power Plant and Weihai Power Plant as well as the management branch located in Jinan were totaled Rmb0.1343 billion (including actually consumed expenses for major repairs and maintenance as well as ordinary repair and maintenance).

Depreciation and amortization The depreciation of the Company and its subsidiaries in 2001 was Rmb3.2610 billion, among which the original nine Power Plants and the Company's headquarter were Rmb2.6660 billion. The former Shandong Huaneng owned Dezhou Power Plant, Jining Power Plant, Weihai Power Plant and the management branch located in Jinan were totaled Rmb0.595 billion.

Labor Costs Labor costs of the Company and its subsidiaries in 2001 was Rmb0.8071 billion, among which former Shandong Huaneng owned Dezhou Power Plant, Jining Power Plant, Weihai Power Plant and the management branch located at Jinan were totalled Rmb0.2465 billion. The total labor costs of the original nine Power Plants and the Company's headquarter were Rmb0.5606 billion, which declined 16.32% from Rmb0.6699 billion in 2000.



*Transmission fees* The transmission fees of the Company and its subsidiaries in 2001 were Rmb36.9 million, including handling fees levied on a per MWh basis for transmission services and an reimbursement for transmission fees consist of such fees incurred by the former Shandong Huaneng owned Dezhou Power Plant, Jining Power Plant and Weihai Power Plant, which had increased over the previous year.

The Service fee paid to HIPDC The service fee paid to HIPDC refers to a fee for the use of its transmission facilities (including grid connection facilities) based on reimbursement of cost plus an agreed-on profit. Pursuant to the Service Agreement dated 30th June, 1994 between the Company and HIPDC (the "Service Agreement"), HIPDC has agreed, among other things, to allow the Company to use its transmission and transformer facilities. The service fee payable to HIPDC for the use of transmission and transformer facilities is calculated on the basis of 10% of the current net fixed asset value of the transmission facilities. We entered into another service agreement in relation to the power transmission and transformer equipment of our new power plants on 4th December, 1997 (as amended by a supplemental letter dated 5th December, 1997) (collectively known as the "T&T Service Agreement") with HIPDC. According to this agreement, HIPDC agreed to allow our new power plants, expanded power plants or power plants acquired after 1st January, 1997 to use its transmission and transformer facilities for a fixed fee payable to HIPDC equal to 12% of the original book value of the assets of HIPDC's transmission and transformer facilities. Former Shandong Huaneng owned Dezhou Power Plant, Jining Power Plant and Weihai Power Plant are not required to pay such fees.

In 1998, HIPDC transferred the relevant transmission and transformer facilities in connection with Dalian, Dandong, Nantong and Nanjing Power Plants to Northwest Electric Power Group and Jiangsu Provincial Electric Power Corporation, as a result of which, these affected power plants were no longer required to pay service fees to HIPDC. Fuzhou Power Plant Phase II was not required to pay service fees to HIPDC because the transmission and transformer facility was directly invested by Fujian Provincial Electric Power Corporation. Fuzhou Power Plant Phase I, Shangan Power Plant, Shantou Oil-Fired Plant (HIPDC has transferred the ownership of transmission and transformation facilities in Shantou Oil-Fired Plant to Shantou Municipal Power Corporation in 2001, thus, commencing from 1st June, 2001, Shantou Oil-Fired Plant was not required to pay services fees to HIPDC), Shantou Power Plant and Shanghai Power Plant were still required to pay the service fees. The service fees paid to HIPDC was Rmb307.3 million in 2001, roughly equal to Rmb310.7 million in 1999.

Income Tax Pursuant to the relevant tax regulations, the Company is treated as a foreign invested joint venture, and enjoys the relevant tax waiver and reduction, which means the Company's income tax are exempted from PRC income tax for 2 years starting from the first profit-making year (after covering any accumulated deficits) followed by a 50% reduction of the applicable tax rate for the next 3 years. In addition, reorganized by the State Taxation Bureau, the original nine Power Plants pay their respective income tax to the local tax authorities. The total income tax paid by the former nine Power Plants and the Company's headquarter was Rmb451.5 million. After the acquisition of Shandong Huaneng, the management branch located in Jinan and Dezhou Power Plant located in Dezhou, Shandong may enjoy the preferential policies as a foreign investment company. After approved by the tax authority, their income tax rate has reduced to 17% from 33% in previous years. The foregoing two tax payable bodies' income tax in 2001 was Rmb166.8 million, which was approximately Rmb157 million decrease. Jining Power Plant's income tax in 2001 was Rmb18.9 million, while Weihai Power Plant's income tax in 2001 was Rmb78 million.

Other expenses Other expenses of the Company and its subsidiaries in 2001 was Rmb451.9 million, among which former Shandong Huaneng owned Dezhou Power Plant, Jining Power Plant and Weihai Power Plant and the management located in Jinan were totalled Rmb246.9 million. The original nine Power Plants and the Company's headquarter were totalled Rmb205 million, which declined 57.51% from Rmb482.5 million in 2000, which was primarily due to the Rmb247.3 million negative goodwill amortization by acquisition of Shandong Huaneng, which net off other expenses and the effectiveness of cost control. Other expenses include rent paid by the Company to HIPDC. Pursuant to the lease agreement dated 26th December, 2000 between the Company and HIPDC, HIPDC agrees to lease the new office building to the Company for five years and the annual rent is Rmb25 million. This Lease Agreement became effective as of 1st January, 2000.

Profit from operation The profit from operation of the Company and its subsidiaries increased 28.34% to Rmb5.014 billion in 2001 from Rmb3.9069 billion in 2000.

*Financial Expenses* The consolidated financial expenses of the Company and its subsidiaries in 2001 declined 18.74% to Rmb796 million from Rmb980 million in 2000. The interest expenses declined 15.33% to Rmb868 million from Rmb1.025 billion in 2000, primarily due to the decrease of the loan balance of the original nine Power Plant. The interest income increased 41.84% to Rmb113 million from Rmb80 million in 2000, primarily due to the plentiful surplus fund of Shandong Huaneng, which resulted in the increase of deposit interest income. The exchange loss in 2001 was Rmb42 million, which was slightly higher than Rmb35 million in 2000.



Net Profit The consolidated net profit of the Company and its subsidiaries increased 37.16% to Rmb3.4507 billion in 2001 from Rmb2.5158 billion in 2000. the increase was primarily due to the new profit sources provided by the acquisition of Shandong Huaneng, negative goodwill amortization by the acquisition and the decrease of the net financial expenses, which resulted that the increase level of net profit exceeds that of output sale and net sales income.

However, due to lack of power output, Dandong Power Plant's net loss increased 13.86% to Rmb201.5 million in 2001 from Rmb177 million in 2000. Shantou Fuel-Fire Plant's net loss decreased 13.98% to Rmb29 million from that of 2000.

## Comparison of key financial ratios

	31st Dece		31st December,
	2001		2000
The Comp	any and	The	
its sub	osidiaries	Company	The Company
Current ratio	1.21	1.21	1.42
Quick ratio	1.13	1.14	1.34
Debt to equity ratio	0.65	0.61	0.79
Multiples of interest earned	5.35	5.51	3.86

As the noteholders have the right to redeem the US\$230 million convertible notes of the principal amount together with the accrued interest in May 2002, the relevant liabilities have been classified as current liabilities as at 31st December, 2001. It leads to the decrease in current ratio and quick ratio when compared with last year.

However, after the acquisition of Shandong Huaneng, the overall repayment ability (multiples of interest earned) of the Company has improved. As at 31st December, 2001, cash and temporary cash investments of the Company and its subsidiaries amounted to approximately RMB8,397 million which were sufficient to meet the daily operating needs and to repay the principal and interest of matured liabilities.

The operating results in 2001 reflected that the successful acquisition of Shangdong Huaneng not only increased the production capacity of the Company, but also improved and strengthened its earning capability, which enhanced the competitive advantage of the Company.

On 15th and 16th November, 2001, 250 million new ordinary shares with par value of RMB1.00 each, in the form of A share, were issued to the public at RMB7.95 per A share. In addition, on 15th November, 2001, 100 million new domestic shares with par value of RMB1.00 each were issued to HIPDC at RMB7.95 each. The shareholders' equity of the Company increased accordingly. The Company early repaid part of its long-term loans using its surplus working capital. At the end of 2001, total liability of the Company and its subsidiaries was approximately Rmb18,513 million. The debt to equity ratio improved as compared with that in 2000.

As at 31st December, 2001, the balances of the foreign currency loans of the Company and its subsidiaries were US\$1,574 million (including US\$285 million liability component and put option of convertible notes) and SFRC3 million, of which US\$504 million and SFRC3 million will be due within one year. The Company and its subsidiaries will closely monitor fluctuations in the foreign exchange market and cautiously assess the exchange rate risk.

Most of the long-term loans of the Company and its subsidiaries are fixed-rate loans. As at 31st December, 2001, according to the original loan contracts, the balance of the floating-rate loans of the Company and its subsidiaries was RMB2,385 million. The Company and its subsidiaries made use of interest rate swap contracts to manage the risk of interest rate fluctuations (Please refer to notes 35 and 37 of the financial statements for details).

Calculation formular of the financial ratio:

Debt to equity ratio	=	Balance of the liabilities at the end of the period/balance of the shareholders' equity at the end of the period
Liquidity ratio	=	Balance of the current assets at the end of the period/ balance of the current liabilities at the end of the period
Quick ratio	=	(balance of the current assets at the end of the period - net amount of inventory at the end of the period)/balance of current liabilities at the end of the period
Multiples of interest earned	=	(profit before taxation + interest expenses) / interest expenditures

# **Dividend Payable**

The Board of Directors proposed a dividend of Rmb0.30 per ordinary share for the year ended 31st December, 2001, based on a resolution passed on 2nd March, 2001. The total dividend payable was Rmb1.8 billion. The proposal is subject to approval by the Shareholders' General Meeting.