

**华能国际电力股份有限公司**  
**HUANENG POWER INTERNATIONAL, INC.**



**Annual Report On Form 20-F**  
**2001**

As filed with the Securities and Exchange Commission on April 8, 2002

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**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**Form 20-F**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934  
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2001**

Commission file number: 1-13314

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**华能国际电力股份有限公司  
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.

| <u>Title of each class</u>  | <u>Name of each exchange<br/>on which registered</u> |
|---|--|
| Ordinary American Depositary Shares<br>Overseas Listed Foreign Shares of Rmb1.00 each | New York Stock Exchange<br>New York Stock Exchange*  |

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Securities registered or to be registered pursuant to Section 12(g) of the Act.

**NONE**

(Title of Class)

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

**NONE**

(Title of Class)

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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 . . . . . 4,500,000,000  
Overseas Listed Foreign Shares of Rmb1.00 each . . . . . 1,500,000,000

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 which financial statement item the registrant has elected to follow.

Item 17  Item 18

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\* 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, “HK\$” are to Hong Kong 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, 2001 of US\$1.00 to Rmb8.2766 (except for amounts relating to future expenditure under our capital expenditure program which use an exchange rate of US\$1.00 to Rmb8.7, the exchange rate utilized by us for planning purposes). 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 shares issued to domestic shareholders.

References to the “Company” include, unless the context requires otherwise, Huaneng Power International, Inc. and the operations of our power plants and our proposed 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 the “central government” refer to the national government of the PRC and its various ministries, agencies and commissions.

References to “Huaneng Group” are to China Huaneng Group Corporation.

References to “local governments” in the PRC include 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 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 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

|                            |   |
|----------------------------|---|
| <b>actual generation</b>   | The total amount of electricity generated by a power plant over a given period of time.   |
| <b>auxiliary power</b>     | Electricity consumed by a power plant in the course of generation.  |
| <b>availability factor</b> | 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.   |
| <b>available hours</b>     | 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. |
| <b>capacity factor</b>     | 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.    |
| <b>demand</b>              | For an integrated power system, the amount of power demanded by consumers of energy at any point in time.   |
| <b>dispatch</b>            | 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.            |
| <b>excess output</b>       | The amount by which the total output of a power plant in a particular year exceeds its planned output for such year.  |
| <b>GW</b>                  | Gigawatt. One million kilowatts.  |
| <b>GWh</b>                 | Gigawatt-hour. One million kilowatt-hours. GWh is typically used as a measure for the annual energy production of large power plants.   |
| <b>installed capacity</b>  | The manufacturers' rated power output of a generating unit or a power plant, usually denominated in MW.   |
| <b>kV</b>                  | Kilovolt. One thousand volts.   |
| <b>kW</b>                  | Kilowatt. One thousand watts.   |
| <b>kWh</b>                 | 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.                                      |
| <b>MVA</b>                 | Million volt-amperes. A unit of measure used to express the capacity of electrical transmission equipment such as transformers.   |

|                            |  |
|----------------------------|--|
| <b>MW</b>                  | Megawatt. One million watts. The installed capacity of power plants is generally expressed in MW.  |
| <b>MWh</b>                 | Megawatt-hour. One thousand kilowatt-hours.  |
| <b>Net Fixed Assets</b>    | The annual average of the book value of our fixed assets (less accumulated depreciation) and construction work in progress, each as determined in accordance with PRC statutory accounting principles. |
| <b>peak load</b>           | The maximum demand on a power plant or power system during a specific period of time.  |
| <b>planned generation</b>  | An annually determined target gross generation level for each of our operating power plants used as the basis for determining planned output.  |
| <b>total output</b>        | The actual amount of electricity sold by a power plant in a particular year, which equals total generation less auxiliary power.   |
| <b>transmission losses</b> | Electric energy that is lost in transmission lines and therefore is unavailable for use.   |

## PART I

### Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

### Item 2. Offer Statistics and Expected Timetable

Not applicable.

### Item 3. Key Information

#### Selected financial data

Consolidated balance sheet data of the Company and its subsidiaries as of December 31, 2001 and the consolidated income statement and cash flow data for the year then ended, and balance sheet data of the Company as of December 31, 2000, 1999, 1998 and 1997 and income statement and cash flow data for each of the years in the four-year period ended December 31, 2000, are derived from the historical financial statements. The Selected Financial Data should be read in conjunction with the 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”) which differ from United States generally accepted accounting principles (“US GAAP”). The differences between IFRS and US GAAP that would have had a significant impact on the net income for each of the years in the three-year period ended December 31, 2001 and the equity as of December 31, 2000 and 2001 are set forth in Note 39 to the Financial Statements. The Selected Financial Data may not be indicative of future earnings, cash flows or financial position.

|  | Year Ended December 31, |                  |                  |                  |                  |                       |
|--|-------------------------|------------------|------------------|------------------|------------------|-----------------------|
|  | 1997                    | 1998             | 1999             | 2000             | 2001             | 2001                  |
|  | (Rmb)                   | (Rmb)            | (Rmb)            | (Rmb)            | (Rmb)            | (US\$) <sup>(1)</sup> |
| <i>Rmb and US dollars in thousands<br/>except per share data</i> |                         |                  |                  |                  |                  |                       |
| <b>Income Statement Data</b>                                     |                         |                  |                  |                  |                  |                       |
| <b>IFRS</b>  |                         |                  |                  |                  |                  |                       |
| Operating revenue, net . . . . .                                 | 6,739,765               | 8,082,496        | 10,488,158       | 12,553,254       | 15,791,362       | 1,907,953             |
| Operating expenses . . . . .                                     | (4,870,805)             | (5,398,607)      | (7,508,172)      | (8,646,356)      | (10,777,328)     | (1,302,143)           |
| Profit from operation . . . . .                                  | 1,868,960               | 2,683,889        | 2,979,986        | 3,906,898        | 5,014,034        | 605,810               |
| Total financial income (expenses) . .                            | 174,768                 | (474,383)        | (727,256)        | (979,866)        | (796,215)        | (96,200)              |
| Gain from disposal of investments . .                            | —                       | —                | —                | —                | 24,671           | 2,981                 |
| Share of loss of an associate . . . . .                          | —                       | —                | —                | —                | (5,381)          | (650)                 |
| Profit before taxation . . . . .                                 | 2,043,728               | 2,209,506        | 2,252,730        | 2,927,032        | 4,237,109        | 511,941               |
| Taxation . . . . .   | (381,720)               | (370,995)        | (384,555)        | (411,202)        | (715,220)        | (86,415)              |
| Minority interests . . . . .                                     | —                       | —                | —                | —                | (71,231)         | (8,606)               |
| Net profit . . . . .   | <u>1,662,008</u>        | <u>1,838,511</u> | <u>1,868,175</u> | <u>2,515,830</u> | <u>3,450,658</u> | <u>416,920</u>        |
| Basic earnings per share . . . . .                               | 0.33                    | 0.33             | 0.33             | 0.45             | 0.61             | 0.07                  |
| Fully diluted earnings per share . . . .                         | 0.32                    | 0.33             | N/A              | 0.44             | 0.60             | 0.07                  |
| <b>US GAAP</b>   |                         |                  |                  |                  |                  |                       |
| Operating revenue, net . . . . .                                 | 6,739,765               | 8,082,496        | 10,488,158       | 12,553,254       | 15,791,362       | 1,907,953             |
| Net profit . . . . .   | 1,662,008               | 1,838,511        | 1,868,175        | 2,489,678        | 3,337,415        | 403,235               |
| Basic earnings per share . . . . .                               | 0.33                    | 0.33             | 0.33             | 0.44             | 0.59             | 0.07                  |
| Fully diluted earnings per share . . . .                         | 0.32                    | 0.33             | N/A              | 0.44             | 0.58             | 0.07                  |

|   | Year Ended December 31, |                   |                   |                   |                   |                       |
|---|-------------------------|-------------------|-------------------|-------------------|-------------------|-----------------------|
|   | 1997                    | 1998              | 1999              | 2000              | 2001              | 2001                  |
|   | (Rmb)                   | (Rmb)             | (Rmb)             | (Rmb)             | (Rmb)             | (US\$) <sup>(1)</sup> |
| <i>Rmb and US dollars in thousands<br/>except per share data</i>      |                         |                   |                   |                   |                   |                       |
| <b>Cash Flow Data</b>   |                         |                   |                   |                   |                   |                       |
| <b>IFRS and US GAAP</b>   |                         |                   |                   |                   |                   |                       |
| Depreciation . . . . .  | 1,096,633               | 1,517,444         | 2,380,651         | 2,654,413         | 3,261,001         | 394,002               |
| Drawdown of short-term bank loans . . . . .                           | 1,177,096               | 172,000           | 142,000           | 1,511,000         | 1,300,000         | 157,069               |
| Repayment of short-term bank loans . . . . .                          | 1,365,680               | 904,096           | 419,000           | 261,000           | 2,560,000         | 309,306               |
| Drawdown of long-term loans . . . . .                                 | 7,171,607               | 3,647,945         | 1,069,853         | 165,215           | 1,604,100         | 193,811               |
| Repayment of long-term loans . . . . .                                | 7,624,873               | 2,330,545         | 2,405,488         | 1,737,382         | 3,017,438         | 364,575               |
| Net proceeds from issuance of<br>Domestic Shares . . . . .            | —                       | —                 | —                 | —                 | 2,770,058         | 334,685               |
| Addition to property, plant<br>and equipment . . . . .                | 6,846,907               | 6,457,432         | 2,274,342         | 351,966           | 2,870,858         | 346,864               |
| Net cash inflow from the acquisition<br>of Shandong Huaneng . . . . . | —                       | —                 | —                 | —                 | 2,635,695         | 318,451               |
| <b>As of December 31,</b>   |                         |                   |                   |                   |                   |                       |
|   | 1997                    | 1998              | 1999              | 2000              | 2001              | 2001                  |
|   | (Rmb)                   | (Rmb)             | (Rmb)             | (Rmb)             | (Rmb)             | (US\$) <sup>(1)</sup> |
| <i>Rmb and US dollars in thousands<br/>except per share data</i>      |                         |                   |                   |                   |                   |                       |
| <b>Balance Sheet Data</b>   |                         |                   |                   |                   |                   |                       |
| <b>IFRS</b>   |                         |                   |                   |                   |                   |                       |
| Current assets . . . . .  | 7,960,456               | 5,709,831         | 5,866,082         | 10,061,689        | 10,763,919        | 1,300,524             |
| Property, plant and equipment, net<br>and land use rights . . . . .   | 27,400,770              | 32,315,351        | 34,603,329        | 32,219,595        | 38,344,245        | 4,632,850             |
| Investment in an associate . . . . .                                  | —                       | —                 | —                 | —                 | 226,488           | 27,365                |
| Other long-term assets . . . . .                                      | 128,134                 | 116,529           | 113,319           | 185,664           | 183,628           | 22,186                |
| Negative goodwill . . . . .   | —                       | —                 | —                 | —                 | (2,225,505)       | (268,891)             |
| Total assets . . . . .  | <u>35,489,360</u>       | <u>38,141,711</u> | <u>40,582,730</u> | <u>42,466,948</u> | <u>47,292,775</u> | <u>5,714,034</u>      |
| Current liabilities . . . . .   | 7,789,539               | 4,102,009         | 6,237,140         | 7,070,603         | 8,922,347         | 1,078,019             |
| Long-term liabilities . . . . .                                       | 12,186,220              | 13,683,472        | 12,573,185        | 11,616,610        | 9,590,637         | 1,158,766             |
| Minority Interests . . . . .  | —                       | —                 | —                 | —                 | 486,261           | 58,751                |
| Shareholders' equity . . . . .  | <u>15,513,601</u>       | <u>20,356,230</u> | <u>21,772,405</u> | <u>23,779,735</u> | <u>28,293,530</u> | <u>3,418,498</u>      |
| Total liabilities and equity . . . . .                                | <u>35,489,360</u>       | <u>38,141,711</u> | <u>40,582,730</u> | <u>42,466,948</u> | <u>47,292,775</u> | <u>5,714,034</u>      |
| <b>US GAAP</b>  |                         |                   |                   |                   |                   |                       |
| Total assets . . . . .  | 35,489,360              | 38,141,711        | 40,582,730        | 42,466,948        | 48,068,606        | 5,807,772             |
| Total liabilities . . . . .   | (20,486,265)            | (18,295,987)      | (19,320,831)      | (19,197,719)      | (18,559,569)      | (2,242,415)           |
| Minority interests . . . . .  | —                       | —                 | —                 | —                 | (486,261)         | (58,751)              |
| Shareholders' equity . . . . .  | <u>15,003,095</u>       | <u>19,845,724</u> | <u>21,261,899</u> | <u>23,269,229</u> | <u>29,022,776</u> | <u>3,506,606</u>      |
| <b>Other Financial Data</b>   |                         |                   |                   |                   |                   |                       |
| <b>IFRS and US GAAP</b>   |                         |                   |                   |                   |                   |                       |
| Proposed dividend per share . . . . .                                 | —                       | 0.08              | 0.09              | 0.22              | 0.30              | 0.04                  |
| Number of ordinary shares ('000) . . . . .                            | 5,000,000               | 5,650,000         | 5,650,000         | 5,650,000         | 6,000,000         | 6,000,000             |

(1) The US dollar data has been translated from Rmb solely for convenience at the PBOC Rate on December 31, 2001 of US\$1.00 to Rmb8.2766.



## **Capitalization and indebtedness**

Not applicable.

## **Reasons for the offer and use of proceeds**

Not applicable.

## **Risk factors**

### ***Risks relating to our business and the PRC's power industry***

*Government regulation of power rates and other aspects of the power industry may negatively affect our business*

Similar to electric power companies in other countries, we are subject to governmental and electric power grid regulations in virtually all aspects of our operations, including the amount and timing of electricity generation, the setting of power rates, performance of scheduled maintenance and compliance with power grid control and dispatch directives. There can be no assurance that these regulations will not change in the future in a manner which could adversely affect our operations. Since 1995, we have charged and collected power rates that were designed to enable us to recover all operating and debt service costs and to earn a fixed return on our Net Fixed Assets. However, there can be no assurance that there will not be any change in the implementation of the principles of setting power rates that could materially adversely affect our operations. In addition, the PRC government started in 1999 to experiment with a program to effect power sales through a bidding process in some of the provinces we operate our power plants. The power rates for power sold by this bidding process are generally lower than the approved power rates for planned output. Although the power sales through the bidding process in the last three years constituted only a small fraction of our total output, it is expected that the government will expand the program in 2002. And if the PRC government chooses to expand the bidding program, the power rates and the revenues of some of our power plants may be adversely affected.

*If our power plants receive less despatching than Planned Generation, the power plant 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 centers of the local power corporations.

The dispatch of electric power generated by a power plant is controlled by the Dispatch Center of the applicable power corporations pursuant to a dispatch agreement with us and to governmental dispatch regulations adopted in 1993. Because many of the power plants in the markets in which we sell electric power are associated with the power corporations, no assurance can be given that the Dispatch Centers, which are under the jurisdiction of the power corporations, will not give preferential dispatch to the power plants associated with such power corporations. A reduction by the Dispatch Center 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 bias in the past.

*Uncertainty regarding the power industry reform may negatively affect our business*

PRC government has indicated on numerous occasions to speed up the reform of the power industry with the ultimate goal to create a more open and fair power market. Broad measures of the reform include separating the administrative functions from the enterprises in the power market, splitting the power industry into two separate generating industry and power transmission and utility industry, experimenting new power

sales mechanism including power bidding practices. It is uncertain how this reform is going to be implemented and how it will impact our business and we may face enhanced competition as the reform is being carried out.

*We are effectively controlled by HIPDC, whose interest may differ from those of our other shareholders*

HIPDC, as our controlling shareholder, together with other local government investment companies, is able to elect the entire board of directors. HIPDC's interests may sometimes conflict with those of our other minority shareholders. There is no assurance that HIPDC will always vote its shares, or direct the directors nominated by it to act, in a way that will benefit our other minority shareholders.

*Disruption in Fuel supply and its transportation may negatively affect the normal operation of our power plants*

We have obtained our coal and oil supplies for our power plants through a combination of purchases pursuant to allocations coordinated under the state guidance and purchases on the open market. At the same time, we have also enjoyed priority access pursuant to PRC Government allocations to transportation services required to transport our coal and oil supplies. PRC Government allocations help to assure priority in the receipt of certain limited resources, sometimes at regulated prices. Although we have received sufficient and timely allocations of fuel supply and transportation services for our operations and have not experienced shutdowns or reduced electricity generation caused by inadequate fuel supply or transportation services, there can be no assurance that the system of PRC Government allocations which ensures priority access by the major power plants to coal, oil and transportation will continue in the future, that we will continue to obtain allocations to match our operation requirements or that the loss of priority access through PRC Government allocations will not, in the event of national supply shortfalls, 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 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 the loss of revenues. The failure to complete construction according to specifications may result in liabilities and 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 or other parties. The timing and the likelihood of the consummation of any such acquisition will depend, among other things, on our ability to obtain financing and relevant PRC Government approvals and to negotiate relevant agreements.

*Substantial capital is required for investing in or acquiring new power plants and the failure to obtain capital on reasonable commercial terms will increase our financing cost and cause delay in our expansion plans*

An important component of our growth strategy is to acquire operating power plants and related development rights from HIPDC or other companies on commercially reasonable terms. Our ability to arrange financing and the cost of such financing are dependent 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. 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 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 plant's ordinary operation is interrupted*

The operation of power plants involves many risks and hazards, including the breakdown, failure or substandard performance of equipment, the 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. We maintain insurance typical in the electric power industry in China 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, we do not currently carry any business interruption insurance or, except for third party liability insurance coverage for accidents during capital construction and equipment installation and other types of assets insurances, any third party liability insurance to cover claims in respect of bodily injury or property or environmental 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 the compliance 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- and oil-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. 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 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 such as the PRC under the Climate Change Convention, and the PRC has objected to any imposition of such ceilings. 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.

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

As a power producer operating only 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 repair and maintenance, and (iii) pay out dividend to our overseas shareholders. Although China has had a stable foreign exchange rate for Renminbi for the last several years, there is no assurance that there will not be a significant devaluation of Renminbi in the future. And if there is such a devaluation, our debt servicing cost will increase and the return to our overseas investors may decrease.

*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***

*PRC economic, political and social conditions as well as government policies could significantly affect our business*

All 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 rates for our power plants, changes in the usage and costs of state controlled transportation services, and 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 precedent presidential value. 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 precedence force, interpretation and enforcement of these laws and regulations involve significant uncertainties. In addition, as the PRC legal system develops, we cannot assure that changes in such laws and regulations, their interpretation or their enforcement will not have a material adverse effect on our business operations.

Although China has promulgated the Electric Power Law, the government is still studying how to implement the reforms in power industry as exhorted in the Electric Power Law. There is no assurance that any future regulations will not adversely affect our business.

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 reducing 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.

#### **Matters relating to our accountants**

On March 28, 2002, our Board of Directors decided to no longer engage Arthur Andersen & Co. and its PRC partner ("Arthur Andersen" or "AA") as our independent public accountants and engaged PricewaterhouseCoopers and its PRC partner ("PWC") to serve as our independent public accountants for the fiscal year 2002. The appointment of PWC is subject to shareholder ratification at our 2001 Annual Meeting of Shareholders.

Arthur Andersen's reports on our financial statements for each of the years ended 2001, 2000 and 1999 did not contain any adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles.

During the years ended December 31, 2001, 2000 and 1999 and through the date hereof, there were no disagreements with Arthur Andersen on any matter of accounting principle or practice, financial statement disclosure, or auditing scope or procedure which, if not resolved to AA's satisfaction, would have caused them to make reference to the subject matter in connection with their report on our financial statements for such years.

#### **Legal proceedings**

We are not a defendant in any material litigation or arbitration and no litigation or claim of material importance is known to us or any member of the Board of Directors of us to be pending or threatened against us.

#### **Item 4. Information on the Company**

##### **History and development of the Company**

We were established in June 1994 as a company limited by shares organized under the laws of the People's Republic of China. We are a power producer, committed to serving China's growing demand for electricity by developing, constructing, managing and operating large thermal power plants throughout China. We place equal emphasis on acquiring existing power plants and developing new power plants to achieve our business and development strategy.

In January 2001, we completed a Rmb5.768 billion acquisition of Shandong Huaneng Power Development Co., Ltd. (“Shandong Huaneng”). The acquisition added 2,113.5 MW to our generation capacity, bringing the total generation capacity to 10,813.5 MW. We now own (entirely or in part) thirteen power plants, and we believe that we are the largest independent power producer in China and one of the largest such producers in the world.

On November 15 and 16, 2001, we issued successfully a total of 350,000,000 A shares in the PRC, of which 250,000,000 public shares were issued to strategic investors and securities investment funds subscribed offline and to public investors subscribed online, both through the book building process. At the same time, the 100,000,000 state-owned legal person shares were placed to HIPDC at the same price. The issue price of A shares was fixed at Rmb7.95 per A share and the proceeds of A shares issue was Rmb2.78 billion. On December 6, 2001, our A shares listed on Shanghai Stock Exchange successfully and the trading of the shares commenced. The stock abbreviation is “Huaneng Power”, with stock code 600011. Our target of listing in New York, Hong Kong and Shanghai has been realised.

The listing of A shares further improved our capital structure and opened up a new financing channel in the domestic capital market, thereby creating favourable conditions for our future development.

At present, our total share capital is 6,000,000,000 shares.

## **Business overview**

We are China’s leading independent power producer based on the total generation capacity of 10,813.5 MW attributable to our ownership. To maintain this leadership position among independent power producers and to enhance shareholder value, we will focus on more efficient operation of our current power plants and aggressively pursue our development strategy. Our development strategy will emphasize both acquisition and development, which includes both construction of greenfield and expansion plants, utilizing both coal-fuel and other types of fuel plants. We will also 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.

Our power plants are in six of China’s coastal provinces: Liaoning, Hebei, Shandong, Fujian, Jiangsu and Guangdong, and in Shanghai Municipality, the largest financial and commercial center in mainland China. We also have plans to build 5,790 MW generation capacity in the same areas. We believe that these areas present greater potential for increasing demand for electricity and enjoy the most favorable conditions for running power plants.

Twelve of our power plants are coal-fired. Three of them, Dalian, Nantong, Fuzhou Power Plants each has a generation capacity of 1,400 MW. Shangan Power Plant has a generation capacity of 1,300 MW. Dandong Power Plant has a generation capacity of 700 MW. Shantou and Nanjing Power Plants each has an aggregate generation capacity of 600 MW. Shanghai Power Plant has a generation capacity of 1,200MW consisting of two supercritical generating units. Our only oil-fired power plant, Shantou Oil-Fired Power Plant, has a generation capacity of 100 MW. Among the power plants acquired as a result of the merger with Shandong Huaneng, Dezhou Power Plant has a generation capacity of 1,200 MW; Weihai Power Plant has a generation capacity of 850 MW, of which we have 60% proportionate interest; Jining Power Plant has a generation capacity of 300 MW, of which we have 75% of proportionate interest, Rizhou Power Plant has a generation capacity of 700 MW, of which we hold 25.5% of proportionate interest.

In 2001, our power plants had an average availability factor of 92.18% and an average capacity factor of 58.97%.

Within HIPDC, we are the exclusive developer of all greenfield coal-fired power plants and other types of fuel plants in China which we may wish to develop. HIPDC has also undertaken that it will not compete with us in the power development business in China.

With respect to Huaneng Group, we have a preferential right to purchase interest in existing power plants owned by Huaneng Group and the right of first refusal on all its future power development projects that we may realistically develop.

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 acquisition of the Shanghai Power Plant, Nanjing Power Plant and Shandong Huaneng 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. We will, in particular, focus on acquiring or developing base load power plants of large sizes due to their higher output, higher efficiency, environmental friendliness, and better contribution to power system stability.

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, so as to hedge against fluctuations in fuel price and increase competitiveness in the power market.

We will also aim to further improve our capital structure, in particular to reduce the proportion of our foreign currency denominated debt when acquiring or developing new projects.

### ***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 development and constructing power plants, we have been able to identify promising power plant projects and to secure all required PRC Government approvals relatively quickly.

### ***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 rates. 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***

Since March of 1998, the State Development Planning Commission has inherited the governmental functions and responsibilities of the former State Planning Commission. At present, any project proposal and supporting documents for new power plants must first be submitted to the State Power Corporation and the State Development Planning Commission for approval and then be submitted to the State Council.

Joint venture power projects are subject to additional governmental approvals. Approval by Ministry of Foreign Trade and Economic Cooperation ("MOFTEC") is also required when foreign investment is involved.

### *Permits and Contracts*

In developing a new power plant, we and third parties obtain permits required before commencement of the project. Such permits include operating licenses and similar approvals related to plant siting, 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*

On April 1, 1996, the central government reduced the “General Level” of China’s import duties to 23%. Along with the change in import duties, preferential import duty treatment, including exemptions and reductions, for equipment and raw materials imported by FIEs were eliminated. As the Power Plants were acquired from HIPDC, which is an FIE, we had enjoyed duty-free treatment of equipment imported for the Power Plants. Under the new regulations, equipment and raw materials imported by FIEs may continue to enjoy duty-free treatment if the relevant project was approved before April 1, 1996. In October, 1997 the central government lowered the general level of China’s import duties to 17%. Any import duties will be reflected in adjustments to our power rates under the Pricing Policy and the Electric Power Law. In addition, the central government in 1998 reinstated the import-duty exemption policy for equipment imported by FIEs that invested in projects encouraged by the central government under the Catalogue for the Guidance of Foreign Investment Industries. In addition, China’s entry to WTO will bring its import tariff to a level consistent with the average level of all WTO members.

### *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 structures 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, the contractor delivers the unit to us, at which time the unit may enter into commercial operation.

### *Pricing policy*

Because we were established to develop power plants using advanced equipment and technology financed with foreign and domestic loans, our power rates, under the authority of State Council Document 72, were initially designed to ensure recovery of all production and financing costs and yield a profit of Rmb40 to Rmb50 per MWh during the period when such loans were outstanding.



On June 6, 1994, the former Ministry of Electric Power (MEP) announced the Pricing Policy applicable to us. The Pricing Policy specifies that our power rates should be determined with reference to international principles and methods for setting power rates based upon the return on net fixed assets methodology to which international investors are accustomed.

While we anticipate that we will consistently generate a profitable return and recover our costs under the existing Pricing Policy, there is no assurance that the government agencies will approve our proposed power rates in accordance with the Pricing Policy. We have received power rates that delivered a return below the permitted 15% return on the Net Fixed Assets in the last several years. The Electric Power Law, which came into effect in 1997, has provided the general principles for determining power rates in the future. The power rate granted to a power producer shall be formulated to provide reasonable compensation for costs as well as a reasonable return, to share expenses fairly and to promote the construction of power projects.

As an important element of China's power industry reform, power bidding is being experimented in some regions, including Shanghai, Liaoning, Shandong and Jiangsu, where some of our power plants are located. Under the current bidding practice, about 10% of expected annual planned generation is designated for bidding sales. In 2001, we sold 5.17% of our total output through the power bidding program. Usually the power rate determined under the bidding practice is lower than the power rate for planned generation, primarily because the competitive bidding drives down the prices. We believe, however, that the output subject to the bidding practice represents only a small portion of our total output and power rate applicable to this portion is calculated to enable the power plants to at least recover variable costs, part of fixed costs and also produce some profit. For our planned generation, the power rate is still determined on a basis which permits us to recover all the operating costs plus a margin of profit. Moreover, our management is closely monitoring and taking effort to minimize the potential impact of the bidding practice on our operating results. We also believe that our highly efficient power plants are competitive in a more open, orderly and fair power market.

### ***Power sales***

Set forth below is a summary of the agreements under which our wholly owned power plants sell power to the local power companies.

We had entered into agency sales agreements (each, an "Agency Sales Agreement") with the respective Power Corporations that managed the grids connecting the Dalian, Fuzhou, Nantong and Shangan Power Plants and Shantou Oil-Fired Plant when we were established in 1994. Under each Agency Sales Agreement, the relevant Power Corporation agreed to sell, as agent, electricity for the relevant power plant. Each Agency Sales Agreement provided for the Power Corporation to transmit electricity to customers and collect and remit payment for such electricity at the power rates applicable to the relevant power plant.

We entered into the Power Purchase Agreements (the "Dalian PPA" and "Dandong PPA") with the Northeast Electric Power Group with respect to our Dalian and Dandong Power Plants on July 14, 1998. The Dalian and Dandong PPAs covers the generation from both Phase I and Phase II of the Dalian Power Plant and the Dandong Power Plant and is for a term of five years. The Dalian and Dandong PPA provide that the annual utilization hours of the Dalian and Dandong Power Plants will be determined according to the average annual utilization hours of the similar generating units connected to the same grid. Dalian Power Plant adopted on-grid power rate on January 1, 1998. Dandong Power Plant adopted on-grid power rate since commencement of commercial operation.

Fuzhou Power Plant adopted on-grid power rate in 1999 and the Agency Sales Agreement for Fuzhou Power Plant remained in effect. We, however, entered into Power Purchase Agreements for Phase I and Phase II in January, 2000 and June 1999 respectively with Fujian Power Corporation, which would set the annual generation on the basis of the utilization hours of the comparable generating units in the province.

With respect to Nantong Power Plant, we entered into a new Power Purchase and Sales Agreement (the “Nantong PPA”) with the Jiangsu Provincial Power Company (“Jiangsu Power”). The Nantong PPA became effective as of January 1, 1999 and would expire on December 31, 2003. The Nantong PPA provides that the annual utilization hours of Nantong Power Plant would be determined in accordance with the average annual utilization hours of all the similar generating units connecting to the grid. Nantong Power Plant adopted on-grid power rate in 1996.

The original Agency Sales Agreement for the Shangan Power Plant was revised in 1995. The revised Agency Sales Agreement provided that generation at the Shangan Power Plant would be determined in accordance with the demand of the grid in any particular year. The revised Agency Sales Agreement was further revised in August 1997 so that the same agreement would govern the power sales from Shangan Power Plant Phase II. We entered into a Power Purchase and Sales Agreement with Hebei Provincial Power Company in September, 2000 to replace the Agency Sales Agreement.

With respect to Shantou Oil-fired Power Plant, the Agency Sales Agreement, which was entered into in October 1994 and for a term of 20 years, remains effective currently.

Shantou Power Plant entered into a power purchase agreement and dispatch and grid interconnection management agreement (the “Shantou Power Agreement”) with the Guangdong Provincial Power Company. The Shantou Power Agreement have no expiration date and provide that the generation of Shantou Power Plant, in principal, is 33 GWh annually. Shantou Power Plant has been using on-grid power rate since its commencement of commercial operation.

We acquired Shanghai Power Plant in 1997 from HIPDC. Pursuant to the Shanghai Management Agreement, Shanghai Power Plant has been under the management of Shanghai Municipality Power Corporation (“SMPC”). The services provided by SMPC included selling the electricity generated by the Shanghai Power Plant and collecting payment on behalf of Shanghai Power Plant. In 2001, we terminated the Shanghai Management Agreement with SMPC and took over the management of Shanghai Power Plant. The power sale will be made in accordance with annual power purchase agreement with SMPC as well as through the power bidding process.

We acquired Nanjing Power Plant in 1999 from HIPDC and Nanjing Investment Company. Pursuant to the Power Sales Agreement, Jiangsu Provincial Power Corporation is responsible for selling the electricity generated by the Nanjing Power Plant. The amount of annual planned generation is determined on the basis of the average capacity factor of comparable generating units in Jiangsu Province. On January 1, 1998, Nanjing Power Plant adopted on-grid power rate.

Dezhou Power Plant’s power sale is made in accordance with an On-Grid Agreement between the former Shangdong Huaneng Power Development Co., Ltd. and Shangdong Provincial Power Company dated as of May 30, 1994. The term of that agreement is 30 years.

In addition, a small percentage of power output of Dalian, Dandong, Shanghai, Nanjing and Nantong Power Plants were sold through the power bidding process.

The following table sets forth the average rates of the power plants which we operate, for each of the five years ended December 31, 2001 and the planned output rate for 2001 and 2002.

|                               | 1997                        | 1998                        | 1999                        | 2000                        | 2001                        |                       | 2002                  |
|-------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------|-----------------------|
|                               | Average Rate <sup>(1)</sup> | Average Rate <sup>(1)</sup> | Average Rate <sup>(1)</sup> | Average Rate <sup>(1)</sup> | Average Rate <sup>(1)</sup> | Approved Rate         | Approved Rate         |
| <b>Dalian Power Plant</b>     |                             |                             |                             |                             |                             |                       |                       |
| Phase I .....                 | 401.69                      | 328.75 <sup>(3)</sup>       | 331.69                      | 316.53                      | 291.38                      | 321                   | 321                   |
| Phase II .....                | —                           | —                           | 303.97                      | 305.42                      |                             |                       |                       |
| <b>Fuzhou Power Plant</b>     |                             |                             |                             |                             |                             |                       |                       |
| Phase I .....                 | 449.10                      | 433.74                      | 339.52                      | 353.40                      | 357.50                      | 362.3                 | 378.2 <sup>(6)</sup>  |
| Phase II .....                | —                           | —                           | 500.00                      | 405.35                      | 349.18                      | 394                   |                       |
| <b>Nantong Power Plant</b>    |                             |                             |                             |                             |                             |                       |                       |
| Phase I .....                 | 338.87 <sup>(2)</sup>       | 337.07 <sup>(2)</sup>       | 336.17                      | 323.71                      | 318.38                      | 334.57                | 334.57                |
| Phase II .....                | —                           | —                           | 288.66                      | 323.71                      |                             |                       |                       |
| <b>Shangan Power Plant</b>    |                             |                             |                             |                             |                             |                       |                       |
| Phase I .....                 | 372.68                      | 346.08 <sup>(4)</sup>       | 298.73                      | 283.30                      | 292.71                      | 307                   | 334.00 <sup>(5)</sup> |
| Phase II .....                | 553.00                      | 372.78 <sup>(4)</sup>       | 306.33                      | 379.50                      | 371.73                      | 432                   |                       |
| Shantou Oil-Fired Plant ..... | 676.20                      | 676.20                      | 597.51                      | 669.77                      | 618.24                      | 594.39                | 594.39                |
| Shantou Power Plant .....     | 473.85                      | 473.61                      | 473.85                      | 473.85                      | 473.85                      | 473.85                | 473.85                |
| Shanghai Power Plant .....    | 332.18                      | 354.20                      | 358.46                      | 362.44                      | 356.76                      | 375.86                | 375.86                |
| Dandong Power Plant .....     | —                           | —                           | 309.70                      | 306.27                      | 298.93                      | 330                   | 330                   |
| Nanjing Power Plant .....     | —                           | —                           | 354.61                      | 325.68                      | 318.60                      | 336.11 <sup>(7)</sup> | 336.11                |
| Dezhou Power Plant .....      | —                           | —                           | —                           | —                           | 340.33                      | 352.20                | 352.20                |
| Jining Power Plant .....      | —                           | —                           | —                           | —                           | 267.31                      | 280.76                | 280.76                |
| Weihai Power Plant.....       | —                           | —                           | —                           | —                           | 390.72                      | 395.85                | 395.85                |

*Notes:*

- (1) Includes value-added tax.
- (2) Excludes transmission costs but includes agency handling fees.
- (3) Dalian Power Plant adopted on-grid power rate effective as of January 1, 1998.
- (4) Shangan Power Plant adopted on-grid power rate effective as of August 1, 1998.
- (5) New power rate was effective as of February 10, 2002.
- (6) New power rate was effective as of September 1, 2001.
- (7) New power rate was effective as of April 1, 2001.

***Fuel supply arrangements***

Twelve of the thirteen power plants are fueled by coal, and only Shantou Oil-Fired Plant is a combined-cycle facility fueled by oil.

*Coal*

Most of the coal supply for the twelve 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. Coal prices, including transportation costs and miscellaneous expenses, for the twelve coal-fired power plants in 2001 averaged approximately Rmb220.66 per ton. Starting in 2002, there was no longer official State Plan for coal supplies, but the government continues to coordinate the coal prices at the annual sales conferences.

We strive to reduce the 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 the method of mixing different terms of coal as a measure of cost reduction.

Allocations for coal purchased are made at annual sales conferences attended by, among others, representatives of each of coal purchasers, the Shanxi Provincial Coal Sales Corporation, the railway authorities and the shipping companies. The annual sales conferences are sponsored and coordinated by the State Planning Development Commission. At these conferences, we obtain allocations for coal on a company-wide basis. We then sign delivery orders with the coal producers and with the railway and shipping companies for the amount of coal and transportation allocated to us. These delivery orders specify on a monthly basis the amount of coal to be delivered to each power plant. We, the producers and the railway and shipping companies then hold monthly conferences to schedule the following month's allocated coal deliveries.

In 2001, we obtained allocations for 16.09 million tons of coal representing more than 70.8% of the total coal requirement for the production of the total planned generation, of which we purchased only 11.53 million tons of coal. During each of the five years from 1997 to 2001 we have generally utilized approximately 60% to 75% of the total amount of coal allocated to us under the State Plan as the coal industry has become more market-oriented. We have been allocated 15.35 million tons of coal and related transportation for 2002, which is more than 75% of the coal required for the total planned generation.

We purchased 11.12 million tons of coal on the open market in 2001. Given our good reputation and commercial relationships with open market coal suppliers and the increasing market orientation of the coal industry in China, we believe that we will be able to purchase sufficient coal on the open market to meet our future requirements in excess of allocations by the PRC Government.

### *Oil*

We obtain our entire supply of oil for the Shantou Oil-Fired Plant through government allocation from the Shengli Oil Field in Shandong Province. The crude oil is transported by pipeline to Huangdao in eastern Shandong Province, loaded onto ships, shipped along the coast to the Zhanjiang port in western Guangdong, trans-shipped to the Shantou port, unloaded into storage tanks in Shantou and finally transported to the Shantou Oil-Fired Plant by pipeline.

We were allocated 50,000 metric tons of oil in 2001. The price at which the Shantou Oil-Fired Plant purchases Shengli crude oil from the China Petroleum and Chemical Corporation is determined by the PRC Government in accordance with the State Plan. The price for crude oil has increased significantly in 2001, in line with the crude oil price in the international market.

During 2001, the average of the State Plan prices for crude oil from the Shengli Oil Field was Rmb1,674 per ton.

We received allocations under the State Plan of crude oil from the Shengli Oil Field and transportation sufficient to meet our oil supply requirements at the Shantou Oil-Fired Plant for 2001. We believe that we will continue to receive allocations of oil and transportation under the State Plan sufficient to meet our crude oil requirements.

### ***Repair and maintenance***

We employ an aggregate of over 1,509 qualified engineers, of which approximately 455 are senior engineers who are responsible for supervising production as well as repair and maintenance.

Each of our power plants has a timetable for routine maintenance, regular inspections and repairs. Such timetables and the procedures for the repair and maintenance of generating units comply with the relevant regulations promulgated by the former MEP.

Pursuant to our procedures, generating units with a capacity of 350 MW or more 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:

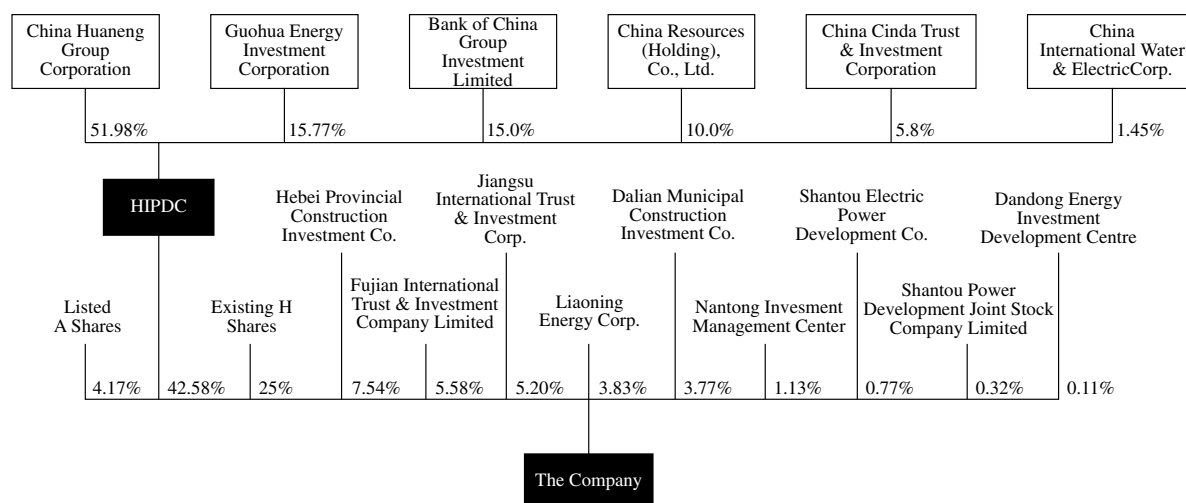
- (i) regular checks and routine maintenance are carried out throughout the period during which a generating unit is in operation;
- (ii) a small-scale servicing is performed every year, which takes approximately 20 days;
- (iii) a medium-scale check-up is carried out between the two overhauls, the length 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.

With respect to the Shantou Oil-Fired Plant, repair and maintenance are scheduled according to cumulative operating hours. A small-scale servicing takes approximately seven days. A full-scale maintenance takes approximately 30 days.

## Organizational Structure

We are 42.58% 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 has invested in industries that are related to power generation which include energy, transportation and raw materials development. HIPDC was established in 1985 as a joint venture with 51.98% of its interest currently owned by Huaneng Group. HIPDC is engaged in developing power plants with foreign capital, and some of the power plants currently owned and operated by us were originally built and later transferred by HIPDC. Both Huaneng Group and HIPDC have agreed to give us preferential rights in the power development business.

The following organizational chart sets forth the organizational structure of us and HIPDC:



## Property, plants and equipment

The following table presents certain summary information on our power plants, project under construction and proposed projects.

### Summary Information on the Company's Power Plants and Proposed Projects

| Plant or Expansion                | Province/<br>Municipality | Actual/Estimated<br>In-service Date <sup>(1)</sup>                  | Total Actual<br>Cost <sup>(2)</sup> | Installed<br>Capacity | Ownership    |
|-----------------------------------|---------------------------|---|-------------------------------------|-----------------------|--------------|
| (Names as defined below)          |                           |   | (Millions Rmb/<br>Millions US\$)    | (MW)                  | %            |
| <b>Power Plants</b>               |                           |   |                                     |                       |              |
| Shantou Oil-Fired Plant           | Guangdong                 | Units I & II: Jan. 1987<br>Unit III: April 1988                     | 215/24.7                            | 2 x 35<br>1 x 30      | 100%         |
| Dalian Power Plant, Phase I       | Liaoning                  | Unit I: Sep. 1988<br>Unit II: Dec. 1988                             | 1,569/180                           | 2 x 350               | 100%         |
| Phase II                          |                           | Unit III: Jan. 1999<br>Unit IV: Jan. 1999                           | 3,554/408                           | 2 x 350               | 100%         |
| Fuzhou Power Plant Phase I        | Fujian                    | Unit I: Sep. 1988<br>Unit II: Dec. 1988                             | 1,713/197                           | 2 x 350               | 100%         |
| Phase II                          |                           | Unit III: Oct. 1999<br>Unit IV: Oct. 1999                           | 3,535/406                           | 2 x 350               | 100%         |
| Nantong Power Plant Phase I       | Jiangsu                   | Unit I: Sep. 1989<br>Unit II: March 1990                            | 1,682/193                           | 2 x 350               | 100%         |
| Phase II                          |                           | Unit III: Jul. 1999<br>Unit IV: Oct. 1999                           | 3,573/410                           | 2 x 350               | 100%         |
| Shangan Power Plant Phase I       | Hebei                     | Unit I: Aug. 1990<br>Unit II: Dec. 1990                             | 1,959/225                           | 2 x 350               | 100%         |
| Phase II <sup>(4)</sup>           |                           | Unit III: Oct. 1997<br>Unit IV: Oct. 1997                           | 2,804/322                           | 2 x 300               | 100%         |
| Shantou Power Plant               | Guangdong                 | Unit I: Jan. 1997<br>Unit II: Jan. 1997                             | 4,942/568                           | 2 x 300               | 100%         |
| Shanghai Power Plant              | Shanghai                  | Unit I: Jun. 1992<br>Unit II: Dec. 1992                             | 4,395/505                           | 2 x 600               | 100%         |
| Dandong Power Plant               | Liaoning                  | Unit I: Jan. 1999<br>Unit II: Jan. 1999                             | 4,798/551                           | 2 x 350               | 100%         |
| Nanjing Power Plant               | Jiangsu                   | Unit I: March 1994<br>Unit II: Oct. 1994                            | 3,212/369                           | 2 x 300               | 100%         |
| Dezhou Power Plant                | Shandong                  | Units I & II: 1992<br>Units III & IV: Jun. 1994,<br>May 1995        | 1,313<br>1,760                      | 2 x 300<br>2 x 300    | 100%<br>100% |
| Jining Power Plant                | Shandong                  | Units I & II: 1973  | 43                                  | 2 x 50                | 75%          |
| Weihai Power Plant                | Shandong                  | Units III & IV: 1976 & 1978<br>Units I & II: May 1994,<br>Jan. 1995 | 69<br>1,110                         | 2 x 100<br>2 x 125    | 75%<br>60%   |
|                                   |                           | Units III & IV: Mar.<br>Nov. 1998                                   | 2,834                               | 2 x 300               | 60%          |
| Rizhao Power Plant                | Shandong                  | Units I & II: Apr. 2000   | —                                   | 2 x 350               | 25.5%        |
|                                   |                           |   | Subtotal                            | 11,750                |              |
| <b>Project under Construction</b> |                           |   |                                     |                       |              |
| Dezhou Phase III                  | Shandong                  | Unit V: 2002  | **                                  | 1 x 660               | 100%         |
|                                   |                           | Unit VI: 2003   | **                                  | 1 x 660               | 100%         |
| Jining Expansion                  | Shandong                  | Unit I, II: 2003  | **                                  | 2 x 135               | 100%         |
|                                   |                           |   | Subtotal                            | 1,590                 |              |
| <b>Proposed Projects</b>          |                           |   |                                     |                       |              |
| Shangan Phase III Expansion       | Hebei                     | *   | **                                  | 2 x 600               | 100%         |
| Shantou Phase II Expansion        | Guangdong                 | *   | **                                  | 1 x 600               | 100%         |
| Shanghai Gas turbine Project      | Shanghai                  | *   | **                                  | 1,200                 | 70%          |
| Jinling Gas turbine Project       | Jiangsu                   | *   | **                                  | 1,200                 | 65%          |
|                                   |                           |   | Subtotal                            | 4,200                 |              |
|                                   |                           |   | TOTAL                               | 17,540                |              |

**Notes:**

- (1) Commencement of commercial operations. See "Development of Power Plants — Plant Start-up and Operation." \* Construction
- (2) Including start-up costs and interest expense during construction assuming, for estimated costs, an 8% interest rate. At the exchange rate of US\$1.00 to Rmb8.7, which the Company uses for planning purposes. \*\* To be determined
- (3) Using boiler technology under license from Foster Wheeler Energy Corporation.
- (4) Assumes a current construction cost of US\$322 million. The final construction costs have not been determined as of the date of filing.

| Installed Capacity<br>(MW)           | Ownership<br>%             | Attributable Capacity<br>MW | Type of Fuel               | Equipment Supplier  |
|--------------------------------------|----------------------------|-----------------------------|----------------------------|---|
| 2 x 35<br>1 x 30<br>2 x 350          | 100%                       | 100<br>700                  | Oil<br>Coal                | Alsthom<br>Mitsubishi Consortium including MHI, MELCO and MC  |
| 2 x 350                              | 100%                       | 700                         | Coal                       | An international consortium including Westinghouse Electric Corporation, Mitsui Babcock Energy Limited and Sargent & Lundy L.L.C.   |
| 2 x 350                              | 100%                       | 700                         | Coal                       | Mitsubishi Consortium including MHI, MELCO and MC   |
| 2 x 350                              | 100%                       | 700                         | Coal                       | An international consortium including Siemens Aktiengesellschaft and Mitsui Babcock Energy Limited  |
| 2 x 350                              | 100%                       | 700                         | Coal                       | General Electric Consortium including GE, B&W and Ansaldo   |
| 2 x 350                              | 100%                       | 700                         | Coal                       | An international consortium including GE, the Babcock & Wilcox Company and Black & Veatch International Company   |
| 2 x 350                              | 100%                       | 700                         | Coal                       | General Electric Consortium including GE, B&W and Ansaldo   |
| 2 x 300                              | 100%                       | 600                         | Coal                       | Dongfang Boiler Works, Dongfang Turbine Works and Dongfang Electrical Machinery Works   |
| 2 x 300                              | 100%                       | 600                         | Coal                       | Energomachexport Corp. Ltd. and Dongfang Boiler Works <sup>(3)</sup>  |
| 2 x 600                              | 100%                       | 1,200                       | Coal                       | An international consortium including ABB, Combustion Engineering, Sulzer and Sargent & Lundy   |
| 2 x 350                              | 100%                       | 700                         | Coal                       | An international consortium including Westinghouse Electric Corporation, Mitsui Babcock Energy Limited and Sargent & Lundy L.L.C.   |
| 2 x 300                              | 100%                       | 600                         | Coal                       | State Unitary Enterprise Foreign Economic Association   |
| 2 x 300                              | 100%                       | 600                         | Coal                       | Haerbin Boiler Works, Dongfang Turbine Works and Dongfang Electrical Machinery Works  |
| 2 x 300                              | 100%                       | 600                         | Coal                       | Haerbin Boiler Works, Dongfang Turbine Works and Dongfang Electrical Machinery Works  |
| 2 x 50                               | 75%                        | 75                          | Coal                       | Shanghai Boiler Works, Herbin Turbine Works and Herbin Electrical Machinery Works   |
| 2 x 100                              | 75%                        | 150                         | Coal                       | Haerbin Boiler Works, Beijing Heavy Machinery Works   |
| 2 x 125                              | 60%                        | 150                         | Coal                       | Shanghai Boiler Works, Shanghai Turbine Works and Shanghai Electrical Machinery Works   |
| 2 x 300                              | 60%                        | 360                         | Coal                       | Dongfang Boiler Works, Shanghai Turbine Works and Shanghai Electrical Machinery Works   |
| 2 x 350                              | 25.5%                      | 178.5                       | Coal                       | Siemens and Foster Wheeler Energy Corporation   |
| <u>11,750</u>                        |                            | <u>10,813.5</u>             |                            |   |
| 1 x 660<br>1 x 660<br>2 x 135        | 100%<br>100%<br>100%       | 660<br>660<br>270           | Coal<br>Coal<br>Coal       | Deutsche Babcock, General Electric Company and Siemens<br>Deutsche Babcock, General Electric Company and Siemens<br>Shanghai Boiler Works, Dongfang Turbine Works, Shanghai Electrical Machinery Work |
| 1,590                                |                            |                             |                            |   |
| 2 x 600<br>1 x 600<br>1,200<br>1,200 | 100%<br>100%<br>70%<br>65% | 1,200<br>600<br>840<br>780  | coal<br>coal<br>gas<br>gas | **<br>**<br>**<br>**  |
| <u>4,200</u>                         |                            |                             |                            |   |
| <u>17,540</u>                        |                            |                             |                            |   |

ation.” \* Construction is not scheduled to commence until after the year 2002.

interest rate. At the \*\* To be determined.

ned as of the date



The following table presents the availability factors and the capacity factors for the years 1998, 1999, 2000 and 2001 for the power plants which we operate.

|                    | Availability factor (%) |      |       |       | Capacity factor (%) |      |       |       |
|--------------------|-------------------------|------|-------|-------|---------------------|------|-------|-------|
|                    | 1998                    | 1999 | 2000  | 2001  | 1998                | 1999 | 2000  | 2001  |
| Dalian             |                         |      |       |       |                     |      |       |       |
| Phase I . . . . .  | 91.6                    | 93.1 | 89.35 | 96.79 | 62.9                | 65.3 | 53.58 | 53.66 |
| Phase II . . . . . | —                       | 88.7 | 88.81 | 90.33 | —                   | 32.8 | 50.13 | 49.25 |
| Fuzhou             |                         |      |       |       |                     |      |       |       |
| Phase I . . . . .  | 90.8                    | 92.9 | 89.33 | 90.99 | 60.5                | 62.2 | 57.11 | 51.3  |
| Phase II . . . . . | —                       | 99.1 | 89.61 | 95.42 | —                   | 37.5 | 47.71 | 41.35 |
| Shangan            |                         |      |       |       |                     |      |       |       |
| Phase I . . . . .  | 81.7                    | 86.7 | 93.86 | 90.01 | 59.7                | 61.7 | 66.51 | 64.46 |
| Phase II . . . . . | 68.8                    | 97.3 | 90.48 | 94.52 | 49.7                | 63.2 | 62.99 | 65.6  |
| Nantong            |                         |      |       |       |                     |      |       |       |
| Phase I . . . . .  | 92.4                    | 89.1 | 86.78 | 93.45 | 58.7                | 49.4 | 55.24 | 58.95 |
| Phase II . . . . . | —                       | 73.4 | 90.09 | 88.28 | —                   | 26.3 | 46.50 | 60.34 |
| Dandong . . . . .  | —                       | 86.9 | 90.03 | 88.35 | —                   | 46.1 | 52.55 | 45.37 |
| Shantou Oil-Fired  | 90.4                    | 92.0 | 92.69 | 91.69 | 16.6                | 22.2 | 19.88 | 22.15 |
| Shantou . . . . .  | 94.4                    | 85.7 | 92.41 | 90.39 | 53.2                | 60.4 | 74.39 | 73.08 |
| Shanghai . . . . . | 89.8                    | 90.8 | 91.25 | 93.33 | 64.8                | 64.5 | 69.99 | 69.98 |
| Nanjing . . . . .  | 89.5                    | 91.9 | 86.92 | 89.16 | 60.3                | 54.5 | 57.71 | 60.73 |
| Dezhou Power       |                         |      |       |       |                     |      |       |       |
| Plant . . . . .    | 89.4                    | 88.1 | 90.37 | 92.33 | 56.2                | 58.2 | 63.76 | 64.97 |
| Jining Power       |                         |      |       |       |                     |      |       |       |
| Plant . . . . .    | 93.5                    | 93.9 | 93.83 | 95.33 | 49.9                | 57.2 | 68.14 | 72.36 |
| Weihai Power       |                         |      |       |       |                     |      |       |       |
| Plant . . . . .    | 66.8                    | 87.3 | 90.58 | 95.89 | 43.9                | 47.8 | 55.42 | 58.46 |

Our power plants, their respective operations and proposed projects are described below.

**Power plants in Liaoning Province**

*Huaneng Dalian Power Plant (“Dalian Power Plant”)* Dalian Power Plant is located on the outskirts of Dalian, on the coast of Bohai Bay. Dalian Power Plant, including Phase I and Phase II, has an installed capacity of 1,400 MW and consists of four 350 MW coal-fired units which commenced commercial operations in 1988 and 1999 respectively.

Dalian Power Plant sells all its electricity through the Northeast Power Administration. Prior to 1998, the Northeast Power Administration charged commissions for its services. Dalian Power Plant adopted on-grid power rate effective as of January 1, 1998.

The coal supply for Dalian Power Plant is obtained from several coal producers located mostly in northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and shipped by special 27,000 ton automatic unloading ships to the wharf at the Dalian Power Plant. The wharf is owned and maintained by the Dalian Port Authority and is capable of handling 30,000 ton vessels. Dalian Power Plant typically stores 140,000 to 150,000 tons of coal on site.

Dalian Power Plant consumes 14,000 tons of coal per day when operating at maximum generating capacity. In 2001, Dalian Power Plant obtained 83.4% of its total consumption of coal pursuant to allocations and the remainder on the open market. The weighted average cost of coal for Dalian Power Plant was Rmb247.60 per ton in 2001.

Electricity generated by Dalian Power Plant is delivered to the Northeast Power Grid.

*Huaneng Dandong Power Plant (“Dandong Power Plant”)* Dandong Power Plant is located on the outskirts of the city of Dandong in Liaoning. Dandong Power Plant had originally been developed by HIPDC which, pursuant to the Reorganization Agreement, transferred all its rights and interests therein to us effective December 31, 1994. In March 1997, we began construction of Dandong Power Plant, which comprises two 350 MW coal-fired units supplied by an international consortium including Westinghouse Electric Corporation, Mitsui Babcock Energy Limited and Sargent & Lundy L.L.C.

Dandong Power Plant consumes 6,200 tons of coal per day when operating at maximum generating capacity. In 2000, Dandong Power Plant obtained 66.7% of its total consumption of coal pursuant to allocation and the remainder on the open market. The weighted average cost of coal for Dandong Power Plant was Rmb220.45 per ton in 2001.

All the electricity generated by Dandong Power Plant is delivered to the Northeast Power Grid and was sold through the Northeast Power Administration. The coal supply is obtained from several coal producers in northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and shipped by barge to the Dadong port in Dandong, where it is unloaded and transported to Dandong Power Plant using special coal handling facilities. The wharf is owned and maintained by Dandong Power Plant and is capable of handling 28,000 ton vessels. Dandong Power Plant typically stores 200,000 tons of coal on site.

#### ***Power plant in Fujian Province***

*Huaneng Fuzhou Power Plant (“Fuzhou Power Plant”)* Fuzhou Power Plant is located on the south bank of the Min River, southeast of the city of Fuzhou. Fuzhou Power Plant, including Phase I and Phase II, has an installed capacity of 1,400 MW and consists of four 350 MW coal-fired units which commenced commercial operations in 1988 and 1999 respectively. The units of Phase I and Phase II were respectively supplied by the Mitsubishi Consortium and an international consortium including Siemens Aktiengesellschaft and Mitsui Babcock Energy Limited.

All the electricity sales of Fuzhou Power Plant are made through the Fujian Provincial Power Corporation, which charges a commission of Rmb5 per MWh for its services for Fuzhou Phase I.

The coal supply for Fuzhou Power Plant is obtained from several coal producers located mostly in northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and by ship down the east coast of China and up the Min River to a wharf located at Fuzhou Power Plant. We own and maintain the wharf, which is capable of handling vessels of up to 20,000 tons and of unloading 10,000 tons to 15,000 tons of coal per day. Fuzhou Power Plant typically stores 170,000 to 180,000 tons of coal on site.

Fuzhou Power Plant consumes up to 14,000 tons of coal per day when operating at maximum generating capacity. In 2000, the Fuzhou Power Plant obtained 86.9% of its total consumption of coal pursuant to allocations and the remainder was obtained on the open market. The weighted average cost of coal for Fuzhou Power Plant in 2001 was Rmb263.46 per ton.

Electricity generated by Fuzhou Power Plant is delivered to the Fujian Provincial Power Grid.

### ***Power plant in Hebei Province***

*Huaneng Shangan Power Plant (“Shangan Power Plant”)* Shangan Power Plant is located on the outskirts of Shijiazhuang. Shangan Power Plant has been developed in two separate expansion phases. The Shangan Power Plant Phase I has an installed capacity of 700 MW and consists of two 350 MW coal-fired units which commenced commercial operations in 1990. The units were supplied by the General Electric Consortium. Shangan Power Plant Phase II shares with the Shangan Power Plant Phase I certain facilities, such as coal storage facilities and effluence pipes, which have been built to accommodate the requirements of plant expansions. The Shangan Power Plant Phase II utilizes two 300 MW coal-fired units supplied by China Dongfang Group using technology licensed for boilers from Foster Wheeler Energy Corporation. The two generating units commenced commercial operation in 1997.

Shangan Power Plant sells all its electricity through the Hebei Provincial Power Corporation which charged commission for its services prior to August 1, 1998. Since August 1, 1998 when the Shangan Power Plant adopted on-grid power rate, no commission has been paid by Shangan Power Plant.

Electricity generated by Shangan Power Plant is delivered to the North China Power Grid.

The coal supply for Shangan Power Plant is obtained from numerous coal producers in central Shanxi Province, which is approximately 64 kilometers from Shangan Power Plant. The coal is transported by rail from the mines to the Shangan Power Plant. We own and maintain the coal unloading facilities which are capable of unloading 10,000 tons of coal per day. Shangan Power Plant typically stores 80,000 to 120,000 tons of coal on site.

Shangan Power Plant consumes 9,000 tons of coal per day when operating at maximum generating capacity. In 2000, Shangan Power Plant obtained 72.1% of its total consumption of coal pursuant to allocations and the remainder was obtained on the open market. The weighted average cost of coal for Shangan Power Plant in 2001 was Rmb158.53 per ton.

### ***Proposed project***

*Huaneng Shangan Power Plant Phase III (“Shangan Phase III Expansion”)* The Shangan Phase III Expansion is expected to be adjacent to the Shangan Power Plant Phase I and the Shangan Power Plant Phase II. The Shangan Phase III Expansion is expected to consist of two 600 MW coal-fired units. The project proposal has been submitted to the State Development Planning Commission.

### ***Power plants in Jiangsu Province***

*Huaneng Nantong Power Plant (“Nantong Power Plant”)* Nantong Power Plant is located in the city of Nantong. Nantong Power Plant, including Phase I and Phase II, has an installed capacity of 1,400 MW and consists of four 350 MW coal-fired units which commenced commercial operations in 1989, 1990 and 1999, respectively. The units were supplied by the General Electric Consortium.

The coal supply for Nantong Power Plant is obtained from several coal producers located mostly in northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and by ship to Yaogang, 7.5 kilometers from the Nantong Power Plant, where it is transhipped onto Company barges for the last stage of the journey up the Yangtze River to the wharf located adjacent to the Nantong Power Plant. The Company owns and maintains the wharf which is capable of handling 5,000 ton barges and of unloading 15,000 tons of coal per day. Nantong Power Plant typically stores 120,000 to 150,000 tons of coal on site.

Nantong Power Plant consumes up to 14,000 tons of coal per day when operated at maximum generating capacity. In 2000, Nantong Power Plant obtained 68.9% of its total consumption of coal pursuant to allocations and the remainder was obtained on the open market. The weighted average cost of coal for Nantong Power Plant in 2001 was Rmb236.56 per ton.

Electricity generated by Nantong Power Plant is delivered to the Jiangsu Provincial Power Grid.

*Huaneng Nanjing Power Plant (“Nanjing Power Plant”)* Nanjing Power Plant has an installed capacity of 600 MW consisting of two 300 MW coal-fired units which commenced commercial operations in March and October 1994, respectively.

The coal supply for the Nanjing Power Plant is obtained from several coal producers located in the Shanxi and Anhui Provinces. The coal is transported by rail from the mines to Yuxikou Port and Pukou Port and shipped to the plant’s own wharf facilities. The wharf is capable of handling 6,000 ton vessels. Nanjing Power Plant typically stores 100,000 tons of coal on site and consumes 5,000 tons of coal per day when operating at maximum generating capacity.

In 2000, Nanjing Power Plant obtained approximately 67.3% of its total consumption of coal pursuant to allocations and the remainder was obtained on the open market. The weighted average cost of coal for Nanjing Power Plant in 2001 was Rmb222.08 per ton.

Electricity generated by Nanjing Power Plant is delivered to the Jiangsu Provincial Power Grid.

#### ***Proposed project***

*Huaneng Jinling Combined-cycle Gas turbine Project (“Jinling Gas turbine Project”)* The project is expected to be located on the outskirts of Nanjing. Three sets of combined cycle gas turbines with a total capacity of 1,200MW will be constructed and the project investment is estimated to be approximately Rmb4.2 billion. The Huaneng Jinling Gas turbine Project will be jointly developed by us, Jiangsu Province Investment Management Company, Ltd. and Nanjing Municipal Investment Corporation and is expected to be rolled out during 2003 to 2005. The project proposal for Jinling Gas turbine Project has been submitted to the State Power Corporation. We have signed a letter of intent with PetroChina Company Limited with regard to the purchase and transportation of natural gas for Jinling Gas turbine Project.

#### ***Power plant in Shanghai Municipality***

*Huaneng Shanghai Shidongkou Second Power Plant (“Shanghai Power Plant”)* Shanghai Power Plant is located in the northern suburbs of Shanghai. Shanghai Power Plant has an installed capacity of 1,200 MW and consists of two 600 MW coal-fired super-critical units which commenced commercial operations in June and December 1992, respectively. The units supplied by a consortium of international suppliers led by Sargent & Lundy L.L.C. Shanghai Power Plant sells all its electricity through the SMPC.

The coal supply for Shanghai Power Plant is obtained from several coal producers located mostly in northern Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port or Tianjin port and shipped to the plant’s own wharf facilities. The wharf is capable of handling 35,000 ton vessels. Shanghai Power Plant typically stores 140,000 to 180,000 tons of coal on site and consumes 11,450 tons of coal per day when operating at maximum generating capacity. In 2000, Shanghai Power Plant obtained 55.5% of its total consumption of coal pursuant to allocations and the remainder was obtained on the open market. The weighted average cost of coal for Shanghai Power Plant in 2001 was Rmb242.21 per ton.

Electricity generated by Shanghai Power Plant is delivered to the East China Power Grid.

### ***Proposed project***

*Shanghai Combined-cycle Gas Turbine Power Plant (“Shanghai Gas Turbine Project”)* Three sets of combined-cycle gas turbines with a total capacity of 1,200MW will be constructed, and the project investment is estimated to be approximately Rmb4.5 billion. Shanghai Gas turbine Project will be jointly developed by us and Shenergy Company, Ltd. and is expected to be rolled out during 2003 to 2005. The project proposal for Shanghai Gas turbine Project has been submitted to the State Development Planning Commission. We have signed a letter of intent with Shanghai Natural Gas Pipeline Company with regard to the purchase and transportation of natural gas for Shanghai Gas turbine Project.

### ***Power plants in Guangdong Province***

*Huaneng Shantou Oil-Fired Power Plant (“Shantou Oil-Fired Plant”)* Shantou Oil-Fired Plant is located on the outskirts of the city of Shantou. Shantou Oil-Fired Plant has an installed capacity of 100 MW and consists of two gas turbine units and a single steam turbine unit. The two gas turbine units commenced commercial operations in January 1987, and Shantou Oil-Fired Plant commenced full-scale commercial operations in April 1988. The units were supplied by Alsthom.

Before June 1, 2001, the electricity sales of Shantou Oil-Fired Plant are made through the Shantou Municipal Power Corporation, which charges a commission of Rmb5 per MWh for its services under the Agency Sales Agreement with Shantou Municipal Power Corporation. The Agency Sales Agreement was terminated thereafter.

Shantou Oil-Fired Plant obtains 100% of its crude oil requirements pursuant to government allocation under the State Plan. Prior to 1995, each year the State Development Planning Commission allocated 120,000 tons of crude oil produced by the Shengli Oil Field to Shantou Oil-Fired Plant. This allocation is currently made in accordance with our planned generation. The crude oil purchased by Shantou Oil-Fired Plant is transported from the Shengli Oil Field to the Huangdao port in Shandong Province and shipped by the Guangzhou Ocean Shipping (Group) Company by tanker to storage facilities at the Maoming Petrochemical Facility in Zhanjiang. The crude oil is then transported twice a month by 5,000 ton barge loads to the port in Shantou where the oil is stored in a 30,000 cubic meter storage tank. From the Shantou port, the crude oil is pumped once a week through a 14-kilometer pipeline to Shantou Oil-Fired Plant. Shantou Oil-Fired Plant typically stores 2,500 tons of oil on site and consumes 200 tons of oil per day.

The average price for crude oil from the Shengli Oil Field to Shantou during 2001 was Rmb1,674 per ton.

Electricity generated by Shantou Oil-Fired Plant is delivered to the Guangdong Power Grid.

*Huaneng Shantou Coal-Fired Power Plant (“Shantou Power Plant”)* Shantou Power Plant had originally been developed and constructed by HIPDC which, pursuant to the Reorganization Agreement, transferred all its rights and interests therein to the Company effective December 31, 1994. See “Item 7. Major Shareholders and Related Transactions.” Located on the outskirts of the city of Shantou near Shantou Oil-Fired Plant, Shantou Power Plant was begun with the support of the Shantou municipal government and the Guangdong provincial government. Shantou Power Plant consists of two 300 MW coal-fired units with boilers supplied by Dongfang Group using technology from Foster Wheeler Energy Corporation and Russian-made turbines and generators. The two units commenced commercial operation on January 1, 1997.

All the electricity sales of Shantou Power Plant are made to the Shantou Municipal Power Corporation and the Guangdong Provincial Power Corporation pursuant to the Shantou Power Purchase Agreement.

The coal supply for Shantou Power Plant is obtained from several coal producers located mostly in the northern area of Shanxi Province. The coal is transported by rail from the mines to Qinhuangdao port and by ship down the east coast of China to the wharf located at Shantou Power Plant, which is maintained by the Shantou Port Authority and is capable of handling 35,000 ton vessels. The Shantou Power Plant typically stores 140,000 to 150,000 tons of coal on site.

Shantou Power Plant will consume up to 5,000 tons of coal per day when operated at maximum generating capacity. In 2000, the Shantou Power Plant obtained 71.3% of its total consumption of coal pursuant to allocations and the remainder was purchased on the open market. The weighted average costs of coal for Shantou Power Plant in 2001 was Rmb274.14 per ton.

Electricity generated by Shantou Power Plant is delivered to the Guangdong Power Grid.

### ***Proposed project***

*Huaneng Shantou Coal-Fired Power Plant Phase II (“Shantou Phase II Expansion”)* Shantou Phase II Expansion is expected to be adjacent to the Shantou Power Plant. We expect that the Shantou Phase II Expansion will share with the Shantou Power Plant certain facilities, such as coal unloading and storage facilities and effluence pipes, which have been built to accommodate the requirements of plant expansions. The Shantou Phase II Expansion is expected to consist of one 600 MW coal-fired unit, and construction is expected to commence after the year 2002.

### ***Power plants in Shandong Province***

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

Dezhou Plant comprises of three Phases, with Phases I and II each consisting of two 300 MW coal-fired generation units. Phases I and II have been completed. The Dezhou Plant Phase III project has been approved by the relevant government agencies. The Phase III project contemplates that two 660 MW coal-fired generation units (i.e., Unit 5 and Unit 6 of the Dezhou Plant) will be added to the Dezhou Plant, and hence the aggregate design capacity of the Dezhou Plant will reach 2,520 MW. In June 1998, Shandong Huaneng entered into equipment supply contracts with each of Deutsche Babcock, General Electric Company and Siemens for the construction of Dezhou Phase III (the capital expenditures contemplated by these contracts amount to US\$310 million). Shandong Huaneng commenced the construction of Phase III in September 1999, with the completion of Unit 5 expected by the fourth quarter of 2002 and the completion of Unit 6 expected by the fourth quarter of 2003.

Dezhou Plant is approximately 200 km from Taiyuan, Shanxi Province, the source of the plant’s coal supply. The plant is located on the Taiyuan-Shijiazhuang-Dezhou rail line, giving it access to transportation facilities for coal. The plant is connected to the main trunk rail line at Dezhou by a dedicated 3.5 km spur line owned by us. The plant is located 22 km from its reservoir and 108 km from the Yellow River, which supplies water to the reservoir. The weighted average cost of coal for Dezhou Plant in 2001 was Rmb165.78 per ton.

Dezhou Plant is connected to the Shandong Grid by one 500 KV circuit and six 220 KV circuits.

*Jining Power Plant (“Jining Plant”)*, we hold a 75% interest in Jining Plant, the remaining 25% of which is owned by Shandong Electric Power Corporation. The facility is located in Jining City, near the Jining load center and near numerous coal mines. Yanzhou coal mine, which is adjacent to the plant, alone has annual production of approximately 20 million tons. The weighted average cost of coal for Jining Power Plant in 2001 was Rmb169.65 per ton.

Jining Plant comprises four coal-fired generation units, with an aggregate installed capacity of 300 MW, of which our proportionate share is 225 MW.

Jining Plant facilities have undergone replacement, renovation and construction as necessary. Jining Plant has higher rates of auxiliary power and coal consumption than many larger and newer plants. In order to upgrade Jining Plant, the construction of another two 135 MW coal fired generation units which consist of cycled fluidized bed combustion boilers has started, and the completion of which is expected to be in 2003.

The generation units of Jining Plant are connected to the Shandong Grid through a combination of 110 KV and 220 KV lines.

*Weihai Power Plant ("Weihai Plant")*, we hold a 60% interest in Weihai Plant, the remaining 40% interest of which is owned by Weihai International Trust and Investment Corporation ("WITIC"). The facility is situated approximately 16 km southeast of Weihai City, on the shore of the Bohai Gulf. Its location provides access to cooling water for operations and transportation of coal as well as ash and slag disposal facilities.

Weihai Plant, developed in two phases, consists of four coal-fired generation units with an aggregate design capacity of 850 MW. Phase I consists of two 125 MW generation units (Units 1 and 2), and Phase II consists of two 300 MW generation units (Units 3 and 4). Unit 1 began commercial operation in May 1994, and Unit 2 began commercial operations in January 1995.

Unit 3 commenced commercial operation in March 1998. Unit 4 commenced commercial operation in November 1998. Phase I comprises two domestically manufactured coal-fired generation units. Phase II comprises two domestically manufactured coal-fired generation units with sub-critical pressure turbines and reheating boilers. The weighted average coal cost for Weihai Plant in 2001 was Rmb251.25 per ton.

*Rizhao Power Plant ("Rizhao Plant")* As the successor of Shandong Huaneng, we inherited a proportionate interest in Rizhao Plant of 25.5%.

The registered capital of the Rizhao joint venture is approximately US\$150 million. Long-term financing required in excess of the amount of the joint venture's registered capital is currently estimated to be approximately US\$474 million, of which US\$350 million will be arranged by the non-Chinese party.

The construction of Unit 1 and Unit 2 of Rizhao Plant, each a coal-fired generation units with installed capacity of 350 MW, was completed in September 1999 and January 2000, respectively. The equipment was supplied by Siemens Aktiengesellschaft and Foster Wheeler Energy Corporation. Both units commenced commercial operation in April 2000.

Rizhao Plant is located on the east coast of Shandong province on the Yellow Sea 9 km southeast of Rizhao City and 4 km southwest of Shijiu Port. Rizhao is located in the coastal open economic area of eastern Shandong Province. Rizhao Plant supplies power to the Shandong Grid through 220 KV circuits.

### ***Competition and dispatch***

All power plants in China are subject to dispatch conducted by various dispatch centers. A dispatch center is required to dispatch electricity pursuant to the Regulations on the Administration of Electric Power Dispatch Networks and Grids, issued by the State Council with effect from November 1, 1993, and in accordance with its agreements with power plants subject to its dispatch. As a result, there is competition for favorable dispatch treatment in the PRC electric power industry, especially during the off-peak load periods. More efficient power plants usually operate at higher output than less efficient power plants. We believe that in order to increase system stability, large and efficient power plants such as those of us will be preferred as

base load plants to generate power for the grids to which they connect. We believe that our dispatch arrangements with the local power corporations and dispatch centers, superior quality equipment, lower coal consumption rate, higher efficiency of plant operation, lower emission levels and larger capacity represent competitive advantages over our competitors in every market in which we operate.

Since 1985, a number of foreign power developers and foreign companies (including Hong Kong companies), have been pursuing investment opportunities in the PRC electric power industry, which opportunities include the development of power plants (through joint ventures with PRC partners) or the purchase of interests in existing power plants. While we believe that we currently possess advantages over such foreign developers because of our extensive experience in the electric power industry of China and our close relationships with the central and local governments, there can be no assurance that we will not experience increased competition in the future.

### ***Environmental regulation***

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

The Local Environmental Rules generally set discharge standards for emissions into the air and water. The Local Environmental Rules set forth schedules of base-level discharge fees for various polluting substances and specify that, if such levels are exceeded, the polluting entity will be required to pay an excess discharge fee to the local governments. The Local Environmental Rules do not make it a violation to exceed these limits, but rather set forth a graduated scale of fees that are required for each incremental unit of excess discharge. Up to a certain level, as the discharge levels increase, the fee per unit also increases. Above a certain level, local governments may issue orders to cease or reduce such discharge levels. To date, we have not incurred any such annual increases. Each power plant, when commissioned, had been tested and approved by local environmental agencies, and since commissioning has been subject to continuous government monitoring.

The National Environmental Laws also provide that, where pollution is causing environmental damage, the local governments have the authority to issue orders requiring the polluting entities to cure the problem within a certain time period. Non-compliance with such orders may result in the entities being shut down. The Local Environmental Rules also specify acts for which fines, as opposed to fees, are to be levied. These are acts of an irregular nature, such as damaging, failing to install or not maintaining environmental protection equipment, permitting accidental pollution or discharging more than minimal amounts of certain particularly dangerous chemicals into the environment. Fines and excess discharge fees are required to be paid out of after-tax profits. We are in compliance in all material respects with applicable environmental standards.



According to the New Emission Standards, promulgated by the State Environmental Protection Agency and State Technology Supervision Administration with effect from January 1, 1997, more restrictive standards to control sulfur dioxide and nitrous oxide emissions are applicable to all thermal power plant projects for which environmental impact study reports are yet to be approved. These restrictive standards govern both the total sulfur dioxide emissions from the power plant and the emission density of each chimney. Although the New Emission Standards are not applicable to the power plants, they apply to the Proposed Projects as well as any additional projects that we decide to undertake. We estimate that the equipment necessary to comply with the New Emission Standards may constitute approximately 10% of the total cost of equipment for a power plant. We believe, however, that the New Emission Standards may be applied to restrict regional rather than individual plant emissions. To the extent that the New Emission Standards are implemented to control total emissions in a region, we may be able to reduce the overall cost of complying with the new standards by assisting the heaviest polluters in such region to deploy emission control equipment.

We have adopted measures to control different emissions into the atmosphere. In order to reduce fly ash, we use very high-efficiency electrostatic precipitators. Sulfur emissions are reduced by burning low-sulfur content coal, which is reflected in the design of the coal-fired Power Plants.

Each power plant has a waste water treatment facility to treat water used by the power plant before it is released into the river or the sea. We pay discharge fees on the basis of measurements made at discharge points of each plant where waste is released. The PRC currently does not have any regulations regarding thermal pollution of the cooling water used by the electric power industry.

Approximately 60% of the ash remaining after the combustion of coal is used in the manufacture of bricks and other construction materials in 2001.

In 1999, 2000 and 2001, we paid discharge fees to local governments of approximately Rmb8.4 million, Rmb9.7 million and Rmb29.7 million respectively. The increase in 2001 was primarily due to the fact that some local governments started to implement the sulphur dioxide discharge regulation in accordance with the PRC Law of the Prevention and Treatment of Air Pollution, as a result of which the discharge fees were collected for the actual amount of discharge, rather than only for the amount in excess of certain threshold as in the past.

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

We believe our environmental protection systems and facilities for the power plants are adequate for us to comply with applicable national and local environmental protection regulations. However, the PRC Government may impose additional, stricter regulations similar to the New Emission Regulations which would require additional expenditure on compliance with environmental regulations.

### ***Insurance***

We currently maintain with the People's Insurance Company of China and China Pacific Insurance Co., Ltd. approximately Rmb48.3 billion of coverage on our property, plant and equipment (including erection insurance of phase III of Dezhou Power Plant).

We do not currently carry any third party liability insurance to cover claims in respect of personal injury or property or environmental damage arising from accidents on our property or relating to our operations. We have not had a third party liability claim filed against it during the last three years. We do not carry business interruption insurance, which is not customarily carried by power companies in the PRC.

We believe that our insurance coverage is adequate and is standard for the power industry in China.

#### ***Land use rights***

Our headquarters, comprised of approximately 27,800 square meters, are located at West Wing, Building C, Tianyin Mansion, 2C, Fuxingmennan Street, Xicheng District, Beijing, PRC, which are leased from HIPDC.

Pursuant to an approval issued by the State Land Administration Bureau dated June 15, 1994, HIPDC was permitted to transfer land use rights for the land on which the Dalian, Fuzhou, Nantong and Shangan Power Plants and Shantou Oil-Fired Plant are located to us. HIPDC acquired from the relevant local Land Administration Bureaus such land use rights for an aggregate fee of Rmb148 million which represented an average of 26.4% of the aggregate value of the land use rights as appraised by a qualified PRC appraiser. HIPDC then entered into agreements with us to transfer such land use rights to us. In accordance with such agreements, we have made annual payments for the land use rights since 1995 and will continue to do so until the year 2004. We acquired the land use rights for the Shantou and Dandong Power Plants directly from the local Land Administration Bureaus for Rmb27.2 million and Rmb128.0 million, respectively. In connection with the acquisition of Shanghai Power Plant, HIPDC has agreed to lease the land use rights in respect of the land on which the Shanghai Power Plant is located to us until the expiry of the land use term of the relevant land use certificate with annual rental payment of Rmb6 million per year. In connection with the acquisition of Nanjing Power Plant, HIPDC agree to lease the land use rights in respect of the land on which the Nanjing Power Plant is located to us until the expiry of the land use term of the relevant land use certificate with annual rental payment of Rmb1.3 million approximately per year.

## **Item 5. Operating and Financial Review and Prospects**

We develop, construct, own and operate large thermal power plants throughout China. Our Financial Statements may not be indicative of future earnings, cash flows or financial position for numerous reasons, including the acquisition of Shanghai Power Plant and Nanjing Power Plant and Huaneng Merger, the implementation of potentially different power rate regulations under the Electric Power Law, the anticipated capital expenditures associated with the power plants and power projects under construction over the next several years, the economic and power industry reform programs of the PRC Government, changes in the prices of fuel, the change in the tax basis of our assets and the change in the tax rate.

Our financial performance has been affected by factors arising from operating in a regulated industry and in an economy still in the transition from a planned economy to a freer one. These factors include the fact that many of our inputs, including fuel and transportation, are subject to PRC Government coordination or allocations and a power rate setting process whereby the power rate for most of our output is subject to PRC Government approval. The PRC Government is implementing certain economic reform programs which have reduced its involvement in allocations of fuel and transportation services.

The PRC Government has indicated on numerous occasions to reform the power industry with the ultimate goal to create a more open and fair power market. One of the two general aspects of the reform is to split the power industry into two separate generating industry and power transmission and utility industry. The other aspect is to increase the importance of power bidding experiment in the power rate setting mechanism and total power sales, which could lead to increase in both the regions and the percentage of power output that applies this power bidding practice. It is expected that the national power grid is going to be restructured into several regional grid companies, and the power plants originally associated with the grid are going to grouped into one or more power producing companies. However, it still remains uncertain how the reform is going to be implemented and what impact it will have on our business and operations. Our management is closely monitoring the process as it unfolds.

### **Critical Accounting Policies**

We have identified the policies below as critical to our business operations and the understanding of our results of operations. The impact and any associated risks related to these policies on our business operation is discussed throughout Management's Discussion and Analysis of Results of Operations where such policies affect our reported and expected financial results. For a detailed discussion on the application of these and other accounting policies, see Note 3 in the Notes to the Financial Statements in Item 17 of this Annual Report on Form 20-F, beginning on page F-8. Note that our preparation of this Annual Report on Form 20-F requires us to make estimates and assumptions that affect the reported amount of assets and liabilities, disclosure of contingent assets and liabilities at the date of our financial statements, and the reported amount of revenue and expenses during the reporting period. There can be no assurance that actual results will not differ from those estimates.

*Revenue recognition.* Our revenue recognition policy is significant because our revenue is a key component of our results of operations. Revenue is recognized when it is probable that the economic benefits associated with the transaction will flow to us and the amount of the revenue can be measured reliably. Net operating revenue represents amounts earned for electricity generated and transmitted to the respective region or provincial power companies (net of Value Added Tax ("VAT")). Revenues are earned and recognized upon transmission of electricity to the power grid controlled and owned by the respective power companies.

*Inventories.* Our inventories include materials and supplies and are stated at the lower of weighted average costs or net realizable values after provision for obsolete items, and are expensed to fuel costs or repairs and maintenance when used, or capitalized to fixed assets when installed, as appropriate. Cost of materials and supplies includes direct material cost and transportation expenses incurred in bringing the materials and supplies to the working locations. Unrealizable inventory has been fully written off.

*Impairment of long-lived assets.* Our long-lived assets include property, plant and equipment, investments in subsidiaries and an associate and other long-term assets. As of December 31, 2001, we and our subsidiaries had Rmb37,577 million of property, plant and equipment, Rmb226 million of investment in an associate and Rmb184 million of other long-term assets, accounting for approximately 80% of our total assets.

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Whenever the carrying amount of an asset exceeds its recoverable amount, an impairment loss is recognized in income statement for items of property, plant and equipment carried at cost. The recoverable amount is the higher of an asset's net selling price and value in use. The net selling price is the amount obtainable from the sale of an asset in an arm's length transaction less the costs of disposal while value in use is the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. Recoverable amounts are estimated for individual assets or, if it is not possible, for the cash-generating unit to which the asset belongs.

During the year ended December 31, 2001, we and our subsidiaries did not have any impairment losses related to long-lived assets.

### Certain Operating and Financial Data

The following table sets forth certain unaudited operating and financial data for each of our power plants (excluding the power plants acquired under the Huaneng Merger) for the fiscal year ended December 31, 2001.

|  | <u>Dalian</u> | <u>Fuzhou</u> | <u>Nantong</u> | <u>Shangan I</u> | <u>Shangan II</u> |
|--|---------------|---------------|----------------|------------------|-------------------|
| <i>Renminbi in millions, except as otherwise indicated</i> |               |               |                |                  |                   |
| <b>Operating data</b>                                      |               |               |                |                  |                   |
| Actual Generation (million kWh) . . . . .                  | 6,310.1       | 5,681.7       | 7,110.5        | 3,952.7          | 3,447.8           |
| Planned Generation (million kWh) . . . . .                 | 6,200.0       | 5,800.0       | 6,300.0        | 3,750.0          | 3,400.0           |
| Total Output (million kWh) . . . . .                       | 6,048.9       | 5,403.9       | 6,843.5        | 3,766.2          | 3,191.1           |
| Bidding Output (million kWh) . . . . .                     | 465.0         | —             | 684.4          | —                | —                 |
| Coal Consumption Rate (grams/kWh) . . . . .                | 308.0         | 308.7         | 313.3          | 318.0            | 325.1             |
| Weighted Average Rate (Rmb/MWh) . . . . .                  | 291.38        | 353.77        | 317.95         | 292.71           | 371.73            |
| <b>Financial Data</b>                                      |               |               |                |                  |                   |
| Operating Revenue, Net . . . . .                           | 1,506.5       | 1,634.0       | 1,859.8        | 942.2            | 1,013.9           |
| Fuel . . . . .   | (603.6)       | (581.0)       | (671.9)        | (254.3)          | (228.1)           |
| Maintenance . . . . .                                      | (92.9)        | (86.2)        | (96.6)         | (52.0)           | (40.4)            |
| Depreciation . . . . .                                     | (389.8)       | (384.2)       | (391.8)        | (162.4)          | (177.0)           |
| Labor . . . . .  | (62.5)        | (62.3)        | (83.5)         | (36.5)           | (31.8)            |
| Transmission fees . . . . .                                | —             | (10.6)        | —              | —                | —                 |
| Service fees to HIPDC . . . . .                            | —             | 0.4           | —              | (17.2)           | (113.5)           |
| Other operating expenses . . . . .                         | (45.0)        | (61.5)        | (51.3)         | (31.9)           | (27.8)            |
| Profit (Loss) from operation . . . . .                     | 312.7         | 448.6         | 564.7          | 387.9            | 395.3             |
| Financial expenses . . . . .                               | (140.6)       | (163.9)       | (222.5)        | (32.8)           | (18.1)            |
| Gain from disposal of investment . . . . .                 | —             | —             | —              | —                | —                 |
| Profit (Loss) before taxation . . . . .                    | 172.1         | 284.7         | 342.2          | 355.1            | 377.2             |
| Taxation . . . . .   | (29.4)        | (47.8)        | (57.4)         | (62.1)           | (34.8)            |
| Net profit (loss) . . . . .                                | 142.7         | 236.9         | 284.8          | 293.0            | 342.4             |

of our power  
ended December

| Nantong | Shangan I | Shangan II | Shantou-oil | Shantou | Shanghai | Dandong | Nanjing | Dezhou  | Jining  | Weihai  |
|---------|-----------|------------|-------------|---------|----------|---------|---------|---------|---------|---------|
| 7,110.5 | 3,952.7   | 3,447.8    | 200.1       | 3,841.2 | 7,356.8  | 2,782.3 | 3,192.1 | 6,829.7 | 1,931.6 | 4,353.1 |
| 6,300.0 | 3,750.0   | 3,400.0    | 200.0       | 3,600.0 | 7,100.0  | 3,000.0 | 3,000.0 | 6,580.0 | 1,773.0 | 6,450.0 |
| 6,843.5 | 3,766.2   | 3,191.1    | 188.4       | 3,551.3 | 7,087.9  | 2,654.7 | 3,027.1 | 6,482.9 | 1,768.5 | 4,087.2 |
| 684.4   | —         | —          | —           | —       | 778.6    | 438.7   | 428.4   | —       | —       | —       |
| 313.3   | 318.0     | 325.1      | 328.4       | 313.3   | 298.4    | 310.0   | 308.21  | 331.0   | 367.7   | 334.3   |
| 317.95  | 292.71    | 371.73     | 618.24      | 473.85  | 356.76   | 298.93  | 318.60  | 340.33  | 267.31  | 390.72  |
| 1,859.8 | 942.2     | 1,013.9    | 99.5        | 1,439.7 | 2,161.2  | 678.3   | 823.7   | 1,884.2 | 399.7   | 1,348.6 |
| (671.9) | (254.3)   | (228.1)    | (77.4)      | (408.1) | (656.3)  | (261.3) | (259.7) | (500.7) | (163.3) | (481.5) |
| (96.6)  | (52.0)    | (40.4)     | (8.6)       | (66.7)  | (82.5)   | (62.5)  | (43.0)  | (54.7)  | (27.3)  | (50.6)  |
| (391.8) | (162.4)   | (177.0)    | (24.9)      | (302.1) | (401.6)  | (273.7) | (156.3) | (225.7) | (33.1)  | (331.6) |
| (83.5)  | (36.5)    | (31.8)     | (10.0)      | (69.3)  | (72.9)   | (29.9)  | (63.0)  | (79.4)  | (88.0)  | (73.6)  |
| —       | —         | —          | (1.2)       | —       | —        | —       | —       | (19.8)  | (5.3)   | —       |
| —       | (17.2)    | (113.5)    | (0.1)       | (84.0)  | (92.9)   | —       | —       | —       | —       | —       |
| (51.3)  | (31.9)    | (27.8)     | (6.6)       | (38.4)  | (65.7)   | (33.3)  | (51.3)  | (126.7) | (32.4)  | (65.5)  |
| 564.7   | 387.9     | 395.3      | (29.3)      | 471.1   | 789.3    | 17.6    | 250.4   | 877.2   | 50.3    | 345.8   |
| (222.5) | (32.8)    | (18.1)     | 0.3         | (11.0)  | (156.4)  | (219.1) | (15.3)  | (0.9)   | 7.0     | (114.1) |
| —       | —         | —          | —           | —       | —        | —       | —       | —       | 0.6     | —       |
| 342.2   | 355.1     | 377.2      | (29.0)      | 460.1   | 632.9    | (201.5) | 235.1   | 876.3   | 57.9    | 231.7   |
| (57.4)  | (62.1)    | (34.8)     | —           | (30.0)  | (113.6)  | —       | (19.0)  | (152.8) | (18.9)  | (78.0)  |
| 284.8   | 293.0     | 342.4      | (29.0)      | 430.1   | 519.3    | (201.5) | 216.1   | 723.5   | 39.0    | 153.7   |

## Results of Operations

*Effective from the fiscal year 2000, we have decided to prepare our financial statements under IFRS. The audited financial statements are accompanied with notes setting out the differences from and reconciliation under US GAAP. The following management's discussion and analysis is based on the financial information prepared under IFRS, for material differences between IFRS and US GAAP, please refer to Note 39 to the Financial Statements.*

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

### *General*

Since January 1, 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 us. Operating results of Dezhou Power Plant are combined into us, and those of Jining Power Plant and Weihai Power Plant are consolidated as controlled subsidiaries into our financial statements. Shandong Rizhao Power Plant's results are accounted for by using the equity method. The acquisition of Shandong Huaneng enables us 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 put us in a better position in competition.

In 2001, our power sale and that of our 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 our consistently strict control over the cost and expenses, 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 coal-fired 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 billion 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.

We own 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.

We own 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* Our total operating expenses along with those of our 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 us and our 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 our previous price level, 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 our's integral business and competition advantages imposed by successful acquisition of Shandong Huaneng.

*Maintenance expense* Our maintenance expense along with that of our subsidiaries in 2001 was Rmb0.7657 billion, in which the total expenses for the original nine Power Plant's and our headquarter were Rmb0.6315 billion, 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 totalled Rmb0.1343 billion.

*Depreciation* Our depreciation and that of our subsidiaries in 2001 was Rmb3.2610 billion, among which the original nine Power Plants and the our 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* Our labor costs and those of our 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 our headquarter were Rmb0.5606 billion, which declined 16.32% from Rmb0.6699 billion in 2000.

*Transmission fees* Our transmission fees and those of our 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 June 30, 1994 between us and HIPDC (the “Service Agreement”), HIPDC has agreed, among other things, to allow us 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 December 4, 1997 (as amended by a supplemental letter dated December 5, 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 January 1, 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 June 1, 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 2000.

*Income Tax* Pursuant to the relevant tax regulations, we are treated as a foreign invested joint venture, and enjoy the relevant tax waiver and reduction, which means our income tax is 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 our 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* Our other expenses and those of our subsidiaries in 2001 were 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 our 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 us to HIPDC. Pursuant to the lease agreement dated December 26, 2000 between us and HIPDC, HIPDC agrees to lease the new office building to us for five years and the annual rent is Rmb25 million. This Lease Agreement became effective as of January 1, 2000.

*Profit from operation* The profit from our operation and those of our subsidiaries increased 28.34% to Rmb5.014 billion in 2001 from Rmb3.9069 billion in 2000.

*Financial Expenses* Our consolidated financial expenses and those of our 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* Our consolidated net profit and those of our 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

|                              | December 31, 2001            |         | December 31, 2000 |
|------------------------------|------------------------------|---------|-------------------|
|                              | Company and its subsidiaries | Company | 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 of December 31, 2001. It leads to the decrease in current ratio and quick ratio when compared with last year.

However, after the acquisition of Shandong Huaneng, our overall repayment ability (multiples of interest earned) has improved. As of December 31, 2001, our cash and temporary cash investments and those of our 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 our production capacity, but also improved and strengthened our earning capability, which enhanced our competitive advantage.

On 15 and 16 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 November 15, 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 us increased accordingly. We early repaid part of its long-term loans using its surplus working capital. At the end of 2001, our total liability and that of our subsidiaries was approximately Rmb18,513 million. The debt to equity ratio improved as compared with that in 2000.

As of December 31, 2001, our balances of the foreign currency loans and that of our 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. We along with our subsidiaries will closely monitor fluctuations in the foreign exchange market and cautiously assess the exchange rate risk.

Most of our long-term loans and those of our subsidiaries are fixed-rate loans. As of December 31, 2001, according to the original loan contracts, our balance of floating-rate loans and those of our subsidiaries was approximately RMB2,385 million. We and our subsidiaries used 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 December 31, 2001, based on a resolution passed on March 12, 2001. The total dividend payable was Rmb1.8 billion. The proposal is subject to approval by the Shareholders' General Meeting.

The Board of Directors anticipated that the dividend policy for 2002 is as follows: (1) We would declare dividends once in 2002; (2) about 50% of our net profit for the year ended 31st December, 2002 would be distributed as dividends; (3) the undistributed profit as at 31st December, 2001 would be retained; and (4) the dividends may be distributed by way of cash or bonus shares, subject to the approval of shareholders on the proposal made by the then Board of Directors.

*Year Ended December 31, 2000 Compared to Year Ended December 31, 1999*

*General*

In 2000, our net operating revenues and net profits significantly increased from 1999. The increase was primarily due to the following two factors. First, the steady growth of national economy and upgrading of urban and rural grid stimulated power demand. The power demand significantly increased in most of the areas in the PRC, particularly in coastal areas where our power plants are located. The good and reliable condition of the power generating units in our plants and the full year commercial operation of Nantong Power Plant Phase II and Fuzhou Power Plant Phase II in 2000 led to a significant increase of 18.01% in our total output in 2000 from 1999. Second, we have also improved on cost control, especially control over fuel cost, which led to a 2.41% decline in unit cost.

*Net Operating Revenues* Net operating revenues is the operating revenues less sales incentives paid to local power corporations usually as an incentive to dispatch more output from the power plants. Net operating revenues increased 19.69% to Rmb12.5533 billion in 2000 from Rmb10.4882 billion in 1999. The increase was primarily due to the commercial operation of Fuzhou Power Plant Phase II and Nantong Power Plant Phase II in the full 2000 and the significant increase in output of Shangan Power Plant, Shanghai Power Plant and Shantou Power Plant, which reached a record high of annual output among our similar plants. In addition, the rise of tariff rate in Shanghai Power Plant and the increase of planned output at approved tariff rate in Shangan Power Plant Phase II also contributed to the increase in our net operating revenues in 2000.

Dalian Power Plant's net operating revenues increased 3.18% to Rmb1.6266 billion in 2000 from Rmb1.5765 billion in 1999. Although the average tariff rate of the whole plant declined 2.41% from Rmb318.84 per MWh due to the impact of the power sale through the bidding process, which accounted for 10% of the total output, the increase in total output of 5.41% still enabled the operating revenues to increase.

Net Operating revenues of Dalian Power Plant Phase I declined 3.10% to Rmb855.1 million in 2000. Although the total output increased 1.53%, the weighted average tariff rate of Dalian Power Plant Phase I declined 4.57% from that of 1999 due to the impact of the power sale through the bidding process of 316.1 GWh.

During the second full year of commercial operation in 2000, the two generating units of Dalian Power Plant Phase II entered into normal production period and enjoyed a 9.90% increase in total output from 1999, which included sale through the bidding process of 295.5 GWh. The total operating revenues for Dalian Power Plant Phase II increased 11.17% from 1999 to Rmb771.5 million in 2000.

Fuzhou Power Plant's net operating revenues increased 49.58% to Rmb1.9717 billion in 2000 from Rmb1.3181 billion in 1999. The increase was primarily due to the fact that Fuzhou Power Plant Phase II had the first full year of normal commercial operation in 2000 and its total output increased 44.16% from 1999.

Fuzhou Power Plant Phase I's net operating revenues declined 3.99% to Rmb1.0040 billion in 2000 from Rmb1.0457 billion in 1999. The decline was primarily due to the downward pressure of the commencement of Phase II on the on-grid output of Phase I.

Fuzhou Power Plant Phase II started commercial operation in October 1999. It produced net operating revenues of Rmb967.7 million in 2000, on an output of 2.7931 TWh at a weighted average tariff rate of Rmb405.35 per MWh.

Shangan Power Plant's net operating revenues increased 12.13% to Rmb1.9345 billion in 2000 from Rmb1.7252 billion in 1999. The increase was primarily due to the significant rise of output of Shangan Power Plant Phase II sold at the approved tariff rate.

Shangan Power Plant Phase I's net operating revenues increased 2.42% to Rmb940.5 million in 2000. The total output increased 7.90% to 3.8840 TWh in 2000.

Shangan Power Plant Phase II's net operating revenues increased 23.18% to Rmb994.0 million in 2000 from Rmb807.0 million in 1999. The increase was primarily due to the increase of output sold at approved tariff rate to 2.3195 TWh in 2000 from 1 TWh in 1999, which resulted in the 23.89% increase of weighted average tariff rate to Rmb379.50 per MWh in 2000 from Rmb306.33 per MWh in 1999.

Nantong Power Plant's net operating revenues increased 56.69% to Rmb1.6685 billion in 2000 from Rmb1.0648 billion in 1999. The increase was primarily due to the fact that Nantong Power Plant Phase II had the first full year of normal commercial operation in 2000 and accordingly increased the total output by 57.14% from 1999 to 6.0375 TWh, of which sale through the bidding process accounted for 5.11%.

Nantong Power Plant Phase I's net operating revenues increased 8.38% to Rmb912.0 million in 2000. The increase was primarily due to the 12.44% increase of output from 1999 and the integration of tariff rates of Phase I and Phase II. The weighted average tariff rate of the whole plant decreased 3.71% from 1999 to Rmb323.71 per MWh in 2000. Nantong Power Plant Phase I had sales through the bidding process of 168.6 GWh, resulting in reduction of operating revenues of Rmb19.78 million.

Nantong Power Plant Phase II's net operating revenues was Rmb756.5 million and total output was 2.7375 TWh in 2000, in which sales through the bidding process was 140 GWh, resulting in reduction of operating revenues of Rmb16.41 million.

Shantou Oil-Fired Plant's net operating revenues was Rmb95.1 million in 2000, roughly holding par with Rmb94.5 million in 1999. The total output decreased 10.30% from 1999 to 166.2 GWh due to the pressure of high fuel costs resulted from the sharp rise of oil price in 2000. However, Shantou Municipal Energy Office and Pricing Bureau approved the fuel price subsidy at peak hours and accordingly the actual weighted average tariff rate reached Rmb669.77 per MWh in 2000, an increase of 12.09% from Rmb597.51 per MWh in 1999, which to some extent mitigated the negative impact of decrease in output.

Shantou Power Plant's net operating revenues increased 24.02% to Rmb1.4685 billion in 2000 from Rmb1.1841 billion in 1999. Power demand increased 20.3% in Guangdong Province in 2000 from 1999 due to its fast economic growth. Accordingly, the total output of Shantou Power Plant increased 24.07% to 3.6260 TWh in 2000 and the weighted average tariff rate was Rmb473.85 per MWh, holding par with 1999.

Shanghai Power Plant's net operating revenues increased 10.68% to Rmb2.2025 billion in 2000 from Rmb1.9899 billion in 1999. The total output increased 9.40% from 1999 to 7.110 TWh, in which sales through the bidding process were 879.7 GWh and generated Rmb242.1 million revenue. The weighted average tariff rate increased 1.11% to Rmb362.44 per MWh in 2000 from Rmb358.46 per MWh in 1999.

Dandong Power Plant's net operating revenues increased 10.19% to Rmb784.8 million in 2000 from Rmb712.2 million in 1999. The increase was primarily due to the 11.43% increase of total output from 1999 to 2.9982 TWh in 2000. Sales through the bidding process of 134.6 GWh in 2000 made the average tariff rate decrease 1.11% to Rmb306.27 per MWh in 2000 from Rmb309.70 per MWh in 1999.

Nanjing Power Plant's net operating revenues decreased 2.64% from 1999 to Rmb801.1 million in 2000. The total output increased 6.00% to 2.8778 TWh, in which sales through the bidding process were 419.3 GWh, accounting for 14.57% of the total output. The weighted average tariff rate dropped 8.16% from Rmb354.61 per MWh in 1999 to Rmb325.68 per MWh in 2000.

*Operating Expenses* Total operating expenses increased 15.16% to Rmb8.6464 billion in 2000 from Rmb7.5082 billion in 1999. The increase in operating expenses resulted primarily from the inclusion of operating expenses of Fuzhou Power Plant Phase II and Nantong Power Plant Phase II, which were in commercial operation in full 2000, as well as the increase of cost due to the significantly increased total output in 2000.

Fuel costs, including the associated transportation costs, increased 14.78% to Rmb3.8407 billion in 2000 from Rmb3.3462 billion in 1999. The increase in fuel costs was primarily due to 18.01% increase in total output. The weighted average unit cost of coal dropped 2.86%, from Rmb227.41 per ton in 1999 to Rmb220.91 per ton in 2000. On a per MWh basis of combined total output of our power plants, fuel costed 2.74% less in 2000 than in 1999, declining to Rmb91.44 per MWh from Rmb94.00 per MWh.

Fuel costs were the most significant operating expenses for us, representing 44.42% of the total operating expenses and 30.60% of the net operating revenues. The cost of coal for our power plants excluding Shantou Oil-Fired Plant accounted for 98.61% of the total fuel costs in 2000. The remaining balance of total fuel costs represented the cost of oil, which were largely consumed as the fuel by the Shantou Oil-Fired Plant.

Maintenance expense primarily includes the provision for major repairs and maintenance reserved on the basis of 1% of fixed asset value and expenses for ordinary repairs and maintenance. Repairs and maintenance expenses in 2000 were Rmb671.0 million, up 18.11% from Rmb568.1 million in 1999. The increase in maintenance expense was primarily due to the provisions for Nantong Power Plant Phase II and Fuzhou Power Plant Phase II.

Depreciation increased 11.50% to Rmb2.6544 billion in 2000. The increase was mainly attributable to the increase of depreciation of fixed assets related to Fuzhou Power Plant Phase II and Nantong Power Plant Phase II, which had the first full year of commercial operation in 2000.

Labor costs increased 34.57% in 2000 to Rmb669.9 million. The increase in labor costs reflected the adjustments to salaries and the inclusion of labor costs in Fuzhou Power Plant Phase II and Nantong Power Plant Phase II, which had commercial operation in full 2000. Labor costs accounted for 7.75% of total operating costs in 2000.

Transmission fees consist of handling fees levied on a per MWh basis for transmission services and an reimbursement for transmission costs incurred by the local power corporations. In 2000, transmission fees were paid by Fuzhou Power Plant Phase I and Shantou Oil-Fired Plant. Fuzhou Power Plant Phase I adopted an on-grid tariff in 1999 and the transmission fees paid by Fuzhou Power Plant Phase I only consisted of handling fee of Rmb5 per MWh. Effective from July 1999, Nantong Power Plant and Nanjing Power Plant ceased to pay transmission fees to local power corporations. As a result of these changes, transmission fees declined 37.48% to Rmb17.1 million in 2000.

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 June 30, 1994 between us and HIPDC (the "Service Agreement"), HIPDC has agreed, among other things, to allow us to use its transmission and transformer facilities. The service fee payable by us to HIPDC for the use of transmission and transformer facilities is calculated on the basis of reimbursement of cost relating to the transmission facilities and reasonable profits to HIPDC (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 December 4, 1997 (as amended by a supplemental letter dated December 5, 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 January 1, 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.

In 1998, HIPDC transferred the relevant transmission and transformer facilities in connection with Dalian, Dandong, Nantong and Nanjing Power Plants to Northeast 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, Shantou Power Plant and Shanghai Power Plant were still required to pay the service fees. The service fees paid to HIPDC was Rmb310.7 million in 2000, roughly equal to Rmb305.8 million in 1999.

We have been accorded special preferential tax treatment by the PRC State Taxation Bureau, pursuant to which income tax is levied on a non-combined basis. Under this regime, each power plant (although it is not a separate legal entity) is taxed individually on its net income. Because PRC tax law grants certain sino-foreign joint venture companies a tax exemption for two years following the first year in which any such company achieves a cumulative profit and grants a 50% reduction in the income tax rate for the three-years following such two-year tax exempt period. We have paid less taxes on a non-combined basis than it would have paid on a combined basis, because each power plant individually enjoys the tax exemption and reduction. The PRC State Taxation Bureau has confirmed that it will continue to levy taxes on us on a non-combined basis in the foreseeable future.

Income tax expenses increased 6.92% to Rmb411.2 million in 2000 from Rmb384.6 million in 1999. The increase was primarily due to the fact that the 2-year income tax exemption period for Shantou Power Plant expired on December 31, 1999. The 3-year 50% reduction in the income tax rate, which is 7.5% after reduction, has begun to apply to Shantou Power Plant since January 1, 2000. In addition, the commercial operation of Fuzhou Power Plant Phase II and Nantong Power Plant Phase II in 2000 also led to an increase in income tax expenses for us.

Other expenses increased 26.22% to Rmb482.5 million in 2000, reflecting the increase of other expenses related to Nantong Power Plant Phase II and Fuzhou Power Plant Phase II. Other expenses also include rent paid by us to HIPDC. Pursuant to a Leasing Agreement (“Leasing Agreement”) between us and HIPDC signed on December 26, 2000, HIPDC agreed to lease a new office building to us for 5 years, and the annual rent is Rmb25 million. The Leasing Agreement became effective as of January 1, 2000.

*Income before Financial Expenses* Income before financial expense increased 31.10% to Rmb3.907 billion in 2000 from Rmb2.980 billion in 1999. This increase was primarily due to the fact that the growth of net operating revenues (19.69%) outpaced that of operating expenses (15.16%).

*Total Financial Expenses* Total financial expense increased 34.73% to Rmb979.9 million in 2000 from Rmb727.3 million in 1999, primarily due to increase of interest expenses in relation to Nantong Power Plant Phase II and Fuzhou Power Plant Phase II, which entered into full year production in 2000. The interest expenses increased 13.88% to Rmb1.0247 billion in 2000 from Rmb899.8 million in 1999. In addition, the decline in deposit interest rate led to 26.59% decrease in interest income earned to Rmb79.7 million. Because of the end of barter trade in 2000, exchange gain of renminbi over Swiss Franc sharply decreased from 1999 and as a result the net exchange loss was Rmb34.9 million in 2000.

*Net Income* Net income increased 34.67% to Rmb2.5158 billion in 2000 from Rmb1.8682 billion in 1999. The increase was primarily due to significant improvement on profitability of Shangan Power Plant, Shanghai Power Plant and Shantou Power Plant, as well as the full year commercial operation of Fuzhou Power Plant Phase II and Nantong Power Plant Phase II in 2000.

Dandong Power Plant incurred a loss of Rmb177 million in 2000, its second year of commercial operation, primarily due to the large financial expense, depreciation and maintenance expense. The loss of Shantou Oil-Fired Plant dramatically increased to Rmb33.7 million in 2000 from Rmb13.2 million in 1999, because the price of oil, its primary fuel, increased 42.14% to Rmb1,862 per ton in 2000 from Rmb1,310 per ton in 1999.

#### *Dividend Payable*

Our Board of Directors proposed a dividend of Rmb0.22 per ordinary share for the year ended December 31, 2000, based on a resolution passed on March 14, 2001. The total dividend payable was Rmb1.243 billion. The proposal is subject to approval by the Shareholders' General Meeting.

#### *Year Ended December 31, 1999 Compared to Year Ended December 31, 1998*

##### *General*

Despite the expiration of VAT refund, both net operating revenue and net income increased in 1999. The increases were primarily due to the following factors: first, Dalian Power Plant Phase II, Dandong Power Plant, Nantong Power Plant Phase II and Fuzhou Power Plant Phase II commenced commercial operation in 1999; second, the operating results of Nanjing Power Plant, which we acquired from HIPDC in 1999, were also included in our operating results. As a result, total output increased 41.84% compared to 1998. We have also improved on cost control, especially control over fuel cost, which led to a 3.55% decline in unit cost.

*Net Operating Revenues* Net operating revenues is the operating revenue less sales incentives paid to local power corporations usually as an incentive to dispatch more output from the power plants. Net operating revenues increased 29.76% to Rmb10.4882 billion in 1999 from Rmb8.0825 billion in 1998. The increase was primarily due to the commencement of commercial operation of Dalian Power Plant Phase II, Dandong Power Plant on January 1, 1999, the increase in output of Shantou Power Plant, and the inclusion of Nanjing Power Plant's operating results.

Dalian Power Plant's net operating revenues increased 51.74% to Rmb1.5765 billion in 1999 from Rmb1.0389 billion in 1998. This increase was primarily due to the commencement of commercial operation of Dalian Power Plant Phase II in 1999.

Net operating revenue of Dalian Power Plant Phase I declined 15.06% to Rmb882.5 million in 1999 from Rmb1.0389 billion in 1998. It was primarily due to the fact that the scheduled overhaul of a generating unit, the low growth rate of power demand in the northeast region and the pressure on the capacity factor of Dalian Power Plant Phase I because of the commissioning of Dalian Power Plant Phase II, which caused the total output to drop 8.48% to 3.1133 TWh. The average tariff rate, however, increased 0.91% to Rmb332 per MWh, partially offsetting the impact of the drop in output on net operating revenue.

During the first full year of commercial operation, the two generating units of Dalian Power Plant Phase II produced an output of 2.6891 TWh, realized Rmb694.0 million net operating revenue. Its average tariff rate for 1999 is Rmb304 per MWh.

Fuzhou Power Plant's net operating revenue increased 8.58% to Rmb1.3181 billion in 1999 from Rmb1.2139 in 1998. It is primarily due to the commencement of commercial operation of Fuzhou Power Plant Phase II.

Fuzhou Power Plant Phase I's net operating revenue declined 13.86% to Rmb1.0457 billion in 1999 from Rmb1.2139 billion in 1998. The decline was primarily due to the fact that Fuzhou Power Phase I adopted on-grid tariff rate from sales tariff rate, and the new rate did not include transmission and transforming expenses. As a result, the weighted average tariff rate for Fuzhou Power Plant Phase I declined 21.66% to Rmb340 per MWh.

Fuzhou Power Plant Phase II started commercial operation in October, 1999. It produced net operating revenue of Rmb272.4 million, on an output of 638.8 GWh at a weighted average tariff rate of Rmb500 per MWh.

Shangan Power Plant's net operating revenue declined 0.57% to Rmb1.7252 billion in 1999 from Rmb1.7351 billion in 1998.

Shangan Power Plant Phase I's net operating revenues decreased 7.20% to Rmb918.2 million in 1999 from Rmb989.4 million in 1998. The decrease was primarily due to the fact that effective from August 1, 1998, Shangan Power Plant Phase I adopted on-grid tariff rate, as a result, the weighted average tariff rate of Shangan Power Plant Phase I declined 13.58% to Rmb299 per MWh in 1999 from Rmb346 per MWh in 1998.

Year 1999 was the second full year in which both generating units of Shangan Power Plant Phase II contributed to our operating results. Its net operating revenue was Rmb807 million on an output of 3.0907 TWh, up 8.22% and 32.06% respectively from 1998.

Nantong Power Plant's net operating revenues increased 6.54% to Rmb1.0648 billion in 1999 from Rmb999.4 million in 1998. The increase was primarily due to the commencement of commercial operation of Nantong Power Plant Phase II, which increased the total output by 10.76% from 1998.

Nantong Power Plant Phase I's net operating revenue declined 15.81% to Rmb841.4 million in 1999 from 999.4 million in 1998. The scheduled overhaul of both of the two generating units and low growth rate of power demand caused a 15.4% decline in power output to 2.9349 TWh. In addition, The weighted average tariff rate in 1999 was Rmb336 per MWh, 0.30% below Rmb337 per MWh in 1998.

Nantong Power Plant Phase II started commercial operation in the second half of 1999. Net operating revenue was Rmb223.4 million, on an output of 907.4 GWh.

Shantou Oil-Fired Plant's net operating revenues increased 17.80 % to Rmb94.5 million in 1999 from Rmb80.2 million in 1998. The total output is 185.2 GWh, representing a 33.48% increase over 1998.

Shantou Coal-Fired Power Plant's net operating revenues increased 15.78% to Rmb1.1841 billion in 1999 from Rmb1.0227 billion in 1998. Its total output increased 15.68% and weighted average power rate remained approximately the same as 1998.

Shanghai Power Plant's net operating revenues were Rmb1.9899 billion with the total output of 6.4991 TWh in 1999, which are approximately the same as 1998. The weighted average tariff rate of the Shanghai Power Plant was Rmb358 per MWh in 1999, increasing 1.13% from Rmb354 per MWh in 1998.

Dandong Power Plant generated a revenue of Rmb712.2 million during its first full year of operation in 1999 with total output of 2.6907 TWh. The weighted average tariff rate was Rmb309.70 per MWh.

Nanjing Power Plant's net operating revenue was Rmb822.8 million, on an output of 2.7148 TWh, at a weighted average tariff rate of Rmb355 per MWh.

Total sales incentives incurred by us was Rmb63 million in 1999, representing a 145.64% increase over 1998. Sales incentives as a percentage of total operating revenues (including sales incentives) increased from 0.32% in 1998 to 0.60% in 1999. Sales incentives on a per MWh basis of combined total output of all power plants increased from Rmb1.02 in 1998 to Rmb1.78 in 1999. To ensure sufficient dispatching from Dalian Power Plant Phase II and Dandong Power Plant and maintain market share in a slow growth power market, we paid a significant amount of sales incentive to Northeast Power Company. In 1999, sales incentives incurred by Dalian, Shangan, Shantou Oil-Fired and Shanghai Power Plants were Rmb32.5 million, Rmb21.35 million, Rmb0.799 million and Rmb8.35 million respectively. Fuzhou, Nantong, Shantou, Dandong and Nanjing Power Plant did not incur any sales incentives in 1999.

*Operating Expenses* Total operating expenses increased 39.08% to Rmb7.5082 billion in 1999 from Rmb5.3986 billion in 1998. The increase in operating expenses resulted primarily from the inclusion of operating expenses of Dandong Power Plant, Dalian Power Plant Phase II, Fuzhou Power Plant Phase II and Nantong Power Plant Phase II, which all commenced commercial operation in 1999, the increase in operating expenses at Shantou Power Plant due to the significantly increased output, and the inclusion of the operating expenses of Nanjing Power Plant.

Fuel costs, including associated transportation costs, increased 29.3% to Rmb3.3462 billion in 1999 from Rmb2.5879 billion in 1998. The increase in fuel costs was primarily due to 41.84% increase in total output. The weighted average unit cost of coal dropped 5.39%, from Rmb240.37 per ton in 1998 to Rmb227.41 per ton in 1999. On a per MWh basis of combined total output of our Power Plants, fuel was costed 8.84% less in 1999 than 1998, declining to Rmb94 per MWh from Rmb103.1 per MWh.

Fuel costs were our most significant operating expense, representing 42.40% of our total operating expenses and 31.9% of the net operating revenues. The cost of coal for our power plants excluding Shantou Oil-Fired Plant accounted for 96.89% of the total fuel costs in 1999. The remaining balance of total fuel costs represented the cost of oil, which were largely consumed as the fuel by the Shantou Oil-Fired Plant.

Depreciation increased 56.89% to Rmb2.3807 billion in 1999. The increase was mainly attributable to the depreciation related to Dandong Power Plant, Dalian Power Plant Phase II, Fuzhou Power Plant Phase II, Nantong Power Plant Phase II and Nanjing Power Plant.

Transmission fees consist of an agency handling fee levied on a per MWh basis for transmission services, as an reimbursement for transmission costs incurred by the local Power Corporations. In 1999, transmission fees were paid by Fuzhou Power Plant Phase I, Shantou Oil-Fired Plant and Nanjing Power Plant. Fuzhou Power Plant Phase I adopted an on-grid tariff that did not require reimbursement of transmission costs of local Power Corporation, therefore, the transmission fees paid by Fuzhou Power Plant Phase I only consisted of agency handling fee of Rmb5 per MWh. Nantong Power Plant and Nanjing Power Plant ceased to pay transmission fees, effective from July, 1999. As a result of these changes, transmission fees declined 91.04% from Rmb305.1 million in 1998 to Rmb27.3 million in 1999.

The service fee to HIPDC includes a fee for the use of its transmission facilities (including grid connection facilities) based on reimbursement of cost plus an agreed profit. Pursuant to the Service Agreement dated June 30, 1994 between us and HIPDC (the "Service Agreement"), HIPDC has agreed, among other things, to allow us to use its transmission and transformer facilities, to rent certain office and headquarters space and to use certain telecommunications facilities. The service fee payable by us to HIPDC for the use of transmission and transformer facilities is calculated on the basis of overhaul and maintenance expenses, financing charges, insurance premiums and taxes payable by HIPDC relating to the transmission

facilities and reasonable profits to HIPDC (calculated on the basis of 10% of the current net fixed asset value of the transmission facilities) and depreciation expenses (10% of the original net fixed asset value of such transmission facilities on a straight line basis) until such facilities are fully depreciated. HIPDC is responsible for the repair and maintenance of such transmission facilities and bear the related costs. We entered into another service agreement in relation to the power transmission and transformer equipment of our new power plants on December 4, 1997 (as amended by a supplemental letter dated December 5, 1997) (collectively known as the "T&T Service Agreement") with HIPDC. According to this agreement, HIPDC agreed to allow our new power plants or expanded power plants which commence commercial operation after January 1, 1997 or power plants acquired in the future 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.

In 1998, HIPDC, transferred the relevant transmission and transformer facilities in connection with Dalian, Dandong, Nanjing and Nantong Power Plants to Northeast 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 invested by Fujian Power Corporation. Fuzhou Power Plant Phase I, Shangan Power Plant, Shantou Oil-Fired Plant, Shantou Power Plant and Shanghai Power Plant were still required to pay the service fees. The net fixed assets value of these power plants, however, has decreased due to depreciation and amortization, which led to a smaller base on which the 10% service fees were levied. The service fees paid to HIPDC declined 10.57% to Rmb305.8 million in 1999 from Rmb341.9 million in 1998.

Maintenance expense primarily includes the provision for major repairs and maintenance determined on the basis of 1 % of fixed asset costs and expenses for ordinary repairs and maintenance. See Note 2(m) of Notes to Financial Statements. Repairs and maintenance expenses in 1999 were Rmb568.1 million, up 31.53% from Rmb431.9 million in 1998. The increase in maintenance expense was primarily due to the provisions for Dandong Power Plant, Nanjing Power Plant, Dalian Power Plant Phase II, Nantong Power Plant Phase II and Fuzhou Power Plant Phase II.

Labor costs increased 21.97% in 1999 to Rmb497.8 million from Rmb408.2 million in 1998. The increase in labor costs reflected the inclusion of labor costs in Nanjing Power Plant, as well as, the adjustments to salaries in 1999. Labor costs accounted for 6.31% of total operating costs in 1999. We believe that labor costs will continue to increase.

We have been accorded special tax treatment by the PRC State Taxation Bureau, pursuant to which income tax is levied on a non-combined basis. Under this regime, each Power Plant (although it is not a separate legal entity) is taxed individually on its net income. Because PRC tax law grants certain sino-foreign joint venture companies a tax exemption for two years following the first year in which any such company achieves a cumulative profit and grants a 50% reduction in the income tax rate for the three-years following such two-year tax exempt period. We have paid less taxes on a non-combined basis than it would have paid on a combined basis, because each Power Plant individually enjoys the tax exemption and reduction. See Note 2(p) of Notes to Financial Statements for further discussion of the tax treatment accorded. The PRC State Taxation Bureau has confirmed that it will continue to levy taxes on us on a non-combined basis in the foreseeable future.

Income tax payment increased 3.66% in 1999 to Rmb384.6 million from Rmb371.0 million in 1998. The increase was primarily due to the fact that the income tax rate for Shanghai Power Plant increased to 16.5% in 1999 from 8.25% in 1998. The acquisition of Nanjing Power Plant also led to an increase in income tax payment. The income tax rate for Shangan Power Plant, however, decreased to 16.5% in 1999 from 31.5% in 1998, partially offsetting the effect of Shanghai Power Plant's increase of income tax rate. Our effective income tax rate was 17% in 1999, as consistent with 1998.

Other expenses increased 23.18% to Rmb382.3 million in 1999 from Rmb310.35 million in 1998, reflecting expenses related to Dandong Power Plant, Dalian Power Plant Phase II, Nantong Power Plant Phase II, Fuzhou Power Plant Phase II and Nanjing Power Plant.

We had been granted an exemption (the "VAT Exemption") from paying the full VAT at the mandated 17% rate. Under the VAT Exemption, we are required to pay VAT calculated at 17% of its revenues, less the amounts of VAT already paid on the purchase of fuel and materials. The net amount of VAT payable is then compared with the amount which would have been paid under the previous legislation for the industrial and commercial consolidated tax ("ICCT Legislation"). Any excess amount paid was compensated by way of a refund from the tax bureau. The VAT Exemption, however, expired for by 1998. As a result, we did not receive any VAT refund in 1999.

*Profit before Financial Expenses* Profit before financial expense (profit from operations) increased 11.03% to Rmb2.9800 billion in 1999 from Rmb2.6839 billion in 1998. This increase was primarily due to the fact that the growth of net operating revenue outpaced that of operating expenses.

*Total Financial Expenses* Total financial expense increased 53.31% to Rmb727.3 million in 1999 from Rmb474.4 million in 1998, primarily due to increase of interest expenses in relation to Dandong Power Plant, Dalian Power Plant Phase II, Nantong Power Plant Phase II, and Fuzhou Power Plant Phase II which started commercial operation in 1999, and the inclusion of the full year interest expenses of Nanjing Power Plant. As a result, interest charge increased 49.95% to Rmb899.8 million in 1999 from Rmb600 million in 1998. In addition, the decline in deposit interest rate led to 24.02% decrease in interest income earned. The appreciation of Renmenbi over Swiss Franc, however, produced a exchange gain of Rmb63.9 million, partially offsetting the increase of interest expenses.

*Net Profit* As a result of the foregoing, net income increased 1.61% to Rmb1.8682 billion in 1999 from Rmb1.8385 billion in 1998. The expiration of VAT Exemption in 1999 reduced approximately Rmb660 million in our net income. Shangan Power Plant Phase II and Shantou Power Plant, however, improved on profitability in 1999. Fuzhou Power Plant Phase II generated Rmb58.9 million net profit during its first year of commercial operation. The inclusion of Nanjing Power Plant's operating results also improve our profit.

Primarily due to fine-tuning of generation facilities, Dandong Power Plant, Dalian Power Plant Phase II and Nantong Power Plant Phase II incurred loss of Rmb146.8 million, Rmb19.5 million and Rmb15.8 million, respectively. Shantou Oil-Fired Power Plant suffered a loss of Rmb13.2 million, 37.72% less than that of 1998.

#### *Dividend Payable*

The total dividend paid for 1999 was Rmb508.5 million.

## Liquidity and Capital Resources

During the year ended December 31, 2001, net cash provided by operating activities was approximately Rmb5,919 million. The major contributors, after adding back the Rmb3,261 million major non-cash item of depreciation and deducting the Rmb247 million non-cash item of amortization of negative goodwill, were an increase in profit before taxation to Rmb4,237 million offset in part by a decrease of Rmb370 million in accounts payable and accrued liabilities and a decrease of Rmb200 million in staff welfare and bonus payable. During the year ended December 31, 2001, net cash used in investing activities, primarily representing cash used in addition to property, plant and equipment of Rmb2,871 million, cash used in repayment of payable to Nanjing Investment of Rmb142 million, cash used in increasing temporary cash investments of Rmb4,665 million offset in part by cash inflow from acquisition of Shandong Huaneng of Rmb2,636 million, was Rmb4,565 million. Net cash used in financing activities, primarily representing the repayment of long-term bank loans, loans from shareholders and short-term loan of Rmb2,234 million, Rmb209 million and Rmb2,560 million, dividend paid of Rmb1,266 million less drawdown of short-term bank loans of Rmb1,300 million and net proceeds from issuance of domestic shares of Rmb2,770 million, was Rmb1,170 million. As a result, the cash and cash equivalents increased by Rmb185 million, resulting in a balance of cash and cash equivalents on December 31, 2001 of Rmb2,173 million.

During the year ended December 31, 2000, net cash provided by operating activities was approximately Rmb5,643 million. The major contributors, after adding back the Rmb2,667 million major non-cash item of depreciation and amortization were an increase in profit before taxation to 2,927 million and a decrease of Rmb207 million in accounts receivable, offset in part by a decrease of Rmb359 million in accounts payable and accrued liabilities. During the year ended December 31, 2000, net cash used in investing activities, primarily representing cash used in prepayment of consideration for the acquisition of Shandong Huaneng of Rmb5,768 million, cash used in capital expenditure of Rmb352 million, cash used in repayment of payable to Nanjing Investment of Rmb100 million and cash provided by a decrease in temporary cash investments of Rmb956 million, was Rmb5,318 million. Net cash used in financing activities, primarily representing the repayment of long-term bank loans and loans from shareholders of Rmb942 million and Rmb737 million, as well as dividend paid of Rmb509 million less drawdown of short-term bank loans of Rmb1,511 million, was Rmb831 million. As a results, the cash and cash equivalents decreased by Rmb505 million, resulting in a balance of cash and cash equivalents on December 31, 2000 of Rmb1,988 million.

During the year ended December 31, 1999, net cash provided by operating activities was approximately Rmb5,007 million. The major contributors, after adding back the Rmb2,392 million major non-cash item of depreciation and amortization were an increase in profit before taxation to Rmb2,253 million and a increase of Rmb887 million in accounts payable and accrued liabilities (mainly for payable to contractors), offset in part by a increase of Rmb726 million in accounts receivable. During the year ended December 31, 1999, net cash used in investing activities, primarily representing cash used in capital expenditures of Rmb2,274 million, cash used in repayment of payable of Nanjing Acquisition of Rmb1,111 million and cash provided by a decrease in temporary cash investment of Rmb586 million, was Rmb2,635 million. Net cash used in financing activities, primarily representing the repayment of long-term bank loans and loans from shareholders of Rmb511 million and Rmb1,836 million respectively, as well as dividend paid of Rmb452 million less the drawdown of long-term bank loans of Rmb1,051 million, was Rmb2,065 million. As a results, cash and cash equivalents increased by Rmb308 million, resulting in a balance of cash and cash equivalents at December 31, 1999 of Rmb2,493 million.

Capital expenditures in 2001 were Rmb2,871 million (US\$347 million), primarily for the construction of Dezhou Power Plant Phase III.

Capital expenditures in 2000 were Rmb352 million (US\$43 million), primarily for the construction of some complementary facilities of Fuzhou Power Plant Phase II and Nantong Power Plant Phase II.

Capital expenditures in 1999 were Rmb2,274 million (US\$275 million), primarily for the construction of Dandong Power Plant, Dalian Power Plant Phase II, Fuzhou Power Plant Phase II and Nantong Power Plant Phase II.

Capital expenditures have been financed by long-term borrowings and cash from operations. Our anticipated capital expenditures will be financed by cash in hand, cash from operations and future debt and equity offerings.

The terms of our existing bank and Local Government loans do not restrict our ability to pay dividends in respect of our shares. In accordance with the US\$16 million Tax Spared Term Loan Agreement dated November 11, 1996 (the "DKB Loan") between us and the Dai-Ichi Kangyo Bank, Limited ("DKB"), absent DKB approval, we may not incur additional *pari passu* or subordinated debt other than in ordinary course of business. DKB has agreed to waive this requirement for the purposes of the Shanghai Power Plant Acquisition, the Offering and Nanjing Power Plant Acquisition. On December 31, 2001, US\$11 million was outstanding under the DKB Loan. Our other existing bank loan and Local Government loans do not restrict its ability to incur additional *pari passu* or subordinated debt. None of our loan are secured.

In connection with the Shanghai Power Plant Acquisition, we assumed approximately Rmb1,386 million of foreign denominated loans and approximately Rmb490 million of HIPDC and bank loans denominated in Rmb that were used to finance the construction of the Shanghai Power Plant. In connection with Shanghai Power Plant Acquisition, we had made four cash payments to HIPDC; Rmb550 million paid on December 31, 1997, (ii) Rmb1,000 million paid on January 1, 1998, (iii) Rmb550 million paid on March 30, 1998 and (iv) Rmb690 million paid on June 30, 1998.

In connection with the Nanjing Power Plant Acquisition, we assumed approximately Rmb252 million of foreign denominated loans and approximately Rmb444 million and Rmb349 million of loans denominated in Rmb on lent by HIPDC and Nanjing Investment respectively. In connection with the Nanjing Power Plant Acquisition, as of December 31, 2001 we had made a cash payment to HIPDC amounted to approximately Rmb1,111 million and a cash payment of Rmb242 million to Nanjing Investment.

As of December 31, 2001, approximately Rmb14,910 million of total long-term debt, including long-term loans (including current portion), convertible notes and accrued put premium was outstanding, of which approximately Rmb13,090 million was denominated in foreign currencies. Because of the number of different provinces in which we operate, we believe that operational failure at any Power Plant would not affect its ability to make principal and interest payments under its financing obligations.



## Contractual Obligations and Commercial Commitments

A summary of payments due by period of our contractual obligations and commercial commitments as of December 31, 2001 is shown in the tables below. A more complete description of these obligations and commitments is included in the Notes to the Financial Statements as referenced below.

### Contractual Cash Obligations

(Rmb millions)

|  | <u>2002</u>  | <u>2003-2004</u> | <u>2005-2006</u> | <u>Thereafter</u> | <u>Total</u>  |
|--|--------------|------------------|------------------|-------------------|---------------|
| Long-term debts <sup>(1)</sup> . . . . .   | 2,929        | 4,647            | 1,231            | 3,698             | 12,505        |
| Convertible notes <sup>(2)</sup> . . . . .   | —            | 1,904            | —                | —                 | 1,904         |
| Operating leases — Head<br>Office, Nanjing Power Plant<br>and Shanghai Power<br>Plant <sup>(3)</sup> . . . . . | 32           | 64               | 15               | 299               | 410           |
| Operating leases — Weihai<br>Power Plant <sup>(3)</sup> . . . . .  | 30           | 60               | 59               | 523               | 672           |
| Interest rate swap <sup>(4)</sup> . . . . .  | —            | 15               | —                | —                 | 15            |
|  | <u>2,991</u> | <u>6,690</u>     | <u>1,305</u>     | <u>4,520</u>      | <u>15,506</u> |

### Other Commercial Commitments

(Rmb million)

|   |            |            |          |            |            |
|---|------------|------------|----------|------------|------------|
| Guarantees <sup>(5)</sup> . . . . .                                     | —          | 170        | —        | 229        | 399        |
| Notes receivable discounted<br>with Recourse <sup>(5)</sup> . . . . .   | 110        | —          | —        | —          | 110        |
| Notes receivable endorsed to<br>coal Suppliers <sup>(5)</sup> . . . . . | 31         | —          | —        | —          | 31         |
|   | <u>141</u> | <u>170</u> | <u>—</u> | <u>229</u> | <u>540</u> |

(1) See financial statement Note 22, “Long-term Loans from Shareholders”, Note 23, “Long-term bank Loans” and Note 24, “Other Long-term Loans”.

(2) See financial statement Note 21, “Convertible Notes”.

(3) See financial statement Note 33, “Obligations and Commitments”.

(4) See financial statement Note 35, “Interest Rate Swap”. The amounts due for the interest swap agreements are based on market valuation as of December 31, 2001. Actual payment, if any, may differ at settlement date.

(5) See financial statement Note 34, “Contingent Liabilities”.

## Impact of Inflation

The national retail inflation rates in the PRC were 0.8% and 2.6% per annum in 1997 and 1998, respectively. Nationwide retail prices decreased 1.4% and 0.4% in 1999 and 2000. We are permitted under the Pricing Policy to pass on increases in our costs to customers through power rate adjustments. As a result, we believe that inflation and PRC Government efforts to curb inflation have not had a significant impact on our profitability or financial position in the past. However, more severe measures or other actions by the PRC Government to control inflation in the future or otherwise regulate the economy could decrease overall demand for electricity in China.

## Item 6. Directors, Senior Management and Employees

The following table sets forth certain information concerning the Directors and executive officers and members of the supervisory committee of us (the "Supervisory Committee"). All Directors will serve a term of three years or until the election of their respective successors.

| <u>Name</u>               | <u>Age</u> | <u>Positions with us</u>                       |
|---------------------------|------------|--|
| Li Xiaopeng . . . . .     | 42         | Chairman                                       |
| Wang Xiaosong . . . . .   | 55         | Vice Chairman                                  |
| Ye Daji . . . . .         | 56         | Director and President                         |
| Feng Dawei* . . . . .     | 51         | Director and Vice President                    |
| Chen Baoliang . . . . .   | 47         | Director and Vice President                    |
| Huang Long . . . . .      | 48         | Director, Vice President and Company Secretary |
| Hu Jianmin . . . . .      | 47         | Director and Vice President                    |
| Wu Dawei** . . . . .      | 48         | Vice President and Candidate of Director       |
| Liu Guoyue** . . . . .    | 38         | Vice President and Candidate of Director       |
| Wang Defang . . . . .     | 77         | Director                                       |
| Li Zhongshu* . . . . .    | 63         | Director                                       |
| Bao Qianyuan* . . . . .   | 61         | Director                                       |
| Shan Qunying . . . . .    | 48         | Director                                       |
| Yang Shengming . . . . .  | 58         | Director                                       |
| Xu Zujian . . . . .       | 47         | Director                                       |
| Liu Shuyuan . . . . .     | 51         | Director                                       |
| Bai Changnian . . . . .   | 51         | Director                                       |
| Miao Kai* . . . . .       | 39         | Director                                       |
| Lin Jianxin* . . . . .    | 46         | Director                                       |
| Shen Weibing** . . . . .  | 34         | Candidate of Director                          |
| Shen Zongmin** . . . . .  | 47         | Candidate of Director                          |
| Gao Zongze . . . . .      | 62         | Independent Director                           |
| Zheng Jianchao . . . . .  | 62         | Independent Director                           |
| Qian Zhongwei** . . . . . | 63         | Candidate of Independent Director              |
| Ju Zhanghua . . . . .     | 52         | Chairman of the Supervisory Committee          |
| Zhao Xisheng . . . . .    | 58         | Member of the Supervisory Committee            |
| Pan Jianmin . . . . .     | 46         | Member of the Supervisory Committee            |

*Note:*

\* The Board of Directors has approved the resignation of such persons and the ordinary resolutions in relation to their appointments will be tabled before the annual general meeting of the Company for year 2001.

\*\* The Board of Directors has nominated such persons as the directors of the Company and the ordinary resolutions in relation to their appointments will be tabled before the annual general meeting of the Company for year 2001.

## Directors and members of the supervisory Committee

### *Directors*

**Li Xiaopeng** is Chairman of the Company, Chairman and President of HIPDC, as well as Chairman and President of China Huaneng Group. From June 1994 to January, 2000, Mr Li was Vice President, President and Vice Chairman of the Company as well as Vice President and Vice Chairman of HIPDC. Before joining HIPDC, he had successively served as Engineer of the Power System Research Division, as Deputy Division Chief of the Planning and Operations Division, and as General Manager of the Power Technology and Economic Research Division, Electric Power Research Institute. Mr Li is a senior engineer and graduated from the North China Institute of Electric Power specializing in power plants and power systems.

**Wang Xiaosong** is Vice Chairman of the Company, Director and Vice President of HIPDC, and Director and Vice President of China Huaneng Group. From June 1994 to January, 2000, he was General Manager of the Securities Department of the Company, Vice President of the Company and Vice President of HIPDC. Before joining the Company, he had served as Deputy General Manager of Fushun Power Plant, General Manager of Yuanbaoshan Power Plant and Chief of the Labour and Wages Division of Northeast Power Administration. Mr Wang is a senior engineer and graduated from Beijing Institute of Electric Power specializing in thermal power engineering.

**Ye Daji** is Director and President of the Company and Director of China Huaneng Group. After joining the Company, he has been Deputy General Manager of Huaneng Shanghai Branch and General Manager of Huaneng Shanghai Shidongkou Second Power Plant. From December 1995 to January, 2000, he was Vice President of the Company and Vice President of HIPDC. Before joining the Company, he had served as Deputy Chief Engineer of Shanghai Shidongkou Power Plant. Mr Ye is a senior engineer and graduated from Shanghai Jiaotong University specializing in mechanical engineering.

**Feng Dawei** was the former Director of the Company. After joining the Company in 1996, he has been the General Manager of Huaneng Guangdong Branch Company, General Manager of Shantou Power Plant, Manager of the Engineering Department of the Company, and Manager of the Production Department of the Company. In 1998, he served as the General Manager of Huaneng Beijing Branch Company, General Manager of the Company's Beijing Thermal Power Plant, and Vice President of the Company. Mr Feng is a senior engineer. He graduated from the Engineering Management Department of Hefei Industrial University and has obtained a master degree in science. On September 19, 2001 the Board has approved Mr Feng's resignation of his position as Director of the Company, pending the approval in the annual general meeting.

**Chen Baoliang** is Director and Vice President of the Company. He joined the Company in 1996 and has worked as General Manager of Huaneng Dalian Branch and General Manager of Dalian Power Plant. Before joining the Company, he had been Deputy Chief Engineer of Liaoning Qinghe Power Plant, Deputy Chief of the Preparation Department and Deputy General Manager of the Construction of Tieling Power Plant and General Manager of Yuan Bao Shan Power Plant. Mr Chen is a senior engineer and graduated with an M.S. degree from North China Electric Power University specializing in thermal power engineering.

**Huang Long** is Director and Vice President of the Company as well as Secretary of the Board of Directors. After joining the Company, he has served as Deputy General Manager and General Manager of the International Co-operation Department of the Company. Mr Huang is a senior engineer and graduated with an M.S. degree from North Carolina State University in the U.S. specializing in communications and control.

**Hu Jianmin** is Director and Vice President of the Company. From April 1998 to January 2001, he worked as Chief Engineer of Shandong Electric Power Group Corp. Before joining the Company, he had been Chairman of Shandong Rizhao Power Company Limited, General Manager of Shandong Liaocheng Power Plant, Shiheng Power Plant and Zouxian Power Plant respectively. Mr Hu is a senior engineer and graduated from Shandong Industrial Institute specializing in relay protection.

**Wu Dawei** is Vice President of the Company. He joined the Company in 1988 and has served as Deputy General Manager of Shanghai Shidongkou Second Power Plant, Deputy Manager of Shanghai branch of the Company, and the General Manager of Shanghai Shidongkou Second Power Plant. Mr Wu is a senior engineer. He graduated from Shanghai Institute of Electric Power and has obtained a Master of Business Administration degree from the Central Europe International Business School of Shanghai Jiaotong University. Mr Wu was nominated as a candidate for Director at the board meeting on September 19, 2001 pending the approval of the annual general meeting.

**Liu Guoyue** is Vice President of the Company. He joined the Company in 1987 and has served as the deputy manager, vice president and president of Shijiazhuang as well as the President of Huaneng Dezhou Power Plant. Mr Liu is a senior engineer, graduated from Northern China Electric Power University with a bachelor degree in science and a bachelor degree in business management. Mr Liu was nominated as a candidate for Director at the board meeting on September 19, 2001 pending the approval of the annual general meeting.

**Wang Defang** is Director of the Company. He was Chairman of the Company prior to February, 1996. He had served as President, Vice President and Chairman of HIPDC. Before joining the Company, Mr Wang had served as Vice Director of the East China Power Administration, Director of the Planning Department of the former Ministry of Electric Power, Vice Minister of the State Energy Commission and President of the Electric Power Planning and Design Institute under the Ministry of Water Resources and Electric Power. Mr Wang graduated from Shandong University.

**Li Zhongshu\*** is the former Director of the Company and is currently the Senior Consultant of the Company. She has served as General Manager of the Company's Fuzhou Branch and Deputy General Manager and General Manager of Huaneng Fuzhou Power Plant. Before joining the Company, she had served as General Manager of Fujian Provincial Fuzhou Power Plant and Deputy General Manager of Fujian Provincial Thermal Power Engineering Contract Corporation. Ms Li is a senior engineer and graduated from Qinghua University specializing in thermal energy. On September 19, 2001, the Board of Directors approved her resignation for the position of director, pending shareholders' approval in next annual general meeting.

**Bao Qianyuan\*** is the former Director of the Company and General Manager of the Company's Nantong Branch. Before joining the Company, he had been the General Manager of the First Branch of Nantong Municipal Construction Installation Corporation and Director of Nantong Municipal Construction Engineering Bureau. Mr Bao is a senior engineer and graduated from Suzhou Architectural School specializing in industrial and civil architecture. On September 19, 2001, the Board of Directors approved his resignation for the position of director, pending shareholders' approval in next annual general meeting.

**Shan Qunying** is Director of the Company and Vice President of Hebei Provincial Construction Investment Company. He had been the Division Chief of Hebei Provincial Construction Investment Company. Mr Shan is a senior engineer and graduated from the former Beijing Steel Institute specializing in automation.

**Yang Shengming** is Director of the Company, Vice President of Fujian International Trust and Investment Company Limited and Chairman of Fujian International Leasing Company. Mr Yang is a senior economist and graduated from Beijing Light Industries Institute.

**Xu Zujian** is Director of the Company, Vice President of Jiangsu International Trust and Investment Company Limited and President of Jiangsu Investment Management Co. Ltd. He formerly served as Section Chief and Deputy Chief of the Infrastructure Division of Jiangsu Planning and Economics Commission. Mr Xu is a senior economist. He graduated from Liaoning Finance Institute majoring in infrastructure finance.

**Liu Shuyuan** is Director of the Company and President of Liaoning Enterprises Group Company and Liaoning Energy Corporation. He has been the General Manager of Liaoning Tieling Steel Plant, Director of Tieling Municipal Construction Commission and Assistant to the Mayor. Mr Liu is a senior economist and a postgraduate specializing in economic management.

**Bai Changnian** is Director of the Company and President of Dalian Municipal Construction Investment Company. He became Deputy Director of Dalian Planning Commission in May, 1994. Mr Bai is a senior economist and graduated from Liaoning University specializing in economics.

**Miao Kai\*** is the former Director of the Company and Director of Nantong Investment Management Centre. He has worked as Vice President of Nantong Construction Investment Corporation and Section Chief of Nantong Planning Commission. Mr Miao is a senior economist and graduated from Zhejiang University with a master's degree in economics. On March 12, 2002, the Board of Directors approved this resignation for the position of director, pending shareholders' approval in next annual general meeting.

**Lin Jianxin\*** is the former Director of the Company and President of Shantou Power Development Corporation. He has worked as President of Shantou Ceramics (Group) Company. Mr Lin is a senior economist and graduated from the graduate school of Jilin University with a master's degree in economics. On September 19, 2001, the Board of Directors approved his resignation for the position of director, pending shareholders' approval in next annual general meeting.

**Shen Zongmin\*\*** is the President of Shantou Electric Power Development Company and Chairman of Shantou Power Development Joint Stock Company Limited. Previously, he was the President of Shantou Light Industry Mechanical (Group) Company. Mr Shen was nominated as a candidate for Director at the board meeting on September 19, 2001, pending the approval of the annual general meeting.

**Shen Weibing\*\*** is the chief officer of Nantong Investment Management Center. He was the vice president and president of Nantong Municipal Oil Company, vice president and legal representative of Nantong Municipal Construction Investment Company, and deputy chief officer of Nantong Investment Management Centre. Mr Shen is a senior economist. He graduated from Nanjing University and hold a master degree in business administration. On March 12, 2002, the Board of Directors nominated Mr Shen as director of the Company, pending the approval of the annual general meeting.

#### *Independent Directors*

**Gao Zongze** is an independent Director of the Company and Senior Partner at C&I Partners. He is an approved arbitrator of China International Economic and Trade Arbitration Commission and China Marine Affairs Arbitration Commission and President of All China Lawyers Association. Mr Gao graduated from Dalian Marine Institute and received a master's degree in law from the Law Department of the Graduate School of the Institute of China Academy of Social Sciences.

**Zheng Jianchao** is an independent Director of the Company and Honorary President of Electric Power Research Institute in China and Chairman of its Academic Committee. He was elected to the Chinese Academy of Engineering in 1995 and became Deputy Director of the Energy and Mining Engineering Department of the Academy. He was also a member of the Academic Committee of CIGRE, Vice President of China Electrical Engineering Institute and editor-in-chief of the Journal of Chinese Electrical Engineering. Mr Zheng graduated from Qinghua University majoring in electrical engineering and graduated from its Graduate School in 1965.

**Qian Zhongwei\*\*** is the Vice President of the United Association of China Electric Enterprises. He has been the Deputy Chief Engineer, Chief Engineer and Deputy head of the Eastern China Power Industry

Management Bureau, Head of Shanghai Electricity Bureau and President of Eastern China Power Group Company. Mr Qian is a senior engineer and graduated from the electrical engineering department of Qinghua University. Mr Qian was nominated as a candidate for Independent Director at the board meeting on 5th December, 2001 pending the approval of the annual general meeting.

### **Supervisory Committee**

As required by the Company Law, the Special Regulations of the State Council for Overseas Stock Offerings and Listings by Joint Stock Limited Companies and other implementing regulations (collectively, the “Company Law”) and the Articles of Association, we have formed the Supervisory Committee, whose primary duty is the supervision of our senior management, including the Chairman of the Board of Directors, the Board of Directors, the President and other senior officers. The function of the Supervisory Committee is to ensure that our senior management acts in the interest of us, our shareholders and employees and does not abuse its power. The Supervisory Committee reports to the shareholders in general meeting. The Articles of Association provide the Supervisory Committee with the right to investigate the business and the financial affairs of us and to request shareholders’ meetings from time to time. The Supervisory Committee is comprised of three members, two of whom, pursuant to the Articles of Association, are appointed by our shareholders of the Company and one by our employees, each for a three-year term.

#### *Supervisors*

**Ju Zhanghua** is Chairman of the Supervisory Committee of the Company, Secretary of the Board of HIPDC, and Assistant to President and General Manager of the Management Department of China Huaneng Group. He has been Secretary of the Board of the Company and General Manager of the Securities Department. Mr Ju is a senior engineer and graduated from Qinghua University specializing in electric power systems.

**Zhao Xisheng** is a senior consultant and a member of the Supervisory Committee of the Company. He has served as Deputy General Manager of the Finance Department, General Manager of the Management Department of the Company and the General Manager of the Company’s Supervising and Auditing Department. Before joining the Company and the General Manager of the Company’s Supervising and Auditing Department, he had served as Section Chief, Deputy Chief Accountant and Deputy General Manager of Beijing Shijingshan Power Plant. Mr Zhao is a senior accountant and graduated from the People’s University of China specializing in industrial economics.

**Pan Jianmin** is a member of the Supervisory Committee of the Company and General Manager of the Finance Department of China Huaneng Group. He has served as Deputy Division Chief of the Finance Department and Deputy General Manager of the Supervising and Auditing Department of China Huaneng Group and Deputy General Manager of Beijing Huaneng Real Estate Development Company. Mr Pan is a senior accountant and graduated from Liaoning Economic and Finance Institute specializing in infrastructure finance and credit.

### **Compensation of Directors and Officers**

We paid Rmb2,387,000 to our Directors and Supervisors as aggregate cash compensation for the year ended December 31, 2001 for services performed as Directors, Supervisors and officers or employees of us. In addition, Directors and Supervisors who are also officers or employees of us receive certain other benefits-in-kind, such as subsidized or free health care services, housing and transportation, which are customarily provided by large enterprises in the PRC to their employees.

## **Employees**

As of December 31, 2001, we employed 9,350 persons. Of these, 1,545 are head quarter management staff and power plant level management personnel, 7,605 are power plant personnel directly involved in the operation of the power plants and the remainder are maintenance personnel, ancillary service workers and others. Approximately 38% of our work force graduated from university or technical college.

We conduct continuing education programs for our employees at the head office and at each Power Plant. We provide training in language, computer, accounting and other areas to our professionals and technicians in their relevant fields. Employees are trained in accordance with the different requirements for professional and managerial positions.

We have reformed the labor system by introducing individual labor contracts. Currently, all employees are employed under employment contracts which specify the employee's position, responsibilities, remuneration and grounds for termination. Short-term employment contracts have fixed terms of typically one to five years, at the end of which they may be renewed with the agreement of both us and the employee. The remaining personnel are employed for an indefinite term.

The contract system imposes discipline, provides incentives to adopt better work methods and provides us with a greater degree of management control over its work force. We believe that, by linking remuneration to productivity, the contract system has also improved employee morale.

Each of our power plants also has a trade union and the employees of our headquarters are also members of a trade union. These trade unions protect employee's rights, aim to fulfill our economic objectives, encourage employees to participate in management decisions and mediate disputes between us and union members. We have not been subject to any strikes or other labor disturbances interfering with our operations, and we believe that our relations with our employees are good.

Total remuneration of our employees includes salary, bonuses and allowances. The employees also receive certain benefits in the form of housing, education and health services subsidized by us and other miscellaneous subsidies.

In compliance with the relevant regulations, we and our employees participate in the electric power industry pension plan under which all the employees are entitled to upon retirement the pensions payments. See Note 6 to the Financial Statements. Other pension payments to our retiring employees are not required under applicable PRC laws and regulations.

We do not carry workmen's compensation or other similar insurance. However, all employees (both contract and non-contract employees) who are unable to work due to illness or disability, whether or not such illness or disability is job-related, will continue, based on seniority, to receive some or all of their base salary and certain subsidies throughout the period of their absence, subject to certain PRC Government specified time limitations. Employees who are unable to work due to job-related illnesses or disabilities will receive certain compensation from us, depending on the severity of the illness or disability. The present workmen's insurance reforms being implemented by the central and local governments and our own implementation of the joint stock limited company accounting and financial principles may result in certain adjustments of the funding, management and payment methods for these types of workmen's compensation arrangements.

## Item 7. Major Shareholders and Related Transactions

### Major shareholders

Our outstanding ordinary shares consist of A Shares and H Shares, each with a par value of Rmb1.00 per share. The following table set forth certain information regarding the ownership of the outstanding shares of us as of December 31, 2000 with respect to (i) each person known by us to own beneficially more than 5% of any class of the outstanding shares of us, (ii) our directors and officers and (iii) local government investment companies.

|  | Number of<br>A Shares | Number of<br>H Shares | Percentage of Total<br>Number of Shares<br>Outstanding |
|--|-----------------------|-----------------------|--|
|  | (in thousands)        | (in thousands)        |  |
| HIPDC .....  | 2,554,840             | —                     | 42.58%   |
| Hebei Provincial Construction Investment<br>Company .....                    | 452,250               | —                     | 7.54%  |
| Fujian International Trust & Investment Company<br>Limited .....             | 334,850               | —                     | 5.58%  |
| Jiangsu Province International Trust and<br>Investment Company Limited ..... | 312,375               | —                     | 5.20%  |
| Liaoning Energy Corporation .....  | 229,685               | —                     | 3.83%  |
| Dalian Municipal Construction & Investment<br>Company .....                  | 226,125               | —                     | 3.77%  |
| Nantong Investment Management Center .....                                   | 67,875                | —                     | 1.13%  |
| Shantou Electric Power Development Company . . .                             | 46,500                | —                     | 0.77%  |
| Shantou Power Development Joint Stock Company<br>Limited .....               | 19,000                | —                     | 0.32%  |
| Dandong Energy Investment Development Center .                               | 6,500                 | —                     | 0.11%  |
| Officers and Directors .....   | —                     | —                     | 0.00%  |
| TOTAL .....  | <u>4,250,000</u>      | <u>—</u>              | <u>70.83%</u>  |

When we were established on June 30, 1994, the assets, liabilities and businesses of the Dalian, Fuzhou, Nantong and Shangan Power Plants (excluding Shangan Power Plant Phase II) and Shantou Oil-Fired Plant were acquired by us from HIPDC and, in return, HIPDC received a then 53.64% equity interest in us. The local governments of the respective provinces or municipalities in which the Dalian, Fuzhou, Nantong and Shangan Power Plants and Shantou Oil-Fired Plant are located had previously extended long-term loans to these Power Plants to finance their construction. Such loans were subsequently assigned to the local government investment companies. In accordance with the Promoters' Agreement dated February 28, 1994 (the "Promoters' Agreement") between HIPDC and the local government investment companies (excluding Shantou Power Development Joint Stock Company and Dandong Energy Investment Development Center) and an understanding between HIPDC and these local government investment companies, these local government investment companies agreed to retire approximately Rmb435 million of the loans extended to Dalian, Fuzhou, Nantong and Shangan Power Plants and Shantou Oil-Fired Plant and to forfeit certain rights to participate in profits of these five Power Plants in exchange for a then aggregate of 46.36% of the equity in us.



HIPDC and the local government investment companies (excluding Shantou Power Development Joint Stock Company and Dandong Energy Investment Development Center) have entered into the Shareholders Agreement dated May 31, 1994 (the “Shareholders Agreement”) which, among other things, grants to HIPDC the right to vote all the shares owned by each of the other seven signatories to the Shareholders Agreement so as to enable HIPDC to have majority voting rights in general meetings for so long as we are in existence. The Shareholders Agreement also provides that Directors designated by HIPDC will have majority representation on our board of directors (the “Board of Directors”) and each of the other signatories to the Shareholders Agreement will have one representative designated by it appointed as a member of the Board of Directors. The Shareholders Agreement also provides that for so long as we are in existence (i) HIPDC and the other signatories to the Shareholders Agreement will maintain their combined shareholdings to ensure their collective majority control of us, (ii) HIPDC has certain priority rights to purchase the shares held by the other signatories to the Shareholders Agreement and (iii) if HIPDC does not exercise its priority rights to purchase such shares, each of the signatories to the Shareholders Agreement other than HIPDC has a priority right to purchase such shares on a pro rata basis and (iv) no shares may be sold or transferred unless their transferees agree to abide by the terms of the Shareholders Agreement.

At the completion of the initial public offering in October 1994, HIPDC and the local government investment companies (excluding Shantou Power Development Joint Stock Company and Dandong Energy Investment Development Center) have owned, respectively, 40.23% and 34.77% of the total number of our outstanding shares.

On February 26, 1998, we placed 250 million H Shares at the price of HK\$4.40 per H Share or US\$22.73 per ADS. Simultaneously with the H Share placement, we issued 400 million A Shares to our controlling shareholder HIPDC as part of the consideration paid for the acquisition of the Shanghai Power Plant, pursuant to the Shanghai Acquisition Agreement. After the completion of the H Share Placement, HIPDC and the local government investment companies (excluding Shantou Power Development Joint Stock Company and Dandong Energy Investment Development Center) each has held 42.17% and 31.28% equity interest, respectively.

On November 15 and 16, 2001, we issued successfully a total of 350,000,000 A shares in the PRC. At the same time, the 100,000,000 state-owned legal person shares were placed to HIPDC at the same price. After the completion of the A share issuance, the total share capital of the Company is 6,000,000,000 shares, HIPDC and the local government investment companies (excluding Shantou Power Development Joint Stock Company and Dandong Energy Investment Development Center) each held 42.58%, and 27.82% equity interest, respectively.

As a result of the Shareholders Agreement, HIPDC currently has 70.4% of the total voting rights of the outstanding shares. As a result, HIPDC will continue to control us and will continue to have the power, subject to the Shareholders Agreement, to control the election of all of our Directors and to direct our management and policies.

In January 2000, Huaneng Group underwent a restructuring, in which State Power Corporation transferred its 17.22% interest in HIPDC to Huaneng Group. Huaneng Group became a 51.98% shareholder of HIPDC. At the same time, Huaneng Group has granted us a preferential right to purchase interest in existing power plants owned by Huaneng Group and the right of first refusal on all future power development projects of Huaneng Group that we may realistically develop.

## **Related party transactions**

### ***Guarantees***

As of December 31, 2001, we had long-term loans of approximately Rmb8,868 million, Rmb1,666 million and Rmb300 million which were guaranteed by HIPDC, Huaneng Group and Wehai International Trust and Investment Corporation, respectively.

### ***Service Agreement***

Pursuant to the Service Agreement, dated June 30, 1994 entered into between HIPDC and us (the "Service Agreement") HIPDC has agreed to provide certain services to us. The service fee payable by us to HIPDC for the use of transmission and transformer facilities is calculated on the basis of overhaul and maintenance expenses, financing charges, insurance premiums and taxes payable by HIPDC relating to the transmission facilities and reasonable profits to HIPDC (calculated on the basis of 10% of the current net fixed asset value of the transmission facilities) and depreciation expenses (10% of the original net fixed asset value of such transmission facilities on a straight line basis) until depreciation is no longer calculated. HIPDC is responsible for the repair and maintenance of such transmission facilities and related costs. Other services and fees include: (i) the renting of office and headquarters space by HIPDC to us at a yearly rental of Rmb500,000; (ii) the shared use of the satellite telecommunications facilities owned by HIPDC at a yearly fee of Rmb300,000; (iii) the training by HIPDC of our personnel for a nominal fee plus reimbursement of HIPDC's actual out-of-pocket expenses if both parties agree; and (iv) the provision of other consulting services relating to production, operation and management of us, subject to payment of service fees equal to at least HIPDC's actual costs to be mutually agreed. The Service Agreement has a term of 10 years, excluding (i) and (ii) above which expired on December 31, 1999.

### ***Lease Agreement***

Pursuant to a new leasing agreement between us and HIPDC signed on December 26, 2000, HIPDC agreed to lease Tianyin Mansion with an area of 27,800 square meters to us for 5 years, and the annual rent is Rmb25 million. The Leasing Agreement was effective retroactive as of January 1, 2000.

### ***T&T Service Agreement***

Pursuant to the T&T Service Agreement we agreed to pay service fees to HIPDC in relation to the provision of transmission and transformer facilities for our newly constructed power plants, power plants under expansion and acquired power plants which commence commercial operations after January 1, 1997 for a fixed fee equal to 12% of the original book value of the transmission and transformer facilities as set forth in the financial statements of HIPDC. The terms of the T&T Service Agreement are to be reviewed after a period of 10 years.

## **Item 8. Financial Information**

See page F-1 to F-46.

## Item 9. The Offer and Listing

### Offer and listing details and markets

The ADSs have been listed on the New York Stock Exchange since October 6, 1994. The table below sets forth, for the periods indicated, the high and low closing prices of the ADSs on the New York Stock Exchange.

|      |                      | Closing Price Per ADS |        |
|------|----------------------|-----------------------|--------|
|      |                      | High                  | Low    |
|      |                      | (US\$)                | (US\$) |
| 1997 | .....                | 29.25                 | 18     |
| 1998 | .....                | 26.06                 | 6.5    |
| 1999 | .....                | 17.44                 | 8.38   |
| 2000 | .....                | 18.94                 | 7      |
| 2001 | .....                | 24.91                 | 16.75  |
| 2000 | First Quarter .....  | 10.69                 | 7      |
|      | Second Quarter ..... | 13.38                 | 7.38   |
|      | Third Quarter .....  | 17.38                 | 13.25  |
|      | Fourth Quarter ..... | 18.94                 | 13.69  |
| 2001 | First Quarter .....  | 21.26                 | 16.75  |
|      | Second Quarter ..... | 26.23                 | 20.80  |
|      | Third Quarter .....  | 24.16                 | 19.20  |
|      | Fouth Quarter .....  | 24.91                 | 20.85  |
| 2001 | October .....        | 24.30                 | 20.85  |
|      | November .....       | 24.91                 | 23.33  |
|      | December .....       | 24.90                 | 22.50  |
| 2002 | January .....        | 26.95                 | 23.06  |
|      | February .....       | 28.55                 | 25.85  |
|      | March .....          | 27.51                 | 25.75  |

Source: Bloomberg

Each ADS represents 40 Overseas Listed Foreign Shares. As of December 31, 2001, there were 59 registered holders of American Depositary Receipts evidencing ADS.

On January 21, 1998, we listed our H shares on the Hong Kong Stock Exchange. On February 26, 1998, we placed 250 million H Shares Placement at the price of HK\$4.40 per H share or US\$22.73 per ADS. The table below sets forth, for the periods indicated, the high and low closing prices of H shares on the Hong Kong Stock Exchange.

|      |                      | <b>Closing Price Per H shares</b> |               |
|------|----------------------|-----------------------------------|---------------|
|      |                      | <b>High</b>                       | <b>Low</b>    |
|      |                      | <b>(HK\$)</b>                     | <b>(HK\$)</b> |
| 1997 | .....                | N/A                               | N/A           |
| 1998 | .....                | 5.1                               | 1.26          |
| 1999 | .....                | 3.3                               | 1.72          |
| 2000 | .....                | 3.77                              | 1.27          |
| 2001 | .....                | 4.2                               | 3.4           |
| 1999 | First Quarter .....  | 2.75                              | 1.72          |
|      | Second Quarter ..... | 3.30                              | 2.00          |
|      | Third Quarter .....  | 3.175                             | 1.92          |
|      | Fourth Quarter ..... | 2.45                              | 1.82          |
| 2000 | First Quarter .....  | 2.13                              | 1.27          |
|      | Second Quarter ..... | 2.67                              | 1.46          |
|      | Third Quarter .....  | 3.45                              | 2.52          |
|      | Fourth Quarter ..... | 3.77                              | 2.75          |
| 2001 |                      |                                   |               |
|      | First Quarter .....  | 4.2                               | 3.4           |
|      | Second Quarter ..... | 5.2                               | 4.1           |
|      | Third Quarter .....  | 4.675                             | 3.8           |
|      | Fourth Quarter ..... | 4.95                              | 4.05          |
| 2001 | October .....        | 4.8                               | 4.05          |
|      | November .....       | 4.95                              | 4.55          |
|      | December .....       | 4.9                               | 4.375         |
| 2002 | January .....        | 5.3                               | 4.53          |
|      | February .....       | 5.65                              | 5.1           |
|      | March .....          | 5.45                              | 5             |

Source: Bloomberg

As of December 31, 2001, there were 450 registered holders of H Shares.

## **Item 10. Additional Information**

### **Memorandum and articles of association**

The information under the heading “Description of Capital Stock” in the Registration Statement on Form F-3 filed with SEC on December 25, 1997 is incorporated herewith by reference.

### **Exchange controls**

The existing foreign exchange regulations have significantly reduced government foreign exchange controls for transactions under the current account, including trade and service related foreign exchange transactions and payment of dividends. We may undertake current account foreign exchange transactions without prior approval from the State Administration of Foreign Exchange by producing commercial documents evidencing such transactions, provided that they are processed through Chinese banks licensed to engage in foreign exchange transactions. The PRC government has stated publicly that it intends to make the Renminbi freely convertible in the future. However, we cannot predict whether the PRC government will continue its existing foreign exchange policy and when the PRC government will allow free conversion of Renminbi to foreign currency.

Foreign exchange transactions under the capital account, including principal payments in respect of foreign currency-denominated obligations, continue to be subject to significant foreign exchange controls and require the approval of the State Administration of Foreign Exchange. These limitations could affect our ability to obtain foreign exchange through debt or equity financing, or to obtain foreign exchange for capital expenditures.

Since 1994, the conversion of Renminbi into Hong Kong and United States dollars has been based on rates set by the People’s Bank of China, which are set daily based on the previous day’s PRC interbank foreign exchange market rate and current exchange rates on the world financial markets. Although the Renminbi to US dollar exchange rate has been relatively stable since 1994, we cannot predict nor give any assurance of its future stability. Fluctuations in exchange rates may adversely affect the value, translated or converted into US dollars or Hong Kong dollars, of our net assets, earnings and any declared dividends. We cannot give any assurance that any future movements in the exchange rate of the Renminbi against the US dollar and other foreign currencies will not adversely affect our results of operations and financial condition.

The following table sets forth the noon buying rates in New York for cable transfers payable in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York (the “Noon Buying Rate”) for the periods indicated:

| <u>Period</u>     | <u>Noon Buying Rate</u>     |                              |             |            |
|-------------------|-----------------------------|------------------------------|-------------|------------|
|                   | <u>Period End</u>           | <u>Average<sup>(1)</sup></u> | <u>High</u> | <u>Low</u> |
|                   | (expressed in Rmb per US\$) |                              |             |            |
| 1997.....         | 8.3100                      | 8.3166                       | 8.3290      | 8.2911     |
| 1998.....         | 8.2789                      | 8.2968                       | 8.3180      | 8.2774     |
| 1999.....         | 8.2795                      | 8.2785                       | 8.2800      | 8.2770     |
| 2000.....         | 8.2774                      | 8.2784                       | 8.2799      | 8.2768     |
| 2001.....         | 8.2766                      | 8.2770                       | 8.2786      | 8.2676     |
| 2001 October..... | 8.2768                      | —                            | 8.2770      | 8.2765     |
| November.....     | 8.2772                      | —                            | 8.2774      | 8.2765     |
| December.....     | 8.2766                      | —                            | 8.2773      | 8.2676     |
| 2002 January..... | 8.2765                      | —                            | 8.2800      | 8.2765     |
| February.....     | 8.2765                      | —                            | 8.2770      | 8.2765     |
| March.....        | 8.2774                      | —                            | 8.2800      | 8.2766     |

Source: Datastream

Note:

(1) Determined by averaging the rates on the last business day of each month during the respective period.

## **Taxation**

The following is a summary of (i) certain tax consequences from acquiring, owning and disposing the H Shares and ADSs based on tax laws of the PRC, the United States and Hong Kong SAR and the Income Tax Treaty between the PRC and the United States (the “Tax Treaty”) as in effect as of April 20, 2000, and is subject to changes in PRC or United States law, including changes that could have retroactive effect, and (ii) the principal PRC taxes to which we are subject. The following summary does not take into account or discuss the tax laws of any country or region other than the PRC, the United States and Hong Kong, nor does it take into account the individual circumstances of an investor. This summary does not purport to be a complete technical analysis or examination of all potential tax effects relevant to an investment in the H Shares or ADSs and current and prospective investors in all jurisdictions of the H Shares or ADSs are advised to consult their tax advisors as to PRC, United States or other tax consequences of the purchase, ownership and disposition of the H Shares or ADSs. This summary also does not purport to be a complete technical analysis or examination of all potential PRC taxes that may be levied upon us.

### ***The People’s Republic of China***

#### *Tax on Dividends*

*Individual Investors.* According to the Provisional Regulations of China Concerning Questions of Taxation on Enterprises Experimenting with the Share System (the “Provisional Regulations”), dividends paid by PRC companies are ordinarily subject to a PRC withholding tax levied at a flat rate of 20%. However, the PRC State Tax Bureau issued, on July 21, 1993, a Notice Concerning the Taxation of Gains on Transfer

and Dividends from Shares (Equities) Received by Foreign Investment Enterprises, Foreign Enterprises and Foreign Individuals (“Tax Notice”) which states that dividends paid by a PRC company to individuals with respect to shares listed on an overseas stock exchange, such as H Shares (including H Shares represented by ADSs), would not be subject to PRC withholding tax.

The Amendments to the Individual Income Tax Law of the PRC (the “Amendments”) were promulgated on October 31, 1993 and became effective on January 1, 1994. The Amendments state that they shall supersede the provisions of any contradictory prior administrative regulations concerning individual income tax. The Amendments and the amended Individual Income Tax Law can be interpreted as providing that foreign individuals are subject to withholding tax on dividends paid by a PRC company at a rate of 20% unless specifically exempted by the financial authority of the State Council. However, in a letter dated July 26, 1994 to the SCRES, the State Securities Commission and the China Securities Regulatory Commission, the PRC State Administration of Taxation (the “SAT”, the PRC central government tax authority which succeeded the State Tax Bureau) reiterated the temporary tax exemption stated in the Tax Notice for dividends received from a PRC company listed overseas. In the event that this letter is withdrawn, a 20% tax may be withheld on dividends in accordance with the Provisional Regulations, the Amendments and the Individual Income Tax Law. Such withholding tax may be reduced pursuant to an applicable double taxation treaty.

Under the Tax Treaty, China may tax a dividend paid by us to an eligible US Holder up to a maximum of 10% of the gross amount of such dividends.

*Enterprises.* According to the Income Tax Law of the PRC Concerning Foreign Investment Enterprises and Foreign Enterprises, dividends paid by PRC companies to enterprises are ordinarily subject to a PRC withholding tax levied at a flat rate of 20%. However, according to the Tax Notice, a foreign enterprise with no permanent establishment in China receiving dividends paid with respect to a PRC company’s H Shares will temporarily not be subject to the 20% withholding tax. If such withholding tax becomes applicable in the future, the rate could be reduced pursuant to an applicable double taxation treaty.

#### *Capital Gains Tax on Sales of Shares*

There is no provision in the Share System Tax Regulations of the PRC that capital gains realized on the sales or dispositions of shares by shareholders are subject to capital gains tax. Furthermore, a ruling issued by the State Tax Bureau on July 21, 1993 (the “July 21, 1993 Notice”) provides that a foreign enterprise selling or disposing of shares of a PRC corporation listed overseas not having its own establishment in the PRC will be exempt from PRC income tax on such capital gains. With respect to shareholders who are foreign individuals, whether or not resident in the PRC, the PRC’s Individual Income Tax Law, which superseded the July 21, 1993 Notice with respect to this particular matter, provides that such capital gains realized by individuals will be taxable and authorizes the State Tax Bureau to promulgate implementing regulations. However, in April 1994 the State Tax Bureau expressed its intention not to impose the tax for two years. In March 1996, the Ministry of Finance and the State Tax Bureau jointly issued a notice stating that personal income tax shall not be collected on capital gains realized on the sales or dispositions of shares in 1996. Under a notice issued by the State Taxation Bureau in 1993, foreign enterprises are temporarily exempted from capital gains tax on sales or disposition of ADSs or H Shares, and a notice issued by the PRC Ministry of Finance and the PRC State Tax Bureau in 1996 temporarily exempting individuals from capital gains tax on the sale or disposition of ADSs or H Shares has expired. There can be no assurance that such exemption will be available. In the event that capital gains tax is imposed on gains from the sale or disposition of H Shares or ADSs, foreign holders would be subject to a 20% tax unless reduced by an applicable double-taxation treaty. Pursuant to the terms of the Tax Treaty, gains derived from the alienation of H Shares or ADSs by a Foreign Holder that is a resident of the United States for purposes of the Tax Treaty

should not be subject to PRC tax; provided that such foreign holder owns H Shares or ADSs which represent a participation of less than 25% in us. The PRC has not, however, promulgated any rules or regulations that address the procedures that a Foreign Holder must follow in order to claim the benefits of the Tax Treaty. Accordingly, it is currently unclear how a Foreign Holder may claim the benefits of the Tax Treaty.

#### *Tax Treaties*

*Non-PRC Investors.* Foreign Holders resident in countries which have entered into double-taxation treaties with the PRC may be entitled to a reduction of the withholding tax imposed on the payment of dividends to such Foreign Holders of us. The PRC currently has double-taxation treaties with a number of other countries, which include Australia, Canada, France, Germany, Japan, Malaysia, the Netherlands, Singapore, the United Kingdom and the United States.

#### *Stamp Tax*

Under the Provisional Regulations of The People's Republic of China Concerning Stamp Tax, PRC stamp tax is not imposed on the transfer of shares of PRC publicly traded companies (including H Shares or ADSs) effected outside China.

#### *Taxation of the Company*

*Income tax.* Pursuant to the Income Tax Law of the People's Republic of China concerning Foreign Invested Enterprises and Foreign Enterprises (the "EIT Law"), Sino-foreign joint stock companies are subject to a 30% national income tax plus 3% local income tax. In certain special zones, however, such tax rate may be reduced. In addition, manufacturing FIEs with an operating period of more than ten years enjoy a tax holiday of a two-year exemption and a three-year 50% reduction starting from the first profit-making year.

We are a Sino-foreign joint stock company and enjoys the tax holiday described above. Pursuant to Document 327 (1989) of the PRC State Tax Bureau, the Dalian, Fuzhou, Nantong and Shangan Power Plants (excluding Shangan Power Plant Phase II) and Shantou Oil-Fired Plant, which previously belonged to HIPDC, were subject to income tax supervision by the local tax bureaus and were entitled to calculate each of their tax holidays separately. Following the Reorganization, we have continued to pay tax pursuant to the EIT Law, so these five Power Plants enjoyed the tax holidays available to them prior to the Reorganization. The tax holiday for each of these five Power Plants has expired. For new projects, including the Shantou Power Plant, each new plant will enjoy its own tax holiday to be calculated separately.

All of our power plants, except for Weihai and Jining Power Plants, are subject to a 15% national income tax, without considering the tax holiday described above.

*Value-added tax.* We were previously subject to a 5.05% Industrial and Commercial Consolidated Tax rate on its total sales of electricity. Since January 1, 1994, the government has implemented a turnover tax system applicable to FIEs. Under the new turnover tax provisions, we have to collect from its electricity customers and pay to the PRC tax authorities a value-added tax ("VAT") on its sales. The tax rate on sales of electricity by us 17% of total sales. The amount of VAT payable by us is this VAT on sales reduced by the VAT paid by us on our purchases of coal, fuel and other inputs.

#### **Documents on display**

We are subject to the information reporting requirements of the Securities Exchange Act and, in accordance with the Act, file certain reports and other information with the SEC. You may read and copy and report, statement or other information filed by us at the SEC's public reference rooms in Washington, D.C., New York and Chicago, Illinois. Please call the SEC at 1-800-0330 for further information on the public reference rooms.



## Item 11. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk from changes in foreign currency exchange rates, interest rates and fuel prices.

Foreign currency exchange rate risk exists with respect to (i) our indebtedness denominated in currencies other than Renminbi and (ii) its equipment purchase commitments. Fluctuations in exchange rates may lead to significant fluctuations in the exposure of our foreign currency denominated liabilities.

We are subject to market rate risks due to fluctuations in interest rates, principally as a result of our indebtedness that bears interests at variable rates. To mitigate its exposure to interest rate risks, we entered into certain interest rate swap agreements for the total notional amount of US\$83 million with a weighted average rate of 6.43% per annum. We use such interest rate swap transactions solely for risk hedging purposes. As of December 31, 2001, the notional amount of interest rate swap agreements which we were exposed to was approximately US\$83 million.

We are also exposed to market rate risk due to fluctuations in fuel prices, mainly coal prices. For the year ended December 31, 2001, our total fuel costs were Rmb5,147.4 million.

The following table provides information, by maturity date, regarding our foreign currency sensitive financial instruments, which consist of cash and cash equivalent, temporary cash investments, short-term and long-term debt obligations and capital commitments as of December 31, 2001.

|  | As of December 31, 2001                          |       |       |       |       |            | Total recorded value | Fair value |
|--|--|-------|-------|-------|-------|------------|----------------------|------------|
|  | Expected Maturity Date                           |       |       |       |       |            |                      |            |
|  | 2002   | 2003  | 2004  | 2005  | 2006  | Thereafter |                      |            |
|  | (Rmb expressed in million, except interest rate) |       |       |       |       |            |                      |            |
| <b>On-balance sheet financial instruments</b>        |  |       |       |       |       |            |                      |            |
| Cash and cash equivalents:                           |  |       |       |       |       |            |                      |            |
| in US\$ . . . . .                                    | 49   | —     | —     | —     | —     | —          | 49                   | 49         |
| in Rmb . . . . .                                     | 2,124  | —     | —     | —     | —     | —          | 2,124                | 2,124      |
| Temporary cash investments:                          |  |       |       |       |       |            |                      |            |
| in US Dollars . . . . .                              | 1,046  | —     | —     | —     | —     | —          | 1,046                | 1,046      |
| in Rmb . . . . .                                     | 5,178  | —     | —     | —     | —     | —          | 5,178                | 5,178      |
| Debts:   |  |       |       |       |       |            |                      |            |
| Fixed rate banks and other loans:                    |  |       |       |       |       |            |                      |            |
| in US\$ . . . . .                                    | 520  | 555   | 555   | 555   | 555   | 3,230      | 5,970                | 6,262      |
| Average interest rate . . . . .                      | 6.21%  | 6.28% | 6.28% | 6.28% | 6.28% | 6.29%      | —                    | —          |
| in Swiss Francs ("SFRC") . . . . .                   | 15   | —     | —     | —     | —     | —          | 15                   | 15         |
| Average interest rate . . . . .                      | 4.35%  | —     | —     | —     | —     | —          | —                    | —          |
| Convertible notes (US\$) . . . . .                   | —  | —     | 1,904 | —     | —     | —          | 1,904                | 2,435      |
| Average interest rate . . . . .                      | —  | —     | 1.75% | —     | —     | —          | —                    | —          |
| Variable rate banks and other loans (US\$) . . . . . |  |       |       |       |       |            |                      |            |
| Average interest rate <sup>(1)</sup> . . . . .       | 2.82%  | 2.77% | 2.87% | 1.98% | 1.98% | 1.98%      | 4,702                | 4,575      |
| Capital commitments (in US\$)                        | 1,821  | —     | —     | —     | —     | —          | 1,821                | 1,821      |

(1) The interest rates for variable rate banks and other loans are calculated based on the year end indice.

The following table provides information, by maturity date, regarding our interest rate sensitive financial instruments, which consist of fixed and variable rate short-term and long-term debt obligations, as of December 31, 2001.

| As of December 31, 2001                                    |       |       |       |       |            |       | Total<br>recorded<br>value | Fair<br>value |
|--|-------|-------|-------|-------|------------|-------|----------------------------|---------------|
| Expected Maturity Date                                     |       |       |       |       |            |       |                            |               |
| 2002   | 2003  | 2004  | 2005  | 2006  | Thereafter |       |                            |               |
| (Rmb expressed in million, except interest rate)           |       |       |       |       |            |       |                            |               |
| <b>Debts</b>   |       |       |       |       |            |       |                            |               |
| Fixed rate banks and other loans . . . . .                 | 1,678 | 555   | 1,142 | 585   | 555        | 3,330 | 7,845                      | 8,137         |
| Average interest rate . . . . .                            | 6.16% | 6.28% | 6.24% | 6.27% | 6.28%      | 6.28% |                            |               |
| Convertible notes . . . . .                                | —     | —     | 1,904 | —     | —          | —     | 1,904                      | 2,436         |
| Average interest rate . . . . .                            | —     | —     | 1.75% | —     | —          | —     |                            |               |
| Various rate banks and other loan <sup>(1)</sup> . . . . . | 1,291 | 1,612 | 1,339 | 46    | 46         | 368   | 4,702                      | 4,575         |
| Average interest rate . . . . .                            | 2.82% | 2.77% | 2.87% | 1.98% | 1.98%      | 1.98% |                            |               |

(1) The interest rates for variable rate banks and other loans are calculated based on the year end indice.

**Item 12. Description of Securities Other than Equity Securities**

Not applicable.

**PART II**

**Item 13. Defaults, Dividend Arrearages and Delinquencies**

None.

**Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

None.

**PART III**

**Item 17. Financial Statements**

See pages F-1 through F-46 incorporated by reference.

**Item 18. Financial Statements**

Not applicable.

**Item 19. Exhibits**

- 1.1 Amended Articles of Association of Huaneng Power International, Inc.
- 3.1 Shareholders Agreement dated May 31, 1994, incorporated by reference to Exhibit 9.1 of our Registration Statement on Form F-1, filed with the SEC on August 24, 1994.
- 4.1 Agreement of Merger by Absorption (Amended and Restated), dated as of July 18, 2000, incorporated by reference to Annex A to Schedule 13E-3, filed with the SEC on August 16, 2000.

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## **AUDITORS' REPORT**

### **TO THE SHAREHOLDERS OF HUANENG POWER INTERNATIONAL, INC. (Incorporated in the People's Republic of China with limited liability)**

We have audited the accompanying balance sheet of Huaneng Power International, Inc. (the "Company") and its subsidiaries as of December 31, 2001 and the balance sheet of the Company as of December 31, 2000 and the related statements of income, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2001. These financial statements are the responsibility of the management of the Company and its subsidiaries. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and International Standards on Auditing issued by the International Federation of Accountants. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements give a true and fair view of the financial position of the Company and its subsidiaries as of December 31, 2001 and the financial position of the Company as of December 31, 2000 and of the results of their operations and cash flows for each of the years in the three-year period ended December 31, 2001, in accordance with International Financial Reporting Standards, as published by the International Accounting Standards Board.

Certain accounting principles used by the Company and its subsidiaries in preparing the accompanying financial statements conform with International Financial Reporting Standards, but do not conform with the accounting principles generally accepted in the United States of America. A description of the significant differences between those two standards and the effects of those differences on net income and shareholders' equity are set forth in Note 39 to the financial statements.

**ARTHUR ANDERSEN & CO**  
*Certified Public Accountants*

Hong Kong, March 12, 2002

**HUANENG POWER INTERNATIONAL, INC. AND ITS SUBSIDIARIES**  
**BALANCE SHEETS**  
**AS OF DECEMBER 31, 2001**  
(Amounts expressed in thousands of Rmb)

|   | Note | The Company and its subsidiaries |                  | The Company       |
|---|------|----------------------------------|------------------|-------------------|
|   |      | 2001                             |                  | 2000              |
|   |      | Rmb                              | US\$             | Rmb               |
| <b>ASSETS</b>   |      |                                  |                  |                   |
| <b>Non-current assets</b>   |      |                                  |                  |                   |
| Property, plant and equipment, net  | 9    | 37,557,114                       | 4,537,747        | 31,643,530        |
| Land use rights   | 10   | 787,131                          | 95,103           | 576,065           |
| Investment in an associate  | 11   | 226,488                          | 27,365           | —                 |
| Investment in subsidiaries  | 12   | —                                | —                | —                 |
| Other long-term assets  |      | 183,628                          | 22,186           | 185,664           |
| Less: Negative goodwill   | 13   | (2,225,505)                      | (268,891)        | —                 |
| <b>TOTAL NON-CURRENT ASSETS</b>   |      | <b>36,528,856</b>                | <b>4,413,510</b> | <b>32,405,259</b> |
| <b>CURRENT ASSETS</b>   |      |                                  |                  |                   |
| Cash and cash equivalents   | 6(l) | 2,173,136                        | 262,564          | 1,988,373         |
| Temporary cash investments  | 14   | 6,224,070                        | 752,008          | 294,925           |
| Investments   |      | 1,102                            | 133              | 60,000            |
| Accounts receivable   | 15   | 1,407,171                        | 170,018          | 1,196,072         |
| Materials and supplies, net   | 16   | 718,997                          | 86,871           | 563,741           |
| Due from a subsidiary   |      | —                                | —                | —                 |
| Other receivables and assets, net   | 17   | 239,443                          | 28,930           | 5,958,578         |
| <b>Total current assets</b>   |      | <b>10,763,919</b>                | <b>1,300,524</b> | <b>10,061,689</b> |
| <b>Total assets</b>   |      | <b>47,292,775</b>                | <b>5,714,034</b> | <b>42,466,948</b> |
| <b>EQUITY AND LIABILITIES</b>   |      |                                  |                  |                   |
| <b>Shareholders' equity</b>   |      |                                  |                  |                   |
| 4,250,000,000 PRC Domestic Shares, par value Rmb1.00 each, in form of legal person shares | 18   | 4,250,000                        | 513,496          | 4,150,000         |
| 250,000,000 A shares, par value Rmb1.00 each  | 18   | 250,000                          | 30,206           | —                 |
| 1,500,000,000 Overseas Listed Foreign Shares, par value Rmb 1.00 each                     | 18   | 1,500,000                        | 181,234          | 1,500,000         |
| Additional paid-in capital  |      | 10,137,732                       | 1,224,867        | 7,717,674         |
| Dedicated capital   | 19   | 2,659,012                        | 321,269          | 2,022,701         |
| Equity component of convertible notes   | 21   | 510,506                          | 61,681           | 510,506           |
| Retained earnings   |      | 8,986,280                        | 1,085,745        | 7,878,854         |
| <b>Total shareholders' equity</b>   |      | <b>28,293,530</b>                | <b>3,418,498</b> | <b>23,779,735</b> |
| <b>Minority interests</b>   |      | <b>486,261</b>                   | <b>58,751</b>    | <b>—</b>          |
| <b>Non-current liabilities</b>  |      |                                  |                  |                   |
| Liability component of convertible notes  | 21   | —                                | —                | 1,393,388         |
| Long-term loans from shareholders   | 22   | 777,717                          | 93,966           | 782,825           |
| Long-term bank loans  | 23   | 8,691,246                        | 1,050,099        | 8,885,634         |
| Other long-term loans   | 24   | 106,799                          | 12,904           | 174,368           |
| Accrued put premium for convertible notes   | 21   | —                                | —                | 380,395           |
| Other financial liabilities   | 35   | 14,875                           | 1,797            | —                 |
| <b>Total non-current liabilities</b>  |      | <b>9,590,637</b>                 | <b>1,158,766</b> | <b>11,616,610</b> |
| <b>Current liabilities</b>  |      |                                  |                  |                   |
| Short-term loans  | 25   | 40,000                           | 4,833            | 1,300,000         |
| Current portion of long-term loans from shareholders                                      | 22   | 15,565                           | 1,881            | 218,995           |
| Current portion of long-term bank loans   | 23   | 2,630,008                        | 317,764          | 1,431,713         |
| Current portion of other long-term loans  | 24   | 283,273                          | 34,226           | 58,123            |
| Accounts payable and accrued liabilities  | 26   | 2,657,223                        | 321,052          | 2,717,957         |
| Taxes payable   | 27   | 521,193                          | 62,972           | 529,661           |
| Due to HIPDC  | 6(j) | 36,584                           | 4,420            | 130,158           |
| Due to other related parties  | 6(j) | 3,225                            | 390              | —                 |
| Staff welfare and bonus payable   |      | 376,193                          | 45,451           | 542,355           |
| Due to Nanjing Investment   |      | —                                | —                | 141,641           |
| Liability component of convertible notes  | 21   | 1,703,443                        | 205,814          | —                 |
| Put option of convertible notes   | 21   | 655,640                          | 79,216           | —                 |
| <b>Total current liabilities</b>  |      | <b>8,922,347</b>                 | <b>1,078,019</b> | <b>7,070,603</b>  |
| <b>Total equity and liabilities</b>   |      | <b>47,292,775</b>                | <b>5,714,034</b> | <b>42,466,948</b> |

For the convenience of the reader, translation of amounts from Renminbi (Rmb) into United States dollars (US\$) has been made at the rate of US\$1.00=Rmb8.2766 announced by the People's Bank of China on December 31, 2001. No representation is made that Renminbi amounts could have been, or could be, converted into United States dollars at that rate on December 31, 2001, or at any other certain rate.

The accompanying notes are an integral part of these financial statements.

**HUANENG POWER INTERNATIONAL, INC. AND ITS SUBSIDIARIES**  
**INCOME STATEMENT**  
**FOR THE YEARS ENDED DECEMBER 31, 2001, 2000 AND 1999**  
**(Amounts expressed in thousands of Rmb, except per share data)**

|  | Note  | The Company and its subsidiaries |             | The Company |             |
|--|-------|----------------------------------|-------------|-------------|-------------|
|  |       | 2001                             |             | 2000        | 1999        |
|  |       | Rmb                              | US\$        | Rmb         | Rmb         |
| Operating revenue, net                 | 4     | 15,791,362                       | 1,907,953   | 12,553,254  | 10,488,158  |
| Operating expenses                     |       |                                  |             |             |             |
| Fuel                                   |       | (5,147,364)                      | (621,918)   | (3,840,690) | (3,346,158) |
| Maintenance                            |       | (765,712)                        | (92,515)    | (670,994)   | (568,119)   |
| Depreciation                           |       | (3,261,001)                      | (394,002)   | (2,654,413) | (2,380,651) |
| Labor                                  |       | (807,136)                        | (97,520)    | (669,916)   | (497,835)   |
| Transmission fees                      |       | (36,925)                         | (4,461)     | (17,094)    | (27,343)    |
| Service fees to HIPDC                  | 6(a)  | (307,322)                        | (37,131)    | (310,742)   | (305,792)   |
| Others                                 | 10,13 | (451,868)                        | (54,596)    | (482,507)   | (382,274)   |
| Total operating expenses               |       | (10,777,328)                     | (1,302,143) | (8,646,356) | (7,508,172) |
| Profit from operation                  |       | 5,014,034                        | 605,810     | 3,906,898   | 2,979,986   |
| Interest income                        |       | 113,081                          | 13,663      | 79,723      | 108,601     |
| Interest expense                       |       | (867,538)                        | (104,818)   | (1,024,653) | (899,780)   |
| Exchange losses, net                   |       | (41,758)                         | (5,045)     | (34,936)    | 63,923      |
| Total financial expenses               |       | (796,215)                        | (96,200)    | (979,866)   | (727,256)   |
| Gain from disposal of investment       |       | 24,671                           | 2,981       | —           | —           |
| Share of loss of an associate          | 11    | (5,381)                          | (650)       | —           | —           |
| Profit before taxation                 | 5     | 4,237,109                        | 511,941     | 2,927,032   | 2,252,730   |
| Taxation                               | 30    | (715,220)                        | (86,415)    | (411,202)   | (384,555)   |
| Profit after taxation                  |       | 3,521,889                        | 425,526     | 2,515,830   | 1,868,175   |
| Minority interests                     |       | (71,231)                         | (8,606)     | —           | —           |
| Net profit                             |       | 3,450,658                        | 416,920     | 2,515,830   | 1,868,175   |
| Proposed dividend                      | 20    | 1,800,000                        | 217,481     | 1,243,000   | 508,500     |
| Proposed dividend per share (Rmb)      | 20    | 0.30                             | 0.04        | 0.22        | 0.09        |
| Basic earnings per share (Rmb)         | 31    | 0.61                             | 0.07        | 0.45        | 0.33        |
| Fully diluted earnings per share (Rmb) | 31    | 0.60                             | 0.07        | 0.44        | N/A         |

For the convenience of the reader, translation of amounts from Renminbi (Rmb) into United States dollars (US\$) has been made at the rate of US\$1.00=Rmb8.2766 announced by the People's Bank of China on December 31, 2001. No representation is made that Renminbi amounts could have been, or could be, converted into United States dollars at that rate on December 31, 2001, or at any other certain rate.

The accompanying notes are an integral part of these financial statements.

**HUANENG POWER INTERNATIONAL, INC. AND ITS SUBSIDIARIES**  
**STATEMENTS OF CHANGES IN EQUITY**  
**FOR THE YEARS ENDED DECEMBER 31, 2001, 2000 AND 1999**  
**(Amounts expressed in thousands of Rmb)**

|   | Share<br>Capital<br><i>(Note 18)</i> | Additional<br>Paid-in<br>Capital<br><i>(Note 18)</i> | Dedicated Capital <i>(Note 19)</i>      |  |                  | Equity<br>Component of<br>Convertible<br>Notes<br><i>(Note 21)</i> | Retained<br>Earnings | Total             |
|---|--------------------------------------|--|---|--|------------------|--|----------------------|-------------------|
|   |                                      |  | Statutory<br>surplus<br>reserve<br>fund | Statutory<br>public<br>welfare<br>fund | Sub-total        |  |                      |                   |
|   |                                      |  |   |  |                  |  |                      |                   |
| Balance at December 31, 1998 as<br>previously reported . . . . .                                | 5,650,000                            | 7,717,674  | 1,066,830                               | 140,661                                | 1,207,491        | 510,506  | 4,818,559            | 19,904,230        |
| Effect of change in accounting<br>policy with respect to dividend<br><i>(Note 20)</i> . . . . . | —                                    | —  | —                                       | —                                      | —                | —  | 452,000              | 452,000           |
| Balance at December 31, 1998 as<br>restated . . . . .   | 5,650,000                            | 7,717,674  | 1,066,830                               | 140,661                                | 1,207,491        | 510,506  | 5,270,559            | 20,356,230        |
| Net profit for the year ended<br>December 31, 1999 . . . . .                                    | —                                    | —  | —                                       | —                                      | —                | —  | 1,868,175            | 1,868,175         |
| Transfer to dedicated capital . . . . .   | —                                    | —  | 201,411                                 | 151,059                                | 352,470          | —  | (352,470)            | —                 |
| Proposed dividend as previously<br>reported . . . . .   | —                                    | —  | —                                       | —                                      | —                | —  | (508,500)            | (508,500)         |
| Effect of change in accounting<br>policy with respect to dividend<br><i>(Note 20)</i> . . . . . | —                                    | —  | —                                       | —                                      | —                | —  | 56,500               | 56,500            |
| Balance at December 31, 1999 . . . . .  | 5,650,000                            | 7,717,674  | 1,268,241                               | 291,720                                | 1,559,961        | 510,506  | 6,334,264            | 21,772,405        |
| Net profit for the year ended<br>December 31, 2000 . . . . .                                    | —                                    | —  | —                                       | —                                      | —                | —  | 2,515,830            | 2,515,830         |
| Transfer to dedicated capital . . . . .   | —                                    | —  | 264,423                                 | 198,317                                | 462,740          | —  | (462,740)            | —                 |
| Dividend declared . . . . .   | —                                    | —  | —                                       | —                                      | —                | —  | (508,500)            | (508,500)         |
| Balance at December 31, 2000 . . . . .  | 5,650,000                            | 7,717,674  | 1,532,664                               | 490,037                                | 2,022,701        | 510,506  | 7,878,854            | 23,779,735        |
| Effect of adoption of IFRS 39<br><i>(Note 21)</i> . . . . .                                     | —                                    | —  | —                                       | —                                      | —                | —  | (463,921)            | (463,921)         |
| Net profit for the year ended<br>December 31, 2001 . . . . .                                    | —                                    | —  | —                                       | —                                      | —                | —  | 3,450,658            | 3,450,658         |
| Transfer to dedicated capital . . . . .   | —                                    | —  | 363,606                                 | 272,705                                | 636,311          | —  | (636,311)            | —                 |
| Issuance and sale of 250,000,000<br>new Domestic Shares . . . . .                               | 250,000                              | 1,737,500  | —                                       | —                                      | —                | —  | —                    | 1,987,500         |
| Issuance of 100,000,000 new<br>Domestic Shares to HIPDC . . . . .                               | 100,000                              | 695,000  | —                                       | —                                      | —                | —  | —                    | 795,000           |
| Issuing cost of new Domestic<br>Shares <i>(Note 18)</i> . . . . .                               | —                                    | (12,442)   | —                                       | —                                      | —                | —  | —                    | (12,442)          |
| Dividend declared . . . . .   | —                                    | —  | —                                       | —                                      | —                | —  | (1,243,000)          | (1,243,000)       |
| Balance at December 31, 2001 . . . . .  | <u>6,000,000</u>                     | <u>10,137,732</u>                                    | <u>1,896,270</u>                        | <u>762,742</u>                         | <u>2,659,012</u> | <u>510,506</u>   | <u>8,986,280</u>     | <u>28,293,530</u> |

The accompanying notes are an integral part of these financial statements.

**HUANENG POWER INTERNATIONAL, INC. AND ITS SUBSIDIARIES**  
**CASH FLOW STATEMENT**  
**FOR THE YEARS ENDED DECEMBER 31, 2001, 2000 AND 1999**  
**(Amounts expressed in thousands of Rmb)**

|   | Note  | The Company and its subsidiaries |           | The Company |             |
|---|-------|----------------------------------|-----------|-------------|-------------|
|   |       | 2001                             |           | 2000        | 1999        |
|   |       | Rmb                              | US\$      | Rmb         | Rmb         |
| <b>CASH FLOWS FROM OPERATING ACTIVITIES</b>   |       |                                  |           |             |             |
| Profit before taxation  |       | 4,237,109                        | 511,941   | 2,927,032   | 2,252,730   |
| Adjustments to reconcile profit before taxation to net cash provided by operating activities: |       |                                  |           |             |             |
| Depreciation  |       | 3,261,001                        | 394,002   | 2,654,413   | 2,380,651   |
| Cost of land use rights   |       | 14,359                           | 1,735     | 12,536      | 11,347      |
| Unrealized exchange gain  |       | (1,429)                          | (173)     | (2,709)     | (56,243)    |
| Amortization of other long-term assets  |       | 35,119                           | 4,243     | 15,657      | 6,814       |
| Provision for bad debts   |       | 1,030                            | 124       | 4,588       | —           |
| Provision for inventory obsolescence  |       | 2,576                            | 311       | 10,608      | —           |
| Loss on disposals of fixed assets   |       | 36,592                           | 4,421     | 50,879      | 6,444       |
| Interest income   |       | (113,081)                        | (13,663)  | (79,723)    | (108,601)   |
| Interest expenses   |       | 867,538                          | 104,818   | 1,024,653   | 899,780     |
| Gain from disposal of investments   |       | (24,671)                         | (2,981)   | —           | —           |
| Amortization of negative goodwill   |       | (247,279)                        | (29,877)  | —           | —           |
| Unrealized loss on put option of convertible notes  | 21    | 46,562                           | 5,626     | —           | —           |
| Unrealized loss on interest rate swaps  |       | 14,875                           | 1,797     | —           | —           |
| Share of loss of an associate   |       | 5,381                            | 650       | —           | —           |
| Decrease (increase) in assets:  |       |                                  |           |             |             |
| Accounts receivable   |       | (28,510)                         | (3,445)   | 207,299     | (726,257)   |
| Materials and supplies  |       | (62,063)                         | (7,499)   | (30,928)    | 18,720      |
| Other receivables and assets  |       | 20,228                           | 2,444     | (25,151)    | 407,779     |
| Due from HIPDC  |       | —                                | —         | 28,583      | (28,583)    |
| Other long-term assets  |       | (15,519)                         | (1,875)   | (86,952)    | —           |
| (Decrease) increase in liabilities:   |       |                                  |           |             |             |
| Accounts payable and accrued liabilities  |       | (370,300)                        | (44,741)  | (359,046)   | 886,738     |
| Taxes payable   |       | (57,289)                         | (6,922)   | 36,087      | 39,990      |
| Due to HIPDC  |       | (93,574)                         | (11,306)  | 130,158     | (2,633)     |
| Due to other related parties  |       | (49,118)                         | (5,935)   | —           | —           |
| Staff welfare and bonus payable   |       | (199,973)                        | (24,161)  | 123,622     | (119,038)   |
| Interest paid   |       | (715,846)                        | (86,490)  | (649,193)   | (615,946)   |
| Income tax paid   |       | (799,669)                        | (96,618)  | (428,693)   | (370,102)   |
| Interest received   |       | 154,847                          | 18,711    | 79,641      | 123,787     |
| Net cash provided by operating activities   |       | 5,918,896                        | 715,137   | 5,643,361   | 5,007,377   |
| <b>CASH FLOWS FROM INVESTING ACTIVITIES</b>   |       |                                  |           |             |             |
| Additions to property, plant and equipment  |       | (2,870,858)                      | (346,864) | (351,966)   | (2,274,342) |
| Proceeds from disposals of fixed assets   |       | 32,904                           | 3,976     | 17,872      | 17,234      |
| Decrease (increase) in other long-term assets   |       | 81,646                           | 9,865     | (1,050)     | (3,197)     |
| (Increase) decrease in temporary cash investments   |       | (4,665,290)                      | (563,672) | 955,619     | 586,489     |
| Proceeds from disposal of investments   |       | 384,569                          | 46,465    | (60,000)    | —           |
| Repayment of payable to Nanjing Investment  | 6(d)  | (141,641)                        | (17,113)  | (100,000)   | (1,111,375) |
| Net cash inflow from acquisition of Nanjing Power Plant                                       |       | —                                | —         | —           | 150,229     |
| Expenditures for Shandong Huaneng acquisition   | 2     | (21,561)                         | (2,605)   | (10,096)    | —           |
| Prepayment of consideration for Shandong Huaneng acquisition                                  | 2     | —                                | —         | (5,767,898) | —           |
| Net cash inflow from the acquisition of Shandong Huaneng                                      | 32(b) | 2,635,695                        | 318,451   | —           | —           |
| Net cash used in investing activities   |       | (4,564,536)                      | (551,497) | (5,317,519) | (2,634,962) |
| <b>CASH FLOWS FROM FINANCING ACTIVITIES</b>   |       |                                  |           |             |             |
| Drawdown of short-term bank loans   |       | 1,300,000                        | 157,069   | 1,511,000   | 142,000     |
| Repayment of short-term bank loans  |       | (2,560,000)                      | (309,306) | (261,000)   | (419,000)   |
| Drawdown of long-term loans from shareholders   |       | —                                | —         | —           | 18,383      |
| Repayment of long-term loans from shareholders  |       | (208,538)                        | (25,196)  | (737,270)   | (1,835,897) |
| Drawdown of long-term bank loans  |       | 1,604,100                        | 193,811   | 165,215     | 1,051,470   |
| Repayment of long-term bank loans   |       | (2,233,721)                      | (269,884) | (941,989)   | (511,468)   |
| Repayment of other long-term loans  |       | (575,179)                        | (69,495)  | (58,123)    | (58,123)    |
| Dividend paid   |       | (1,266,317)                      | (153,000) | (508,500)   | (452,000)   |
| Net proceeds from issuance of Domestic Shares   | 18    | 2,770,058                        | 334,685   | —           | —           |
| Net cash used in financing activities   |       | (1,169,597)                      | (141,316) | (830,667)   | (2,064,635) |
| NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS  |       | 184,763                          | 22,324    | (504,825)   | 307,780     |
| Cash and cash equivalents, beginning of year  |       | 1,988,373                        | 240,240   | 2,493,198   | 2,185,418   |
| CASH AND CASH EQUIVALENTS, END OF YEAR  | 32(a) | 2,173,136                        | 262,564   | 1,988,373   | 2,493,198   |

For the convenience of the reader, translation of amounts from Renminbi (Rmb) into United States dollars (US\$) has been made at the rate of US\$1.00=Rmb8.2766 announced by the People's Bank of China on December 31, 2001. No representation is made that Renminbi amounts could have been, or could be, converted into United States dollars at that rate on December 31, 2001, or at any other certain rate.

The accompanying notes are an integral part of these financial statements.



**HUANENG POWER INTERNATIONAL, INC. AND ITS SUBSIDIARIES**

**NOTES TO THE FINANCIAL STATEMENTS**

**(Amounts expressed in Rmb unless otherwise stated)**

**1. COMPANY ORGANIZATION AND PRINCIPAL ACTIVITIES**

Huaneng Power International, Inc. (the “Company”) was incorporated in the People’s Republic of China (the “PRC”) as a Sino-foreign joint stock limited company on June 30, 1994. As of December 31, 2001, the Company and its subsidiaries had 9,350 employees (2000: 5,602 employees; 1999: 5,485 employees). The Company and its subsidiaries are principally engaged in the generation and sale of electric power to the respective regional or provincial power companies.

Particulars of the Company’s and its subsidiaries’ power plants are as follows:

| <b>Operating Plants</b>  | <b>Total installed capacity of the Company, its subsidiaries and associate (MW)</b> | <b>Equity portion of total capacity of the Company (MW)</b> | <b>Province/ Municipality located</b> |
|--|---|---|---------------------------------------|
| Five original operating plants:  |   |   |                                       |
| Huaneng Dalian Power Plant<br>(the “Dalian Power Plant”) . . . . .                       | 700   | 700   | Liaoning                              |
| Huaneng Shangan Power Plant<br>(the “Shangan Power Plant”) . . . . .                     | 700   | 700   | Hebei                                 |
| Huaneng Nantong Power Plant<br>(the “Nantong Power Plant”) . . . . .                     | 700   | 700   | Jiangsu                               |
| Huaneng Fuzhou Power Plant<br>(the “Fuzhou Power Plant”) . . . . .                       | 700   | 700   | Fujian                                |
| Huaneng Shantou Oil-Fired Plant<br>(the “Shantou Oil-Fired Power Plant”) . . . . .       | 100   | 100   | Guangdong                             |
| New operating plants:  |   |   |                                       |
| Huaneng Shantou Coal-Fired Power Plant<br>(the “Shantou Power Plant”) . . . . .          | 600   | 600   | Guangdong                             |
| Huaneng Shangan Power Plant Phase II<br>(the “Shangan Phase II”) . . . . .               | 600   | 600   | Hebei                                 |
| Huaneng Shanghai Shidongkou Second Power Plant<br>(the “Shanghai Power Plant”) . . . . . | 1,200   | 1,200   | Shanghai                              |
| Huaneng Dalian Power Plant Phase II<br>(the “Dalian Phase II”) . . . . .                 | 700   | 700   | Liaoning                              |
| Huaneng Dandong Power Plant<br>(the “Dandong Power Plant”) . . . . .                     | 700   | 700   | Liaoning                              |
| Huaneng Nantong Power Plant Phase II<br>(the “Nantong Phase II”) . . . . .               | 700   | 700   | Jiangsu                               |
| Huaneng Fuzhou Power Plant Phase II<br>(the “Fuzhou Phase II”) . . . . .                 | 700   | 700   | Fujian                                |
| Huaneng Nanjing Power Plant<br>(the “Nanjing Power Plant”) . . . . .                     | 600   | 600   | Jiangsu                               |
| Huaneng Dezhou Power Plant<br>(the “Dezhou Power Plant”) . . . . .                       | 1,200   | 1,200   | Shandong                              |

| Operating Plants   | Total installed capacity of the Company, its subsidiaries and associate (MW) | Equity portion of total capacity of the Company (MW) | Province/ Municipality located |
|--|--|--|--------------------------------|
| Subsidiaries:  |  |  |                                |
| Huaneng Weihai Power Plant<br>(the "Weihai Power Plant") . . . . .         | 850  | 510  | Shandong                       |
| Huaneng Jining Power Plant<br>(the "Jining Power Plant") . . . . .         | 300  | 225  | Shandong                       |
| Associate:   |  |  |                                |
| Shandong Rizhao Power Company Ltd.<br>(the "Rizhao Power Plant") . . . . . | <u>700</u>   | <u>178</u>   | Shandong                       |
| Total . . . . .  | <u>11,750</u>  | <u>10,813</u>  |                                |

The parent company and ultimate parent company of the Company are Huaneng International Power Development Corporation ("HIPDC") and China Huaneng Group Corporation ("China Huaneng Group") respectively. Both companies are incorporated in the PRC.

## 2. ACQUISITION OF SHANDONG HUANENG

On July 18, 2000, the Company and Shandong Huaneng Power Development Co., Ltd ("Shandong Huaneng") entered into an agreement under which the Company acquired the net assets of Shandong Huaneng. The shareholders of Shandong Huaneng were entitled to Rmb1.34 per ordinary A share or US\$0.1618 per ordinary N share (the "Acquisition"). The total consideration of the Acquisition is approximately Rmb5,768 million paid in cash. Direct costs relating to the Acquisition amounted to approximately Rmb32 million.

Before the Acquisition, Shandong Huaneng owned and operated the net assets of Dezhou Power Plant and held 60%, 75% and 25.5% equity interests in Weihai Power Plant, Jining Power Plant and Rizhao Power Plant, respectively. These power plants own coal-fired power generating facilities in the Shandong province and sell all the power generated to Shandong Electricity Power Group Corporation ("SEPCO"). After obtaining all the necessary government approvals on the Acquisition, the Company took over the control of the net assets and operation of Shandong Huaneng from January 1, 2001.

The purchase method of accounting is used for this Acquisition. The acquired identifiable assets and liabilities are recorded based on their respective fair values on January 1, 2001. The Company estimated that the fair value of the net identifiable assets and liabilities of Shandong Huaneng on that date was approximately Rmb8,272 million. Such estimation was made by the Company based on the current information available, taking into consideration the recoverability and realizability of each asset and liability. On the above basis, the resulting negative goodwill amounted to approximately Rmb2,473 million (Note 13), which is amortized over the remaining weighted average useful life of the identifiable acquired depreciable/amortizable assets (ie.10 years) on the straight-line basis, starting from January 1, 2001.

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the dates of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

The principal accounting policies adopted in preparing the financial statements of the Company and its subsidiaries are as follows:

*(a) General*

The accompanying financial statements are prepared in accordance with International Financial Reporting Standards (“IFRS”) as published by the International Accounting Standards Board (“IASB”) effective as of December 31, 2001.

The principal accounting policies adopted for the preparation of the consolidated financial statements as of and for the year ended December 31, 2001 are consistent with those adopted for the preparation of the financial statements as of and for the year ended December 31, 2000, except that financial instruments are recognized and measured in accordance with IFRS 39, which is effective from January 1, 2001 (See Note 3(w) and Note 21).

*(b) Basis of presentation*

The accompanying financial statements are prepared under the historical cost convention, except that investments held for trading and available for sale are stated at their fair value (see Note 3(f)).

*(c) Principles of Consolidation*

The consolidated financial statements of the Company and its subsidiaries include Huaneng Power International, Inc. and the companies that it controls. This control is normally evidenced when the Company owns, either directly or indirectly, more than 50% of the voting rights of a company’s share capital and is able to govern the financial and operating policies of an enterprise so as to benefit from its activities. The equity and net income attributable to minority shareholders’ interests are shown separately in the balance sheet and income statement, respectively.

The purchase method of accounting is used for acquired businesses. Companies acquired during the year are included in the consolidated financial statements from the effective date of acquisition.

Investments in an associate (generally investments of between 20% to 50% in a company’s equity) where a significant influence is exercised by the Company are accounted for by using the equity method. An assessment of investments in associates is performed when there is an indication that the asset has been impaired or the impairment losses recognized in prior years no longer exist. When the associate incurs losses, the Company recognizes its share of losses until the carrying amount of the investment is reduced to nil. Recognition of further losses is discontinued, unless the Company has incurred obligations to the associate or to satisfy obligations of the associate that the Company has guaranteed or otherwise committed. To the extent that the Company has incurred such obligations, it continues to recognize its share of losses of the investee.

All other investments are accounted for in accordance with IFRS 39, Financial Instruments: Recognition and Measurement as further disclosed in Note 3 (w).

Intercompany balances and transactions, including intercompany profits and unrealized profits and losses are eliminated upon consolidation.

Consolidated financial statements are prepared using uniform accounting policies for like transactions and other events in similar circumstances.

In the Company's financial statements, investments in subsidiaries and an associate are accounted for using the equity method.

*(d) Property, Plant and Equipment*

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment loss. When assets are sold or retired, their cost and accumulated depreciation and accumulated impairment loss are eliminated from the accounts and any gain or loss resulting from their disposal is included in the income statement.

The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditures incurred after the property, plant and equipment have been put into operation, such as repairs and maintenance and overhaul costs, are normally charged to income statement in the period the costs are incurred. In situations where it can be clearly demonstrated that the expenditures have resulted in an increase in the future economic benefits expected to be obtained from the use of an item of property, plant and equipment beyond its originally assessed standard of performance, the expenditures are capitalized as an additional cost of property, plant and equipment.

Depreciation is computed on a straight-line basis to write off the cost, after taking into account the estimated residual value, of each asset over its estimated useful life. The estimated useful lives are as follows:

|   |             |
|---|-------------|
| Buildings . . . . .                         | 10-50 years |
| Electric utility plant in service . . . . . | 4-32 years  |
| Transportation facilities . . . . .         | 10-30 years |
| Others . . . . .                            | 3-22 years  |

The useful life and depreciation method are reviewed periodically to ensure that the method and period of depreciation are consistent with the expected pattern of economic benefits from items of property, plant and equipment.

Construction-in-progress represents plant and properties under construction and is stated at cost. This includes the costs of construction, plant and machinery and other direct costs. Construction-in-progress is not depreciated until such time as the relevant assets are completed and ready for its intended use.

*(e) Land Use Rights*

Costs of land use rights are recognized as an expense on a straight-line basis over the duration of the land use rights of 50 years.

*(f) Investments*

The Company adopted IFRS 39, Financial Instruments: Recognition and Measurement on January 1, 2001. Accordingly, investments are classified into the following categories: held-to-maturity, trading and available-for-sale. Investments with fixed or determinable payments and fixed maturity that the Company has

the positive intent and ability to hold to maturity other than loans and receivables originated by the Company are classified as held-to-maturity investment. Investments acquired principally for the purpose of generating a profit from short-term fluctuations in price are classified as trading. All other investments, other than loans and receivables originated by the Company, are classified as available-for-sale.

Investments held for trading are included in current assets. Available-for-sale in investments are classified as current assets if management intends to realize them within 12 months of the balance sheet date.

All the purchase and sales of investments are recognized on the trade date.

Investments are initially measured at cost, which is the fair value of the consideration given for them, including transaction costs.

Available-for-sale and trading investments are subsequently carried at fair value without any deduction for transaction costs by reference to their quoted market price at the balance sheet date. Equity securities classified as available-for-sale and trading investments without quoted market price in an active market and whose fair value cannot be reliably measured are stated at cost less accumulated impairment loss. Gains or losses on measurement to fair value of available-for-sale investments are recognized directly in the fair value reserve in shareholders' equity until the investment is sold or otherwise disposed of, or until it is determined to be impaired, at which time the cumulative gain or loss previously recognized in equity is included in net profit or loss for the period.

Changes in fair value of trading investments are included in financial expense or income.

Investments held-to-maturity are included in non-current assets unless they mature within 12 months of the balance sheet date. Held-to-maturity investments are carried at amortized cost.

*(g) Negative Goodwill*

The excess of the Company's interest in the fair value of the net identifiable assets acquired as at the date of the exchange transaction over the cost of an acquisition is recorded as negative goodwill. The identifiable assets and liabilities recognized upon acquisition are measured at the fair values as at that date.

In addition to the purchase consideration, direct costs relating to the acquisition incurred by the Company is included in the cost of acquisition. These include the costs of registering and professional fees paid to accountants, legal advisers, valuers and other consultants to effect the acquisition. General administrative costs, which cannot be directly attributed to the particular acquisition being accounted for, are not included in the cost of the acquisition but are recognized as an expense as incurred.

The amount of negative goodwill not exceeding the fair values of the acquired identifiable non-monetary assets is recognized in the income statement as other income on a systematic basis over the remaining weighted average useful life of the identifiable acquired depreciable/amortizable assets, which is estimated to be 10 years.

*(h) Cash and Cash Equivalents*

Cash includes cash on hand and deposits with banks or other financial institutions.

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash with original maturities of three months or less and that are subject to an insignificant risk of change in value.

(i) *Temporary Cash Investments*

Temporary cash investments are cash invested in fixed-term deposits with original maturities ranging from more than three months to one year. Temporary cash investments are classified as held-to-maturity investments and are carried at amortized cost (see Note 3(f)).

(j) *Receivables*

Receivables are stated at the fair value of the consideration given and are carried at amortized cost, after provision for impairment.

(k) *Materials and Supplies*

Materials and supplies are stated at the lower of weighted average costs or net realizable values after provision for obsolete items, and are expensed to fuel costs or repairs and maintenance when used, or capitalized to fixed assets when installed, as appropriate. Cost of materials and supplies includes direct material cost and transportation expenses incurred in bringing the materials and supplies to the working locations. Unrealizable inventory has been fully written off.

(l) *Convertible Notes*

The proceeds received on the issue of the convertible notes were allocated into liability and equity components. Upon initial recognition, the liability component represents the present value, at the issuance date, of the contractually determined stream of cash flows discounted at the market interest rate for instruments of comparable credit status providing substantially the same cash flows, on the same terms, but without the conversion option. The equity component is then determined by deducting the liability component from the proceeds received on the issue of the notes. After the initial recognition, the liability component is measured at amortized cost.

As further discussed in Note 21, the convertible notes were issued at par with a put option allowing the investors to redeem the notes at a premium for cash at 128.575% of the par value on May 21, 2002. The put option is accounted for as an embedded derivative and separated from the host contract. This embedded derivative is carried at fair value, with changes in fair value included in net profit or loss (See Note 3(w)).

The accounting treatments of the convertible notes prior to the adoption of IFRS 39 on January 1, 2001 were set out in Note 21.

(m) *Provisions*

A provision is recognized when, and only when, the Company and its subsidiaries have a present obligation (legal or constructive) as a result of a past event and it is probable (i.e. more likely than not) that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Provisions are reviewed at each balance sheet date and adjusted to reflect the current best estimate. Where the effect of the time value of money is material, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation.

Gains from the expected disposal of assets are not taken into account in measuring the provision. Property, plant and equipment that is retired from active use is carried at the lower of the carrying amount or estimated net selling price less costs of disposal.

(n) *Equity Transaction Costs*

The transaction costs of an equity transaction, other than in the context of a business combination, are accounted for as a deduction from equity, net of any related income tax benefit. Equity transaction costs are comprised of only those incremental external costs directly attributable to the equity transaction which would otherwise have been avoided.

*(o) Foreign Currency Translation*

The Company and its subsidiaries maintain their books and records in Renminbi (“Rmb”). Transactions in other currencies are translated into Rmb at the applicable exchange rates quoted by the People’s Bank of China (the “PBOC”) prevailing at the dates of the transactions. Monetary assets and liabilities denominated in other currencies are re-translated into Rmb using the applicable PBOC exchange rates prevailing at the balance sheet date. Non-monetary assets and liabilities in other currencies are translated at historical rates. Exchange differences arising on the settlement of monetary items at rates different from those at which they were initially recorded during the periods, other than those capitalized as a component of borrowing cost, are recognized in the income statement in the period in which they arise.

*(p) Revenue and Income Recognition*

Revenue and income are recognized when it is probable that the economic benefits associated with the transaction will flow to the Company and its subsidiaries and the amount of the revenue and income can be measured reliably.

*(i) Operating revenue, net*

Net operating revenue represents amounts earned for electricity generated and transmitted to the respective regional or provincial power companies (net of Value Added Tax (“VAT”). Revenues are earned and recognized upon transmission of electricity to the power grid controlled and owned by the respective power companies.

*(ii) Interest income*

Interest income from deposits in banks or other financial institutions is recognized on a time proportion basis that reflects the effective yield on the assets.

*(q) Fuel Expenses*

Fossil fuel inventories are stated at the lower of moving weighted average costs (net of VAT) and net realizable value and are charged to fuel expenses based on actual inventory usage.

*(r) Repair and Maintenance Expenses*

Except for the power plants acquired from Shandong Huaneng, major repairs and maintenance determined on the basis of 1% of the fixed asset cost is allowed as an expense recoverable through power rates. The Company estimates that, over the useful life of its power plants, this basis would approximate the total expenses for major repair and maintenance actually incurred. In a particular year, to the extent that the actual repair and maintenance expenses incurred are less than the amount determined on the above basis, the difference represents revenue collected in excess of actual expenses incurred. Such difference is recorded as revenue received in advance.

*(s) Operating Leases*

Leases of assets under which substantially all the risks and rewards of ownership are effectively retained by the lessors are classified as operating leases. Lease payments under an operating lease are recognized as an expense on a straight-line basis over the lease term.

(t) *Borrowing Costs*

Borrowing costs generally are expensed as incurred. Borrowing costs are capitalized if they are directly attributable to the acquisition, construction or production of a qualifying asset. Capitalization of borrowing costs commences when the activities to prepare the asset are in progress and expenditures and borrowing costs are being incurred. Borrowing costs are capitalized until the assets are substantially ready for their intended use. If the resulting carrying amount of the asset exceeds its recoverable amount, an impairment loss is recorded. Borrowing costs include interest charges and other costs incurred in connection with the borrowing of funds, including exchange differences arising from foreign currency borrowings used to finance these projects to the extent that they are regarded as an adjustment to interest costs.

(u) *Taxation*

(i) VAT

Under the relevant tax laws implemented on January 1, 1994, the Company and its subsidiaries are subject to VAT. The Company and its subsidiaries are subject to output VAT levied at 17% of the Company's and its subsidiaries' operating revenue. The input VAT paid on purchases of coal, water and materials can be used to offset the output VAT levied on operating revenue to determine the net VAT payable. Because the VAT is a tax on the customer and the Company and its subsidiaries collect such tax from the customers and pay such tax to the suppliers on behalf of the tax authority, the VAT has not been included in operating revenues or operating expenses.

(ii) Income Tax

Effective from January 1, 1999, in accordance with the practice notes on the PRC income tax laws applicable to Sino-foreign enterprises investing in energy and transportation infrastructure businesses, the reduced income tax rate of 15% (after the approval of State Tax Bureau) are applicable across the country.

All power plants (except for Dezhou Power Plant, expansion projects other than Shangan Power Plant Phase II and the subsidiaries of the Company) are exempted from PRC income tax for two 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 three years ("tax holiday").

The tax holiday of the five original operating plants and the Shanghai Power Plant had already expired prior to 2000. The tax holiday of the remaining operating plants will expire in 2002 to 2003.



The statutory income tax rates applicable to the head office and the individual power plants, after taking the effect of tax holiday into consideration, are summarized below:

|  | 2001  | 2000             | 1999             |
|--|-------|------------------|------------------|
| Head Office . . . . .                                      | 15.0% | 15.0%            | 15.0%            |
| Dalian Power Plant (including Dalian Phase II) . . . . .   | 15.0% | 15.0%            | 15.0%            |
| Shangan Power Plant . . . . .                              | 16.5% | 16.5%            | 16.5%            |
| Shangan Phase II . . . . .                                 | 9.0%  | Exempted*        | Exempted*        |
| Nantong Power Plant (including Nantong Phase II) . . . . . | 15.0% | 15.0%            | 15.0%            |
| Fuzhou Power Plant (including Fuzhou Phase II) . . . . .   | 15.0% | 15.0%            | 15.0%            |
| Shantou Oil-Fired Plant . . . . .                          | 15.0% | 15.0%            | 15.0%            |
| Shantou Power Plant . . . . .                              | 7.5%  | 7.5%             | Exempted         |
| Shanghai Power Plant . . . . .                             | 16.5% | 16.5%            | 16.5%            |
| Nanjing Power Plant . . . . .                              | 7.5%  | 7.5%             | 7.5%             |
| Dandong Power Plant . . . . .                              | —     | —                | —                |
| Shandong Branch . . . . .                                  | 17.0% | Not applicable** | Not applicable** |
| Dezhou Power Plant . . . . .                               | 17.0% | Not applicable** | Not applicable** |
| Weihai Power Plant . . . . .                               | 33.0% | Not applicable** | Not applicable** |
| Jining Power Plant . . . . .                               | 33.0% | Not applicable** | Not applicable** |

\* In accordance with Guo Shui Han [2000] No. 194, the tax holiday of the Shangan Phase II is determined separately from the Shangan Power Plant. The Shangan Phase II is entitled to a tax holiday starting from the first profit making year (after covering any accumulated deficits). The excess income tax paid by the Shangan Phase II for the year ended December 31, 1999 was refunded to the Company in 2000.

\*\* Not applicable because they were not subsidiaries or branches of the Company in 2000.

The income tax charge is based on profit for the year and after considering deferred taxation. Deferred taxes are calculated using the balance sheet liability method. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Deferred tax assets and liabilities are measured using the tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled based on tax rates enacted or substantially enacted at the balance sheet date. The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Company and its subsidiaries expect, at the balance sheet date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are recognized regardless of when the temporary difference is likely to reverse. Deferred tax assets and liabilities are not discounted and are classified as non-current assets (liabilities) in the balance sheet. Deferred tax assets are recognized when it is probable that sufficient taxable profits will be available against which the deferred tax assets can be utilized. At each balance sheet date, the Company and its subsidiaries re-assess unrecognized deferred tax assets and the carrying amount of deferred tax assets. The Company and its subsidiaries recognize a previously unrecognized deferred tax asset to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered. The Company and its subsidiaries conversely reduce the carrying amount of a deferred tax asset to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

(v) *Related Parties*

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also considered to be related if they are subject to common control or common significant influence.

(w) *Financial Instruments*

Liabilities and equity

Financial instruments are classified as liabilities or equity in accordance with the substance of the contractual arrangement. Interest, dividends, gains and losses relating to a financial instrument classified as a liability, are reported as expense or income. Distributions to holders of financial instruments classified as equity are charged directly to equity. When the rights and obligations regarding the manner of settlement of financial instruments depend on the occurrence or non-occurrence of uncertain future events or on the outcome of uncertain circumstances that are beyond the control of both the issuer and the holder, the financial instrument is classified as a liability unless the possibility of the issuer being required to settle in cash or another financial asset is remote at the time of issuance, in which case the instrument is classified as equity.

Derivative financial instruments

On inception, the Company identifies certain derivatives as either a) a hedge of the fair value of an asset or a liability (fair value hedge), b) a hedge of the exposure to variability in cash flows attributable to an asset or liability or a forecasted transaction or c) a hedge of a net investment in a foreign entity.

The Company's criteria for classifying a derivative instrument as a hedge include: i) the hedge transaction is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk, ii) the effectiveness of the hedge can be reliably measured, iii) there is adequate documentation of the hedging relationships at the inception of the hedge, and iv) for cash flow hedges, the forecasted transaction that is subject of the hedges must be highly probable.

Derivative financial instruments that are not designated as hedging instruments are classified as held-for-trading and carried at fair value, with changes in fair value included in the income statement.

An embedded derivative is separated from the host contract and accounted for as a derivative if i) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract; ii) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and iii) the hybrid (combined) instrument is not measured at fair value with changes in fair value reported in net profit or loss.

(x) *Impairment of Assets*

Financial instruments

Financial instruments are reviewed for impairment at each balance sheet date. For financial assets carried at amortised cost, whenever it is probable that the Company and its subsidiaries will not collect all amounts due according to the contractual terms of loans, receivables or held-to-maturity investments, an impairment or bad debt loss is recognized in the income statement. Reversal of

impairment losses previously recognized is recorded when the decrease in impairment loss can be objectively related to an event occurring after the write-down. Such reversal is recorded in income. However, the increased carrying amount is only recognised to the extent it does not exceed what amortized cost would have been had the impairment not been recognized.

For available-for-sale financial assets, the cumulative gain or loss previously recognized in equity is included in net profit or loss for the period when there is objective evidence that the asset is impaired. The recoverable amount of a debt instrument remeasured to fair value is the present value of expected future cash flows discounted at the current market interest rates for a similar financial asset. A reversal of an impairment loss is recorded when the decrease in the impairment loss can be objectively related to an event occurring after the write down. Such reversal is recorded in income.

#### Other assets

Property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Whenever the carrying amount of an asset exceeds its recoverable amount, an impairment loss is recognized in income statement for items of property, plant and equipment carried at cost. The recoverable amount is the higher of an asset's net selling price and value in use. The net selling price is the amount obtainable from the sale of an asset in an arm's length transaction less the costs of disposal while value in use is the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. Recoverable amounts are estimated for individual assets or, if it is not possible, for the cash-generating unit to which the asset belongs.

Reversal of impairment losses recognized in prior years is recorded when there is an indication that the impairment losses recognized for the asset no longer exist or has decreased. The reversal is recorded in income. However, the increased carrying amount of an asset due to a reversal of an impairment loss is recognized to the extent it does not exceed the carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognized for that asset in prior years.

As an exception, an impairment loss recognized for goodwill is not reversed in a subsequent period unless the impairment loss was caused by a specific external event of an exceptional nature that is not expected to recur and subsequent external events have occurred that reverse the effect of that event.

#### (y) *Contingencies*

Contingent liabilities are not recognized in the financial statements. They are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. A contingent asset is not recognized in the financial statements but disclosed when an inflow of economic benefits is probable.

#### (z) *Subsequent Events*

Post-year-end events that provide additional information about a company's position at the balance sheet date (adjusting events), are reflected in the financial statements. Post-year-end events that are not adjusting events are disclosed in the notes when material.

#### **4. SALES OF ELECTRIC POWER**

The Company and its subsidiaries have contractual arrangements for the sale of electric power with the local power companies. All power output is sold at rates designed to cover all operating and debt service costs, taxes and any exchange losses incurred, plus a reasonable return on the Company's and its subsidiaries' rate base.

For the years ended December 31, 2001, 2000 and 1999, all operating revenues were billed at the on-grid wholesale rates to the local power companies, except for the Shantou Oil-Fired Power Plant, the operating revenues of which were billed at the retail rate and charged to the ultimate consumers before June 1, 2001.

Upon the approval from local authorities, operating revenues of Shantou Oil-Fired Power Plant have been billed at the on-grid wholesale rates to the local power companies since June 1, 2001.

Before June 1, 2001, under the retail rate arrangement, the local power company collected revenue from the ultimate consumers and remitted it to the Shantou Oil-Fired Power Plant after deducting the cost of transmission and an agreed amount of handling fees. The Shantou Oil-Fired Power Plant recognized the gross amount received as revenue with the reimbursement of transmission costs and payment of handling fees to the local power company being separately recorded as transmission fees under operating expense. For Shantou Oil-Fired Power Plant after June 1, 2001 and other power plants subject to on-grid wholesale rates, since such rates excluded the transmission costs incurred by the local power companies, no transmission fees were recorded.

Sales incentives are paid to the power companies usually as an incentive to dispatch electricity of the Company in excess of the amount the Company has agreed to generate for them during the year. No sales incentives were paid for the year ended December 31, 2001 (2000: nil; 1999: Rmb63 million).

## 5. PROFIT BEFORE TAXATION

Profit before taxation was determined after charging and (crediting) the following:

|   | <u>2001</u>     | <u>2000</u>      | <u>1999</u>      |
|---|-----------------|------------------|------------------|
|   | '000            | '000             | '000             |
| Interest expenses on convertible notes . . . . .  | 108,581         | 146,762          | 139,776          |
| Interest expenses on:   |                 |                  |                  |
| - bank loans repayable within 5 years . . . . .   | 236,832         | 135,835          | 111,776          |
| - bank loans repayable beyond 5 years . . . . .   | 492,079         | 572,040          | 894,766          |
| Interest expenses on:   |                 |                  |                  |
| - shareholders loans wholly repayable within 5 years . . . . .                          | 73,524          | 153,044          | 113,644          |
| - shareholders loans repayable beyond 5 years . . . . .                                 | —               | —                | 120,190          |
| Interest expenses on other long-term loans wholly repayable<br>within 5 years . . . . . | 43,726          | 16,972           | 22,703           |
|   | <u>954,742</u>  | <u>1,024,653</u> | <u>1,402,855</u> |
| Less: amount capitalized in property, plant and equipment . . .                         | <u>(87,204)</u> | <u>—</u>         | <u>(503,075)</u> |
| Total interest expenses . . . . .   | 867,538         | 1,024,653        | 899,780          |
| Interest income . . . . .   | (113,081)       | (79,723)         | (108,601)        |
| Interest expense, net . . . . .   | <u>754,457</u>  | <u>944,930</u>   | <u>791,179</u>   |
| Exchange losses, net . . . . .  | 41,758          | 34,936           | (63,923)         |
| Loss of interest rate swaps . . . . .   | 14,875          | —                | —                |
| Fair value change of put option . . . . .   | 46,562          | —                | —                |
| Auditors' remuneration . . . . .  | 12,747          | 7,119            | 4,796            |
| Loss on disposals of fixed assets . . . . .   | 36,592          | 50,879           | 6,444            |
| Operating lease   |                 |                  |                  |
| - Buildings . . . . .   | 25,000          | 25,000           | —                |
| - Land use rights . . . . .   | 51,567          | 19,870           | 19,181           |
| Depreciation of property, plant and equipment . . . . .                                 | 3,261,001       | 2,654,413        | 2,380,651        |
| Amortization of negative goodwill . . . . .   | (247,279)       | —                | —                |
| Cost of materials and supplies . . . . .  | 5,337,630       | 4,001,614        | 3,499,699        |
| Provision for doubtful accounts . . . . .   | 1,030           | 4,588            | —                |
| Provision for inventory obsolescence . . . . .  | 2,576           | 10,608           | —                |
| Personnel expenses  |                 |                  |                  |
| - Wages and staff welfare . . . . .   | 588,552         | 503,573          | 383,513          |
| - Retirement benefits . . . . .   | 107,301         | 80,608           | 62,620           |
| - Staff housing benefits . . . . .  | 56,406          | 36,473           | 22,452           |
| - Other staff costs . . . . .   | 54,877          | 49,262           | 29,250           |

## 6. RELATED PARTY TRANSACTIONS

The related parties of the Company and its subsidiaries are as follows:

| Name of related parties   | Nature of relationship                     |
|---|--|
| HIPDC   | Parent                                     |
| China Huaneng Group   | Ultimate parent                            |
| China Huaneng Finance Company<br>("Huaneng Finance")                  | A subsidiary of China Huaneng Group        |
| SEPCO   | Minority shareholder of Jining Power Plant |
| Weihai International Trust and Investment<br>Corporation ("WITIC")    | Minority shareholder of Weihai Power Plant |
| China Huaneng International Trade Economics<br>Corporation ("CHITEC") | A subsidiary of China Huaneng Group        |

- a. Pursuant to the relevant service agreements, HIPDC provides transmission and transformer facilities to some of the power plants of the Company and receives service fees. Such service fees represent recoverable costs for rate setting purposes. For the Shangan Power Plant, the Fuzhou Power Plant and the Shantou Oil-Fired Power Plant, such service fees include various costs of transmission incurred by HIPDC plus a profit margin of 10% of the average net book value of HIPDC's transmission facilities. For the Shantou Power Plant, the Shangan Power Plant Phase II and the Shanghai Power Plant, the annual service fees were fixed and equal to 12% of the original book value of HIPDC's transmission and transformer facilities. The total service fees paid to HIPDC for the year ended December 31, 2001 was approximately Rmb307 million (2000: Rmb311 million, 1999: Rmb306 million).
- b. At the time of the formation of the Company, HIPDC transferred the land use rights pertaining to existing sites occupied by the five original operating plants for a period of 50 years in return for an amount of approximately Rmb148 million. Payments to HIPDC for the land use rights are being made in 10 equal, non-interest bearing, annual installments starting in 1994.
- c. In accordance with the leasing agreement entered into between the Company and HIPDC, the land use rights of the Shanghai Power Plant is leased to the Company for a period of 50 years at an annual rental payment of Rmb6 million.
- d. Pursuant to an acquisition agreement entered into amongst the Company, HIPDC and Nanjing Investment in 1999 (the "Nanjing Acquisition Agreement"), the Company acquired from HIPDC and Nanjing Investment Company ("Nanjing Investment") the existing power generation facilities and related assets and liabilities of the Nanjing Power Plant. The total purchase price was approximately Rmb2,702 million which was based on the appraised value of the assets acquired as determined by an independent appraiser. As of December 31, 2001, the total purchase price has been fully settled according to Nanjing Acquisition agreement. The Company paid Rmb142 million in 2001 to Nanjing Investment (2000: Rmb100 million, 1999: 1,111million).
- e. Pursuant to a leasing agreement entered into amongst the Company, HIPDC and Nanjing Investment, the land use right of the Nanjing Power Plant is leased to the Company for 50 years with an annual rental payment of approximately Rmb1.3 million, starting from the year ended December 31, 1999.
- f. As of December 31, 2001, current deposits of approximately Rmb64 million (2000: Rmb166 million) and fixed deposits of approximately Rmb3,689 million (2000: Rmb100 million) were placed with a non-bank PRC financial institution, Huaneng Finance, which is a subsidiary of China Huaneng Group (See Note 14).

- g. Pursuant to the leasing agreement between the Company and HIPDC signed on February 13, 2000, HIPDC agreed to rent out its building to the Company as office for 5 years at an annual rental of Rmb25 million effective from January 1, 2000.
- h. As described in Note 22 and Note 24(b), certain bank loans were on-lent from HIPDC and drawn from WITIC to the Company and its subsidiaries.
- i. As of December 31, 2001, short-term loans amounting to Rmb40 million were borrowed from Huaneng Finance (See Note 25).
- j. The balances with HIPDC and SEPCO are listed as follows:

|                      | <u>The Company<br/>and its subsidiaries</u> | <u>The Company</u> |
|----------------------|---|--------------------|
|                      | <u>2001</u>                                 | <u>2000</u>        |
|                      | '000  | '000               |
| Due to HIPDC .....   | 36,584                                      | 130,158            |
| Due from SEPCO ..... | 241,982                                     | —                  |
| Due to SEPCO .....   | 3,225                                       | —                  |

The balances with HIPDC and SEPCO are unsecured, non-interest bearing and repayable within one year. As the amount due from SEPCO represented the uncollected sales of electricity, it was included in accounts receivable.

- k. As of December 31, 2001, long-term bank loans of approximately Rmb8,868 million, Rmb1,666 million and Rmb300 million (2000: Rmb9,962 million, 5 million and nil) were guaranteed by HIPDC, China Huaneng Group and WITIC, respectively.
- l. As of December 31, 2001, current deposit of Rmb5.5 million was placed with the financing center of SEPCO.
- m. On July 18, 2000, the Company and Shandong Huaneng Power Development Co., Ltd (“Shandong Huaneng”) entered into an agreement under which the Company acquired the net assets of Shandong Huaneng in which China Huaneng Group held 33.09% equity interest. The shareholders of Shandong Huaneng were entitled to Rmb1.34 per ordinary A share or US\$0.1618 per ordinary N share (the “Acquisition”). The total consideration of the Acquisition paid in 2000 is approximately Rmb5,768 million, among which, approximately Rmb1,909 million was paid to China Huaneng Group.
- n. Sales to a related party:

|   | <u>The Company and<br/>its subsidiaries</u> |
|---|---|
|   | <u>2001</u>                                 |
|   | '000  |
| Sales of electricity power to SEPCO ..... | 3,654,726                                   |

- o. In accordance with an equipment import agency service agreement entered into between Shandong Huaneng and CHITEC, the Company is required to pay an agency fee at 0.5% of the value of imported equipment in return for the agency service provided by CHITEC. No such agency fee is paid in 2001. In addition, in 2001, the Company paid an agency fee to CHITEC amounted to US\$3.856 million for equipment transportation and insurance service received (2000: nil, 1999: nil).

## 7. RETIREMENT PLAN AND POST-RETIREMENT BENEFITS

All PRC employees of the Company and its subsidiaries are entitled to a monthly pension at their retirement dates. The PRC government is responsible for the pension liability to these retired employees. The Company and its subsidiaries are required to make contributions to the state-sponsored retirement plan at a specified rate, currently set at 17% to 20%, of the basic salary of the PRC employees. The retirement plan contributions paid by the Company and its subsidiaries for the year ended December 31, 2001 was approximately Rmb66 million (2000: Rmb42 million, 1999: Rmb29 million).

In addition, the Company and its subsidiaries have implemented a supplementary defined contribution retirement scheme. Under this scheme, the employees are required to make a specified contribution based on the number of years of service with the Company and its subsidiaries, and the Company and its subsidiaries are required to make a contribution equal to twice the employees' contributions. The employees will receive the total contributions upon their retirement. The contributions paid by the Company and its subsidiaries for the year ended December 31, 2001 was approximately Rmb60 million (2000: Rmb39 million, 1999: Rmb34 million).

The Company and its subsidiaries have no further obligation for post-retirement benefits beyond the above annual contributions made.

## 8. DIRECTORS', SENIOR EXECUTIVES' AND SUPERVISORS' EMOLUMENTS

|  | <u>2001</u> | <u>2000</u> | <u>1999</u> |
|--|-------------|-------------|-------------|
|  | '000        | '000        | '000        |
| Fees for executive directors . . . . .                 | —           | —           | —           |
| Fees for non-executive directors . . . . .             | —           | —           | —           |
| Fees for supervisors . . . . .                         | —           | —           | —           |
| Other emoluments for executive directors               |             |             |             |
| - basic salaries and allowances . . . . .              | 522         | 396         | 492         |
| - bonus . . . . .                                      | 1,128       | 544         | 523         |
| - retirement benefits . . . . .                        | 148         | 134         | 118         |
| Other emoluments for non-executive directors . . . . . | —           | —           | —           |
| Other emoluments for supervisors . . . . .             | 589         | 237         | 279         |

No director had waived or agreed to waive any emoluments during the year.

The annual emoluments paid during the year to each of the directors and supervisors (including the five highest paid employees) fell within the band from Rmb nil to Rmb1 million.



Details of emoluments paid to the five highest paid employees (all being directors) were:

|   | <u>2001</u> | <u>2000</u> | <u>1999</u> |
|---|-------------|-------------|-------------|
|   | '000        | '000        | '000        |
| Basic salaries and allowances . . . . . | 404         | 223         | 226         |
| Bonus . . . . .                         | 815         | 369         | 298         |
| Retirement benefits . . . . .           | 112         | 86          | 66          |

During the year, no emolument was paid to the five highest paid individuals (all being directors) as an inducement to join or upon joining the Company or as compensation for loss of office.

## 9. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment, net comprised:

|   | <u>The Company and its subsidiaries</u> |  |                                      |                |                                      |                   | <u>The Company</u> |
|---|---|--|--------------------------------------|----------------|--------------------------------------|-------------------|--------------------|
|   | <u>2001</u>                             |  |                                      |                |                                      |                   | <u>2000</u>        |
|   | <u>Buildings</u>                        | <u>Electric<br/>Utility Plant<br/>in Service</u> | <u>Transportation<br/>Facilities</u> | <u>Others</u>  | <u>Construction<br/>-in-progress</u> | <u>Total</u>      | <u>Total</u>       |
| <u>Cost</u>   | <u>'000</u>                             | <u>'000</u>                                      | <u>'000</u>                          | <u>'000</u>    | <u>'000</u>                          | <u>'000</u>       | <u>'000</u>        |
| Beginning of year . . . . .                                 | 1,654,228                               | 37,868,422                                       | 522,314                              | 632,028        | 235,185                              | 40,912,177        | 40,634,921         |
| Reclassification . . . . .                                  | (139,994)                               | 285,055  | (92,628)                             | (52,433)       | —                                    | —                 | —                  |
| Acquisition of<br>Shandong<br>Huaneng<br>(Note 2) . . . . . | 165,606                                 | 4,530,063  | 149,944                              | 156,110        | 1,426,118                            | 6,427,841         | —                  |
| Addition . . . . .  | 27,998                                  | 28,821   | 1,880                                | 39,559         | 2,717,982                            | 2,816,240         | 351,966            |
| Transfer from CIP . . . . .                                 | 36,107                                  | 101,009  | —                                    | 108,572        | (245,688)                            | —                 | —                  |
| Disposals . . . . .   | (31,755)                                | (83,971)   | (719)                                | (24,964)       | —                                    | (141,409)         | (74,710)           |
| End of year . . . . .                                       | <u>1,712,190</u>                        | <u>42,729,399</u>                                | <u>580,791</u>                       | <u>858,872</u> | <u>4,133,597</u>                     | <u>50,014,849</u> | <u>40,912,177</u>  |
| <b>Accumulated<br/>Depreciation</b>                         |   |  |                                      |                |                                      |                   |                    |
| Beginning of year . . . . .                                 | 379,695                                 | 8,547,401  | 110,436                              | 231,115        | —                                    | 9,268,647         | 6,620,193          |
| Reclassification . . . . .                                  | (52,490)                                | 155,273  | (33,697)                             | (69,086)       | —                                    | —                 | —                  |
| Charge for the year . . . . .                               | 35,528                                  | 3,071,016  | 27,673                               | 126,784        | —                                    | 3,261,001         | 2,654,413          |
| Written back on<br>disposals . . . . .                      | (449)                                   | (57,026)   | (498)                                | (13,940)       | —                                    | (71,913)          | (5,959)            |
| End of year . . . . .                                       | <u>362,284</u>                          | <u>11,716,664</u>                                | <u>103,914</u>                       | <u>274,873</u> | <u>—</u>                             | <u>12,457,735</u> | <u>9,268,647</u>   |
| <b>Net Book Value</b>                                       |   |  |                                      |                |                                      |                   |                    |
| End of year . . . . .                                       | <u>1,349,906</u>                        | <u>31,012,735</u>                                | <u>476,877</u>                       | <u>583,999</u> | <u>4,133,597</u>                     | <u>37,557,114</u> | <u>31,643,530</u>  |
| Beginning of year . . . . .                                 | <u>1,274,533</u>                        | <u>29,321,021</u>                                | <u>411,878</u>                       | <u>400,913</u> | <u>235,185</u>                       | <u>31,643,530</u> | <u>34,014,728</u>  |

Borrowing costs capitalized to construction-in-progress for the year ended December 31, 2001 was approximately Rmb87 million (2000: nil). The capitalization rate used to determine the amount of borrowing costs eligible for capitalization was 5.75% per annum for the year ended December 31, 2001 (2000: nil). There was no write-down of any property, plant and equipment during the year.

#### 10. LAND-USE RIGHTS

Land in the PRC is owned by the state and no individual land ownership right exists. However, the Company and its subsidiaries acquired the rights to use certain land for their operation. In prior years, land use rights were recorded as property, plant and equipment in the balance sheet. Following the introduction of IFRS 40, Investment Property, it is concluded that all interests in property held under an operating lease should be dealt with in accordance with IFRS 17, Leases. As a result, land use rights were excluded from the classification of property, plant and equipment. Costs of the land use rights are recognized as an expense on a straight line basis over the lease term and included in other operating expenses. Comparative figures have been reclassified to conform with current year presentation.

#### 11. INVESTMENT IN AN ASSOCIATE

The following are details of the Company's investment in an associate:

| <u>Name</u>                  | <u>Country and date of incorporation</u> | <u>Percentage of equity interest held</u> | <u>Issued and fully paid capital</u> | <u>Principal activities</u> |
|------------------------------|--|---|--------------------------------------|-----------------------------|
| Rizhao Power Plant . . . . . | PRC<br>March 20, 1996                    | 25.5%                                     | US\$<br>150,000,000                  | Power generation            |

For the year ended December 31, 2001, Rizhao Power Plant was in a loss position. The Company uses equity method to recognize its share of losses of the Rizhao Power Plant amounting to approximately Rmb5 million.

## 12. INVESTMENT IN SUBSIDIARIES

As of December 31, 2001, the Company had equity interests in the following subsidiaries:

| <u>Name of subsidiaries</u>  | <u>Country and date of incorporation</u> | <u>Percentage of equity interest held</u> | <u>Issued and fully paid capital</u> | <u>Principal activities</u> |
|------------------------------|--|---|--------------------------------------|-----------------------------|
| Weihai Power Plant . . . . . | PRC<br>November 22,<br>1993              | 60%                                       | Rmb761,832,800                       | Power generation            |
| Jining Power Plant . . . . . | PRC<br>February 19,<br>1990              | 75%                                       | Rmb383,010,000                       | Power generation            |

Summarized financial information of the above subsidiaries is as follows:

|                                 | <u>As of<br/>December 31,<br/>2001</u>                  |
|---------------------------------|---|
|                                 | '000  |
| <b>Balance sheet</b>            |   |
| Current assets . . . . .        | 449,985   |
| Long-term assets . . . . .      | <u>2,776,538</u>  |
| Total assets . . . . .          | <u>3,226,523</u>  |
| Current liabilities . . . . .   | 1,173,081   |
| Long-term liabilities . . . . . | <u>718,392</u>  |
| Total liabilities . . . . .     | <u>1,891,473</u>  |
|                                 | <br><b>For the year ended<br/>December 31,<br/>2001</b> |
|                                 | '000  |
| <b>Income statement</b>         |   |
| Revenue . . . . .               | 1,748,309   |
| Expenses . . . . .              | <u>(1,555,590)</u>                                      |
| Net profit . . . . .            | <u>192,719</u>  |

### 13. NEGATIVE GOODWILL

Negative goodwill arose from the acquisition of Shandong Huaneng. It was recognized in the income statement as other operating income on a systematic basis over the remaining weighted average useful lives of the identifiable acquired depreciable/ amortizable assets, which is estimated to be 10 years (See Note 2). The movement of the carrying amount of negative goodwill during the year was as follows:

|  | <u>2001</u>             |
|--|-------------------------|
|  | <u>'000</u>             |
| Beginning of year . . . . .            | —                       |
| Addition . . . . .                     | 2,472,784               |
| Amortization during the year . . . . . | <u>(247,279)</u>        |
| End of year . . . . .                  | <u><u>2,225,505</u></u> |

### 14. TEMPORARY CASH INVESTMENTS

Temporary cash investments consist of fixed-term deposits denominated in Renminbi and US dollars with original maturities ranging from more than three months to one year.

As of December 31, 2001, temporary cash investment included deposits of approximately Rmb3,689 million (2000: Rmb100 million) placed with a non-bank financial institution, Huaneng Finance, which is a subsidiary of China Huaneng Group (see Note 6(f)). The annual interest rate and interest earned from Huaneng Finance were as follows:

|                           | <u>2001</u> | <u>2000</u> | <u>1999</u> |
|---------------------------|-------------|-------------|-------------|
| Interest rate . . . . .   | 1.43%-2.44% | 1.89%-2.25% | 3.78%-5.62% |
| Interest earned . . . . . | 20 million  | 25 million  | 35 million  |

As of December 31, 2001, the Company and its subsidiaries had Rmb162 million placed with a bank as deposit to secure letter of credits issued to equipment suppliers.

## 15. ACCOUNTS RECEIVABLE

Accounts receivable comprised:

|                               | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|-------------------------------|---|--------------------|
|                               | <u>2001</u>                                 | <u>2000</u>        |
|                               | '000  | '000               |
| Accounts receivable . . . . . | 1,254,941                                   | 1,126,072          |
| Notes receivable . . . . .    | 152,230                                     | 70,000             |
|                               | <u>1,407,171</u>                            | <u>1,196,072</u>   |

The Company and its subsidiaries usually grants one month credit period to all the local power companies from the end of the month in which the sales are made. As of December 31, 2001 and 2000, all accounts receivable were aged within one year.

As of December 31, 2001, accounts receivable amounting to approximately Rmb242 million was due from SEPCO (2000: nil, see Note 6(j)).

## 16. MATERIALS AND SUPPLIES, NET

Materials and supplies comprised:

|  | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|--|---|--------------------|
|  | <u>2001</u>                                 | <u>2000</u>        |
|  | '000  | '000               |
| Fuel (coal and oil) for power generation . . . . . | 224,131                                     | 176,628            |
| Construction and other supplies . . . . .          | 508,050                                     | 397,721            |
|  | 732,181                                     | 574,349            |
| Less: provision for obsolescence . . . . .         | (13,184)                                    | (10,608)           |
|  | <u>718,997</u>                              | <u>563,741</u>     |

Approximately Rmb439,467,000 of the total carrying amount of materials and supplies are carried at net realizable value.

## 17. OTHER RECEIVABLES AND ASSETS, NET

Other receivables and assets comprised:

|  | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|--|---|--------------------|
|  | <u>2001</u>                                 | <u>2000</u>        |
|  | '000  | '000               |
| Prepayments for materials and supplies . . . . .                                 | 94,954                                      | 24,224             |
| Prepayments for contractors . . . . .  | 16,900                                      | 65,010             |
| Prepayment for consideration of the acquisition of<br>Shandong Huaneng . . . . . | —   | 5,767,898          |
| Prepaid expenditure relating to the acquisition of<br>Shandong Huaneng . . . . . | —   | 23,070             |
| Interest receivable on temporary<br>cash investments . . . . .                   | 16,355                                      | 420                |
| Others . . . . .   | 116,852                                     | 82,544             |
|  | <u>245,061</u>                              | <u>5,963,166</u>   |
| Less: Provision for doubtful accounts . . . . .                                  | <u>(5,618)</u>                              | <u>(4,588)</u>     |
|  | <u>239,443</u>                              | <u>5,958,578</u>   |

## 18. CAPITALIZATION

### *Authorized Share Capital*

As of December 31, 2001, the authorized share capital of the Company was Rmb6,000,000,000, divided into 6,000,000,000 shares of Rmb1.00 each. In addition, the issued and fully paid share capital of the Company as of December 31, 2001 was Rmb6,000,000,000 (2000: Rmb5,650,000,000) comprising 4,500,000,000 Domestic Shares and 1,500,000,000 Overseas Listed Foreign Shares. The holders of Overseas Listed Foreign Shares and Domestic Shares, with minor exceptions, are entitled to the same economic and voting rights.

### *Public Offering in the PRC*

On November 15 and November 16, 2001, 250,000,000 new ordinary shares par value Rmb1.00 each, in the form of A shares, were issued to the public in a public offering on the Shanghai Stock Exchange at Rmb7.95 per A share. The 250,000,000 A shares were listed on the Shanghai Stock Exchange on December 6, 2001. Net issuing cost of Rmb12.4 million were incurred to sell the A shares and reduced the net proceeds. In addition, on November 15, 2001, 100,000,000 new Domestic Shares of Rmb1.00 each were issued to HIPDC at Rmb7.95 each.

## 19. APPROPRIATION AND DISTRIBUTION OF PROFIT

The Board of Directors decides on an annual basis the percentages of the profit after taxation, as determined under the PRC accounting standards and regulations, to be appropriated to the statutory surplus reserve fund, the statutory public welfare fund and, on an optional basis, the discretionary surplus reserve fund. When the balance of the statutory surplus reserve fund reaches 50% of the Company's share capital, any further appropriation will be optional. The statutory surplus reserve fund can be used to offset prior years' losses, if any, and may be converted into share capital by the issue of new shares to shareholders in proportion to their existing shareholding or by increasing the par value of the shares currently held by them, provided that the balance after such issue is not less than 25% of registered capital. The statutory public

welfare fund can only be utilized on capital items for the collective benefits of the Company's employees. Titles of these capital items will remain with the Company. This fund is non-distributable other than in liquidation. The discretionary surplus reserve fund can be provided and used in accordance with the resolutions of the shareholders.

For the year ended December 31, 2001, the Board of Directors resolved the following on March 12, 2002:

- (i) to appropriate 10% and 7.5% (2000: 10% and 7.5%, 1999: 10% and 7.5%), respectively, of the profit after taxation as determined under the PRC accounting standards and regulations to the statutory surplus reserve fund and the statutory public welfare fund, amounting to approximately Rmb636 million (2000: Rmb463 million, 1999: Rmb352 million) in total;
- (ii) to make no appropriation to the discretionary surplus reserve fund;

In accordance with the Articles of Association, earnings available for distribution by the Company will be based on the lower of the amounts determined in accordance with (a) the PRC accounting standards and regulations, (b) IFRS and (c) US GAAP. The amounts of distributable profit resulting from the current year operation after appropriation to dedicated capital for the year ended December 31, 2001 was approximately Rmb2.70 billion (2000: Rmb2.03 billion, 1999: Rmb1.52 billion). The cumulative balance of distributable profit as of December 31, 2001 was approximately Rmb9.31 billion (2000: Rmb7.85 billion, 1999: Rmb6.33 billion (as restated)).

## **20. DIVIDENDS**

On March 12, 2002, the Board of Directors proposed a dividend of Rmb0.30 (2000: Rmb0.22, 1999: Rmb0.09) per share, totaling approximately Rmb1,800 million (2000: Rmb1,243 million, 1999: Rmb509 million) for the year ended December 31, 2001. The proposed dividend distribution is subject to shareholders' approval in their next general meeting. In accordance with the revised IFRS 10 "Events After the Balance Sheet Date", the dividend will be recorded in the Company's financial statements for the year ending December 31, 2002.

Before 2000, dividends proposed or declared after the balance sheet date were recognized as a liability as of the balance sheet date. Because of the adoption of the revised IFRS 10 "Events After the Balance Sheet Date", dividends proposed or declared after the balance sheet date are no longer permitted to be recognized as a liability as of the balance sheet date.

This change in accounting policy has been applied retrospectively with the result that the Company's retained earnings as of December 31, 1999 and 1998 were increased by Rmb508.5 million and Rmb452 million, respectively, being the amount of dividends declared by the Company after the balance sheet date. Comparative figures as of December 31, 1999 and 1998 have been restated to reflect this change in accounting policy.

## **21. CONVERTIBLE NOTES**

In May 1997, the Company issued at par value convertible notes with an aggregate principal amount of US\$230 million at 1.75% due 2004. These notes are listed on the New York Stock Exchange and the Luxemburg Stock Exchange. The notes mature on May 21, 2004, unless previously redeemed or converted.

The notes are convertible, at the option of the noteholders, at any time from and including August 21, 1997 up to and including the date of maturity, unless previously redeemed, at an initial conversion price of US\$29.20 per ADS, each of which represents 40 Overseas Listed Foreign Shares, subject to adjustment in certain circumstances. No noteholder had converted the convertible notes to ADS during the year ended December 31, 2001.

The notes may be redeemed, at the option of the noteholders, in whole or in part, on May 21, 2002 at 128.575% of the principal amount of the notes together with accrued interest, if any.

The notes may be redeemed, at the option of the Company, at any time on or after May 21, 2000, but prior to maturity, in whole or in part, at a redemption price equal to 100% of the principal amount of the notes, together with accrued interest, if any, if the closing price of the ADSs for a period of 30 consecutive trading days is at least 130% of the conversion price in effect on each such trading day.

The proceeds received were allocated for accounting purposes into a liability component of approximately US\$168 million (equivalent to Rmb1,393 million) and an equity component of approximately US\$62 million (equivalent to Rmb511 million) at the issuance date.

Prior to 2001, the Company carried the liability component at cost, and accrued for the put option liability together with the interest payable on the notes using the effective interest rate of 6.66%. In 2001, the Company adopted IFRS 39. The put option for the noteholders to redeem the notes at 128.575% of the principal amount of the notes is accounted for as an embedded derivative. It is separated from the host contract of the convertible notes and measured at its fair value with changes in fair value included in net profit or loss. The liability component is measured at amortized cost.

The fair value of the put option is determined on the following basis:

- (i) No fair value is attributed to the share conversion option. Management believes that the probability of exercising the conversion option by the noteholders is very low because the prevailing share price of the Company is significantly below 128.575% of the principal amount of the notes.
- (ii) The fair value of the liability component is determined by discounting the stream of future payments of interest and principal at the prevailing market rate for a similar liability (instrument of comparable credit status and providing substantially the same cash flows, on the same terms, but without the conversion option).
- (iii) Given (i) and (ii) above, the fair value of the put option is then determined by deducting the fair value of the liability component from the prevailing market price of the convertible notes.

At the beginning of 2001 in which IFRS 39 was initially applied, the Company recognized the put option of the convertible notes, which allows the noteholders to redeem the convertible notes at a premium, as an embedded derivative and measured it at fair value. The difference between the previous carrying amount and the current fair value amounted to approximately Rmb229 million, which was recognized as an adjustment to the opening retained earnings as of January 1, 2001.

In addition, in accordance with IFRS 39, the liability component is measured at amortized cost. The difference of approximately Rmb235 million compared with the previous carrying amount is recognized as an adjustment to the opening retained earnings as of January 1, 2001.



During the year ended December 31, 2001, the Company recorded a loss amounting to approximately Rmb47 million arising from the changes in the fair value of the put option during the year.

## 22. LONG-TERM LOANS FROM SHAREHOLDERS

Long-term loans from shareholders comprised:

|  | <u>2001</u>    | <u>2000</u>      |
|--|----------------|------------------|
|  | '000           | '000             |
| Loans from local investment companies (a) . . . . .        | —              | 120,000          |
| Foreign currency bank loans on-lent by HIPDC (b) . . . . . | <u>793,282</u> | <u>881,820</u>   |
|  | <u>793,282</u> | <u>1,001,820</u> |

a. Interest-bearing Renminbi loans were borrowed from the local investment companies by the five original operating plants to finance construction. These loans bore interest at 6.21% per annum for the year ended December 31, 2001 (2000: 6.21%, 1999: 3.60% to 6.21%) and had been repaid in 2001 in accordance with the agreed repayment schedules.

b. The foreign currency bank loans bear interest at the prevailing lending rates (both fixed and floating) prescribed by the contracts, which ranged from 4.25% to 7.40% per annum for the year ended December 31, 2001 (2000: 4.25% to 7.40%, 1999: 4.25% to 8.80%), and are repayable in accordance with the repayment schedules set by the banks. The amounts outstanding comprised:

|   | <u>2001</u>               |                | <u>2000</u>    |
|---|---------------------------|----------------|----------------|
|   | Original Currency<br>'000 | Rmb'000        | Rmb'000        |
| Amounts denominated in United States Dollar<br>("US\$") . . . . . | 94,052                    | 778,429        | 810,721        |
| Amounts denominated in Swiss Francs<br>("SFRC") . . . . .         | 3,003                     | <u>14,853</u>  | <u>71,099</u>  |
|   |                           | <u>793,282</u> | <u>881,820</u> |

The foreign-currency bank loans were previously borrowed by HIPDC for financing construction. All these outstanding long-term bank loans were restructured. HIPDC continued to borrow the loans from the banks and then on-lent the proceeds to the Company as shareholders' loans. The existing terms of the loans including interest rates and repayment schedules remained intact after the restructuring (see Note 6(h)).

- c. The shareholders' loans are repayable as follows:

|   | <u>2001</u>           | <u>2000</u>           |
|---|-----------------------|-----------------------|
|   | '000                  | '000                  |
| Within one year . . . . .   | 15,565                | 218,995               |
| Between one to two years . . . . .  | 388,835               | 4,967                 |
| Between two to five years . . . . .   | <u>388,882</u>        | <u>777,858</u>        |
|   | 793,282               | 1,001,820             |
| Less: Amount due within one year included under current liabilities . . . . . | <u>(15,565)</u>       | <u>(218,995)</u>      |
|   | <u><u>777,717</u></u> | <u><u>782,825</u></u> |

### 23. LONG-TERM BANK LOANS

Long-term bank loans comprised:

|   | <u>The Company and<br/>its subsidiaries</u> |                          | <u>The Company</u>       |
|---|---|--------------------------|--------------------------|
|   | <u>2001</u>                                 |                          | <u>2000</u>              |
|   | US\$'000                                    | Rmb'000                  | Rmb'000                  |
| Renminbi bank loans (a) . . . . .             | —   | 1,430,213                | 828,000                  |
| United States dollar bank loans (b) . . . . . | 1,195,050                                   | <u>9,891,041</u>         | <u>9,489,347</u>         |
|   |   | <u><u>11,321,254</u></u> | <u><u>10,317,347</u></u> |

- a. Renminbi bank loans were borrowed from local banks to finance the construction of the Shangan Phase II, the Shantou Power Plant, the Dezhou Phase III and the Weihai Phase II. These loans bore interest at the prevailing lending rates at 6.21% per annum for the year ended December 31, 2001 (2000: 6.21%, 1999: 5.85% to 6.21%) and are repayable in accordance with the agreed repayment schedules set by the banks.
- b. United States dollar bank loans were borrowed mainly to finance the construction of the Dandong Power Plant, the Fuzhou Phase II, the Nantong Phase II, the Dalian Phase II and the Dezhou Phase III. These loans bore interest at lending rates (both fixed and floating) ranging from 5.89% to 6.60% per annum for the year ended December 31, 2001 (2000: 5.95% to 6.60%, 1999: 5.95% to 6.60%), and are repayable in accordance with the agreed repayment schedules set by the banks.

- c. The long-term bank loans are repayable as follows:

|  | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u>      |
|--|---|-------------------------|
|  | <u>2001</u>                                 | <u>2000</u>             |
|  | '000  | '000                    |
| Within one year . . . . .  | 2,630,008                                   | 1,431,713               |
| Between one to two years . . . . .   | 1,777,844                                   | 1,429,713               |
| Between two to five years . . . . .  | 3,215,678                                   | 3,098,607               |
| Over five years . . . . .  | <u>3,697,724</u>                            | <u>4,357,314</u>        |
|  | 11,321,254                                  | 10,317,347              |
| Less: Amount due within one year included under<br>current liabilities . . . . . | <u>(2,630,008)</u>                          | <u>(1,431,713)</u>      |
|  | <u><u>8,691,246</u></u>                     | <u><u>8,885,634</u></u> |

#### 24. OTHER LONG-TERM LOANS

|  | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u>    |
|--|---|-----------------------|
|  | <u>2001</u>                                 | <u>2000</u>           |
|  | '000  | '000                  |
| Long-term loan from Nanjing Investment (a) . . . . . | 174,368                                     | 232,491               |
| Long-term loan from Weihai Investment (b) . . . . .  | <u>215,704</u>                              | <u>—</u>              |
|  | <u><u>390,072</u></u>                       | <u><u>232,491</u></u> |

- a. An interest bearing Renminbi loan was previously borrowed by the Nanjing Power Plant from Nanjing Investment to finance its construction. Upon the acquisition of the Nanjing Power Plant, the Company assumed the loan, which bore interest at the prevailing lending rate in the PRC at 6.21% per annum for the year ended December 31, 2001 (2000: 6.21%, 1999: 6.21% to 7.56%).
- b. An unsecured interest bearing Renminbi loan was borrowed by the Weihai Power Plant from WITIC to finance its construction with interest at the prevailing lending rate in the PRC at 6.21% per annum for the year ended December 31, 2001 (see Note 6(h)).

Other long-term loan is repayable as follows:

|   | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|---|---|--------------------|
|   | <u>2001</u>                                 | <u>2000</u>        |
|   | '000  | '000               |
| Within one year . . . . .   | 283,273                                     | 58,123             |
| Between one to two years . . . . .  | —   | 58,123             |
| Between two to five years . . . . .   | <u>106,799</u>                              | <u>116,245</u>     |
|   | 390,072                                     | 232,491            |
| Less: Amount due within one year included under current liabilities . . . . . | <u>(283,273)</u>                            | <u>(58,123)</u>    |
|   | <u>106,799</u>                              | <u>174,368</u>     |

## 25. SHORT-TERM LOANS

Short-term loans are denominated in Renminbi and drawn from Huaneng Finance by the Weihai Power Plant (see Note 6(i)). It bears interest at the prevailing interest rates in the PRC, which was 5.30% per annum for the year ended December 31, 2001 (2000: 5.02%, 1999: 5.58%), and repayable within one year.

## 26. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities comprised:

|   | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|---|---|--------------------|
|   | <u>2001</u>                                 | <u>2000</u>        |
|   | '000  | '000               |
| Accounts payable . . . . .                            | 387,814                                     | 361,591            |
| Revenue received in advance (see Note 3(r)) . . . . . | 726,808                                     | 535,588            |
| Payable to contractors for construction . . . . .     | 716,956                                     | 1,249,780          |
| Deposits payable to contractors . . . . .             | 120,559                                     | 24,832             |
| Accrued interest . . . . .                            | 200,978                                     | 202,390            |
| Payable to power companies . . . . .                  | 10,196                                      | 36,550             |
| Housing fund payable . . . . .                        | 31,030                                      | 22,007             |
| Others . . . . .                                      | <u>462,882</u>                              | <u>285,219</u>     |
|   | <u>2,657,223</u>                            | <u>2,717,957</u>   |

As of December 31, 2001, the aging analysis of accounts payable was as follows:

|                                   | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|-----------------------------------|---|--------------------|
|                                   | <u>2001</u>                                 | <u>2000</u>        |
|                                   | '000  | '000               |
| Within one year . . . . .         | 373,270                                     | 356,527            |
| Between one to two year . . . . . | 9,494                                       | 3,527              |
| Over two years . . . . .          | <u>5,050</u>                                | <u>1,537</u>       |
|                                   | <u>387,814</u>                              | <u>361,591</u>     |

## 27. TAXES PAYABLE

Taxes payable comprised:

|                              | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|------------------------------|---|--------------------|
|                              | <u>2001</u>                                 | <u>2000</u>        |
|                              | '000  | '000               |
| VAT payable . . . . .        | 209,020                                     | 193,000            |
| Income tax payable . . . . . | 292,615                                     | 329,960            |
| Others . . . . .             | <u>19,558</u>                               | <u>6,701</u>       |
|                              | <u>521,193</u>                              | <u>529,661</u>     |

## 28. ADDITIONAL FINANCIAL INFORMATION ON BALANCE SHEET

As of December 31, 2001, the net current assets of the Company and its subsidiaries amounted to approximately Rmb1,842 million (2000: Rmb2,991 million). On the same date, the total assets less current liabilities was approximately Rmb38,370 million (2000: Rmb35,396 million).

## 29. HOUSING SCHEME

In accordance with the PRC housing reform regulations, the Company and its subsidiaries are required to make contributions to the State-sponsored housing fund at 7%-11% of the specified salary amount of the PRC employees. At the same time, the employees are required to make a contribution equal to the Company's and its subsidiaries' contribution out of their payroll. The employees are entitled to claim the entire sum of the fund under certain specified withdrawal circumstances. For the year ended December 31, 2001, the Company and its subsidiaries contributed approximately Rmb31 million (2000: Rmb27 million, 1999: Rmb27 million) to the fund.

In addition, the Company and its subsidiaries provided housing benefits to certain employees to enable them to purchase living quarters from the Company and its subsidiaries at a substantial discount. Such housing benefits represent the difference between the cost of the staff quarters sold to and the net proceeds collected from the employees. The housing benefits are expected to benefit the Company and its subsidiaries over the estimated remaining average service life of the relevant employees.

For the year ended December 31, 2001, the housing benefits provided by the Company and its subsidiaries to the employees amounted to approximately Rmb16 million (2000: Rmb87 million, 1999: nil) which is recorded as a long-term deferred asset and amortized over the remaining average service life of the relevant employees which is estimated to be 10 years.

The Company and its subsidiaries have no further obligation for housing benefits.

### 30. PROVISION FOR INCOME TAX

Provision for income tax comprised:

|  | The Company and<br>its subsidiaries | The Company |         |
|--|-------------------------------------|-------------|---------|
|  | 2001                                | 2000        | 1999    |
|  | '000                                | '000        | '000    |
| Current tax expense . . . . .  | 715,220                             | 445,244     | 384,555 |
| Adjustment for current tax of prior<br>year of Shangan Phase II (See<br>Note 3(u)(ii)) . . . . . | —                                   | (31,824)    | —       |
| Others . . . . .   | —                                   | (2,218)     | —       |
|  | 715,220                             | 411,202     | 384,555 |

The reconciliation of the effective income tax rate to the statutory income tax rate in the PRC is as follows:

|                                      | The Company and<br>its subsidiaries | The Company |      |
|--------------------------------------|-------------------------------------|-------------|------|
|                                      | 2001                                | 2000        | 1999 |
| Average statutory tax rate . . . . . | 17%                                 | 16%         | 16%  |
| Effect of tax holiday . . . . .      | (2%)                                | (4%)        | (2%) |
| Others . . . . .                     | 2%                                  | 2%          | 3%   |
| Effective tax rate . . . . .         | 17%                                 | 14%         | 17%  |

The aggregate effect of the tax holiday was approximately Rmb79 million for the year ended December 31, 2001 (2000: Rmb112 million, 1999: Rmb56 million).

The average statutory tax rate for the year ended December 31, 2001 represented the weighted average tax rate of the head office and the individual power plants calculated on the basis of the relative amounts of net profit before tax and the applicable statutory tax rates.

For the year ended December 31, 2001, there were no material deferred tax assets or liabilities recognized or reversed.

### 31. EARNINGS PER SHARE

|   | 2001             |                         |                  | 2000             |                         |                  | 1999             |                         |                  |
|---|------------------|-------------------------|------------------|------------------|-------------------------|------------------|------------------|-------------------------|------------------|
|   | Net Profit       | Weighted Average Shares | Per Share Amount | Net Profit       | Weighted Average Shares | Per Share Amount | Net Profit       | Weighted Average Shares | Per Share Amount |
|   | '000             | '000                    |                  | '000             | '000                    |                  | '000             | '000                    |                  |
| <b>Earnings per Share</b>   |                  |                         |                  |                  |                         |                  |                  |                         |                  |
| Net profit attributable to shareholders . . .   | 3,450,658        | 5,693,750               | 0.61             | 2,515,830        | 5,650,000               | 0.45             | 1,868,175        | 5,650,000               | 0.33             |
| Interest on convertible notes (net off tax effect)  | 90,253           | —                       |                  | 122,546          | —                       |                  | 118,809          | —                       |                  |
| Changes of fair value of the put option in relation to convertible notes (net off tax effect) | 38,702           | —                       |                  | —                | —                       |                  | —                | —                       |                  |
| Effect of assumed conversion . . . . .  | —                | 315,068                 |                  | —                | 315,068                 |                  | —                | 315,068                 |                  |
| <b>Diluted Earnings per Share</b>   |                  |                         |                  |                  |                         |                  |                  |                         |                  |
| Net profit attributable to shareholders plus effect of assumed conversion . . . . .           | <u>3,579,613</u> | <u>6,008,818</u>        | 0.60             | <u>2,638,376</u> | <u>5,965,068</u>        | 0.44             | <u>1,986,984</u> | <u>5,965,068</u>        | N/A              |

Basic earnings per share was computed by dividing the net profit for the year by the weighted average number of ordinary shares outstanding during the year. On a diluted basis, both net profit and the weighted average number of ordinary shares outstanding were adjusted on the assumption that the convertible notes (see Note 21) had been fully converted at the beginning of the year. For the year ended December 31, 1999, the 1.75% convertible notes had no dilution effect on the earnings per share.

### 32. NOTES TO CASH FLOW STATEMENT

#### a. Analysis of cash and cash equivalents

Cash and cash equivalents consisted of:

|   | The Company and its subsidiaries |                  | The Company      |      |
|---|----------------------------------|------------------|------------------|------|
|   | 2001                             | 2000             | 2000             | 1999 |
|   | '000                             | '000             | '000             | '000 |
| Cash in Rmb . . . . .                     | 381                              | 212              | 113              |      |
| Current deposits                          |                                  |                  |                  |      |
| Rmb . . . . .                             | 2,123,393                        | 1,973,977        | 2,402,266        |      |
| US\$ denominated . . . . .                | 49,362                           | 14,180           | 90,819           |      |
| Others . . . . .                          | —                                | 4                | —                |      |
| Total cash and cash equivalents . . . . . | <u>2,173,136</u>                 | <u>1,988,373</u> | <u>2,493,198</u> |      |

b. *Acquisition of Shandong Huaneng*

|  | <u>2001</u>             |
|--|-------------------------|
|  | '000                    |
| Cash and cash equivalents . . . . .                                    | 2,635,695               |
| Temporary cash investment . . . . .                                    | 1,263,855               |
| Short-term investments . . . . .                                       | 301,000                 |
| Accounts receivable . . . . .  | 182,589                 |
| Materials and supplies . . . . .                                       | 95,769                  |
| Other current assets . . . . .   | 238,414                 |
| Property, plant and equipment, net . . . . .                           | 6,427,841               |
| Land use rights . . . . .  | 170,807                 |
| Investment in an associate . . . . .                                   | 231,869                 |
| Other long-term assets . . . . .                                       | 99,210                  |
| Current liabilities . . . . .  | (1,326,169)             |
| Long-term loans . . . . .  | (1,808,458)             |
| Minority Interest . . . . .  | <u>(240,083)</u>        |
|  | 8,272,339               |
| Less: Negative goodwill . . . . .                                      | (2,472,784)             |
| Less: Direct costs of acquisition . . . . .                            | <u>(31,657)</u>         |
| Total Consideration paid in 2000 . . . . .                             | <u>5,767,898</u>        |
| Net cash inflow in 2001 from the acquisition of Shandong Huaneng . . . | <u><u>2,635,695</u></u> |

c. *Undrawn borrowing facilities*

As of December 31, 2001, the undrawn borrowing facilities available to finance the Company's and its subsidiaries' capital commitments for its various power plant construction projects amounted to approximately Rmb483 million (2000: Rmb1.5 billion). Such borrowing facilities would be drawn down in accordance with the financial requirements of the projects. Based on current plans, such borrowing facilities will be utilized as follows:

|                                     | <u>2001</u>           | <u>2000</u>             |
|-------------------------------------|-----------------------|-------------------------|
|                                     | '000                  | '000                    |
| Amount to be drawn down:            |                       |                         |
| Within one year . . . . .           | 197,347               | 587,738                 |
| Between two to five years . . . . . | <u>285,802</u>        | <u>919,358</u>          |
|                                     | <u><u>483,149</u></u> | <u><u>1,507,096</u></u> |



### 33. OBLIGATIONS AND COMMITMENTS

#### a. Capital Commitments

Commitments mainly relate to the construction of the Dezhou Phase III, some complementary facilities and renovation projects for existing power plants and the purchase of coal. Commitments outstanding as of December 31, 2001 not provided for in the balance sheet were as follows:

|   | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|---|---|--------------------|
|   | <u>2001</u>                                 | <u>2000</u>        |
|   | '000  | '000               |
| Authorized and contracted for . . . . .     | 7,633,206                                   | 1,585,005          |
| Authorized but not contracted for . . . . . | 93,044                                      | 112,729            |
|   | <u>7,726,250</u>                            | <u>1,697,734</u>   |

#### b. Operating lease commitments

The Company has various operating lease arrangements with HIPDC for land and buildings (see Note 6). Some of the leases contain renewal options. Most of the leases contain escalation clauses. Lease terms do not contain restriction on the Company's activities concerning dividends, additional debts or further leasing.

Total future minimum lease payments under non-cancelable operating leases in respect of land and buildings of the Head Office, the Nanjing Power Plant, the Shanghai Power Plant are as follows:

|  | <u>2001</u>    | <u>2000</u>    |
|--|----------------|----------------|
|  | '000           | '000           |
| Land and buildings   |                |                |
| - not later than one year . . . . .                            | 32,334         | 32,334         |
| - later than one year and not later than two years . . . . .   | 32,334         | 32,334         |
| - later than two years and not later than five years . . . . . | 47,002         | 72,002         |
| - later than five years . . . . .                              | <u>299,028</u> | <u>306,362</u> |
|  | <u>410,698</u> | <u>443,032</u> |

In accordance with the land use operating lease agreement signed by the Dezhou Power Plant and the relevant land management authorities for the land occupied by Dezhou Phase I and Phase II, annual rental is approximately Rmb30 million effective June 1994 and is subject to revision five years after the said date. Thereafter, the annual rental is subject to revision once every three years. The increment for each rental revision is restricted to no more than 30 percent of the previous annual rental amount. For the year ended December 31, 2001, the annual rental is approximately Rmb30 million.

### 34. CONTINGENT LIABILITIES

|  | <u>The Company and<br/>its subsidiaries</u> | <u>The Company</u> |
|--|---|--------------------|
|  | <u>2001</u>                                 | <u>2000</u>        |
|  | <u>'000</u>                                 | <u>'000</u>        |
| Guarantee for loan facilities granted to the associated company and a subsidiary . . . . . | 399,250                                     | —                  |
| Notes receivable discounted with recourse . . . . .  | 110,000                                     | —                  |
| Notes receivable endorsed to coal suppliers . . . . .                                      | 30,628                                      | —                  |
|  | <u>539,878</u>                              | <u>—</u>           |

### 35. INTEREST RATE SWAP

As of December 31, 2001, the notional amount of the outstanding interest rate swap agreements was approximately US\$83 million (2000: US\$114 million). Such agreements will mature between May 20, 2003 and September 18, 2004. As of December 31, 2001, there was a loss amounted to approximately Rmb15 million arising from changes in the fair value of the interest rate swaps subsequent to initial recognition. Since the hedging relationship does not meet all of the conditions required for special hedge accounting as set out in IFRS 39, such loss was charged to earnings in current year.

### 36. FAIR VALUE OF FINANCIAL INSTRUMENTS

The Company and its subsidiaries' financial instruments not carried at fair value are cash and cash equivalents, temporary cash investments, accounts receivables, other current assets, other non-current assets, accounts and other payables, short-term borrowings, long-term borrowings and held-to-maturity investments.

The carrying amounts of the Company and its subsidiaries' cash and cash equivalents, temporary cash investments, short-term investments, short-term borrowings and other current financial assets and liabilities approximated their fair value due to the short-term maturity of these instruments.

Similarly, the historical cost carrying amounts of receivables and payables which are all subject to normal trade credit terms approximate their fair values.

The fair value of investments held for trading is estimated by reference to their quoted market price at the balance sheet date.

Available-for-sale investments are measured at cost as there is no quoted market price in an active market and whose fair value cannot be reliably measured.

The fair value of held-to-maturity investments is determined using market valuation.

The estimated fair value of long-term debt including current maturities was Rmb12.67 billion as of December 31, 2001 (2000: Rmb11.22 billion). The fair value of long-term debt is determined by discounting the stream of future payments of interest and principal at the prevailing market interest rates for comparable instruments. The book value of these liabilities was Rmb12.50 billion as of December 31, 2001 (2000: Rmb11.55 billion).

The quoted market rate of the convertible notes was 128% and 117% as of December 31, 2001 and December 31, 2000 respectively (100% as at the issue date with total proceeds of US\$230 million or Rmb1,908 million equivalent).

As of December 31, 2001, the fair value of the put option embedded in the convertible notes was estimated to be approximately Rmb656 million.

Fair value estimates are made at a specific point in time and based on relevant market information and information about the financial instrument. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and therefore cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

### **37. CONCENTRATION OF RISK**

#### *a. Business Risk*

The Company and its subsidiaries conduct their operations in the PRC and accordingly investing in the shares of the Company and its subsidiaries are subject to the risks of, among others, the PRC's political, economic and legal environment, restructuring of the PRC electric power industry and regulatory reform, new regulation pertaining to setting of power tariff and availability of fuel supply at stable price.

Six largest customers represented approximately 90% (2000: 99%, 1999: 99%) of the operating revenue of the Company and its subsidiaries for the year ended December 31, 2001.

#### *b. Interest Rate Risk*

The Company's floating rate bank loans expose the Company to interest rate risk. The Company uses derivative instruments, to the extent available in the PRC, to manage exposures arising from changes in interest rates. When considered appropriate, the Company would enter into interest rate swap agreements with local banks to convert certain floating rate bank loans into fixed rate debts of the same principal amounts and for the same maturities to hedge against cash flow interest rate risk.

The interest rates and terms of repayment of the convertible notes, shareholders loans, bank loans and other loans of the Company and its subsidiaries are disclosed in Notes 21, 22, 23 and 24.

#### *c. Foreign Currency Risk*

The Company and its subsidiaries have foreign currency risk as the convertible notes and a significant portion of its long-term bank loans and shareholder loans are denominated in foreign currencies, principally US dollars, as described in Note 22 and 23(b). Fluctuation of exchange rates of Renminbi against foreign currencies could affect the Company and its subsidiaries' results of operation.

#### *d. Credit risks*

Significant portion of the Company and its subsidiaries' cash and cash equivalents and temporary cash investments maturing over three months are deposited with the four largest state-owned banks of the PRC and a non-bank financial institution in the PRC, which is a related party of the Company.

Each power plant of the Company and its subsidiaries sells the electricity generated to its sole customer (i.e. provincial or regional power company) in the province or region where the power plant is situated.

### 38. SUBSEQUENT EVENT

On January 22, 2002, the Company and its subsidiaries and BOC entered into a Loan Restructuring Agreement to borrow a loan of US\$270 million. According to the agreement, such loan is borrowed specially to repay loans borrowed from British Barclays Bank PRC, Canadian Export Development Corporation and France Societe Generale Bank - London Branch and on-lent by BOC with a floating interest rate of LIBOR+0.6% per annum and is repayable in accordance with the agreed repayment schedules (from 2002 to 2004).

### 39. US GAAP INFORMATION

The accounting policies adopted by the Company and its subsidiaries conform to IFRS which differ in certain respects from generally accepted accounting principles in the United States of America ("US GAAP"). The principal differences having a significant effect on its financial statements are set out below.

#### a. *Housing Benefits Provided by HIPDC*

HIPDC provided housing benefits to certain qualified employees of the Company whereby the living quarters owned by HIPDC were sold to these employees at preferential prices. Under IFRS, such housing benefits provided by HIPDC are not reflected in the financial statements of the Company. Under US GAAP, the amount of housing benefits provided by HIPDC to the employees of the Company are recognized as the Company's operating expenses on a straight-line basis over the estimated remaining average service life of the employees. The corresponding amount is recorded as a capital contribution.

#### b. *Effect of the Difference in the Amount of Negative Goodwill*

China Huaneng Group is the controlling parent company of HIPDC, which in turn is the controlling parent of the Company. China Huaneng Group used to be one of the substantial shareholders of Shandong Huaneng, holding 33.09% equity interest in it before the Acquisition. Under US GAAP, upon completion of the Acquisition, China Huaneng Group's proportionate share in the net assets of Shandong Huaneng being transferred to the Company is recorded at the historical carrying value. The excess of the proportionate share in the book value of the net assets acquired over the relevant portion of the cash consideration is recorded as capital contribution to the Company. After the acquisition, the book value of the power plants of Shandong Huaneng continue to be the recoverable rate base under the cost recovery formula of the tariff setting mechanism. Accordingly, in accordance with US regulatory accounting requirements, the book value of the remaining 66.91% of the net assets is effectively equal to fair value. The difference between these net asset values and the cash consideration is recorded as a negative goodwill and not taken into consideration when determining rate base in the tariff setting procedures. Under IFRS, upon the completion of the Acquisition, the entire net assets of Shandong Huaneng are recorded at fair value. The excess of the fair value of the entire net assets acquired over the total cost of the Acquisition is recorded as negative goodwill.

The movement of the carrying amount of negative goodwill under US GAAP during 2001 was as follows:

|                              | <u>Rmb'000</u>          |
|------------------------------|-------------------------|
| Beginning of year            | —                       |
| Addition                     | 1,609,861               |
| Amortization during the year | <u>(160,187)</u>        |
| End of year                  | <u><u>1,449,674</u></u> |

c. *Convertible Notes*

In accordance with IFRS 39, which is effective on January 1, 2001, the put option of the convertible notes, which allows the noteholders to redeem the convertible notes at a premium, is separated from the host contract and accounted for as an embedded derivative. This put option is measured at its fair value after initial recognition with changes in the fair value charged/credited to income statement. When IFRS 39 is initially applied in 2001, the difference between the previous carrying amount and the fair value of the put option was recognized as an adjustment to the opening retained earnings as of January 1, 2001. In addition, the liability component is measured at amortized cost and the resulting difference with the previous carrying amount was recognized as an adjustment to opening retained earnings as of January 1, 2001.

Under US GAAP, the entire proceeds of the issue of convertible notes as described in Note 21 are recorded as liabilities without distinguishing between the equity and liability components.

In addition, under US GAAP, it is permitted not to account separately for the put option, which represents a derivative embedded in pre-1998 hybrid instrument. The Company continues to accrue for the put premium liability together with the interest payable on the notes using the effective interest rate of 6.66% under US GAAP.

d. *US Regulatory Accounting*

Statement of Financial Accounting Standard Number 71 "Accounting for the Effects of Certain Types of Regulation" ("SFAS 71") is applicable to utilities in the United States whose regulators have the power to approve and/or regulate rates that may be charged to customers. SFAS 71 recognizes that the regulatory process produces economic effects which should be reflected in the financial statements. Because revenues are based on costs, SFAS 71 governs the period in which various costs are included in the income statements with the objective of matching costs with revenues. Provided that, through the rate setting process, the utility is substantially assured of recovering its allowable costs by the collection of revenue from its customers, such costs not yet recovered are deferred as regulatory assets. The regulatory process may also impose a liability on a rate-regulated enterprise, usually representing obligations to the enterprise's customers, which should be recognized as regulatory liability.

In order to apply SFAS 71, three criteria must be met. These criteria require that a) the power rates for regulated services or products provided to customers be established by or are subject to approval by an independent, third-party regulator or by an entity's own governing board empowered by statute or contract to establish power rates that bind customers; b) the regulated power rates are designed to recover the costs of providing the regulated services or products; and c) in view of the demand for the regulated services or products and the level of competition, direct and indirect, it is reasonable to assume that power rates set at levels that will recover costs can be charged to and collected from customers; this criterion requires consideration of anticipated changes in levels of demand or competition during the recovery period for any capitalized costs. The Company and its subsidiaries believe these criteria have been met. Firstly, its power rates are established by an independent regulator, the provincial or local price bureau. Further, the pricing policy applicable to the Company and its subsidiaries provides for rate-setting based on the specific costs of the Company and its subsidiaries. This process has operated historically and will continue under the pricing policy. Finally, based on the significant demand for electricity in its service territory, it is reasonable to assume that the authorized power rates will be collected from customers.

Under IFRS, as there is no equivalent regulatory accounting standard, the Company's and its subsidiaries' policy is to recognize regulatory assets established under SFAS 71 only where they comprise rights or other access to future economic benefits as a result of past events; or to recognize regulatory liabilities only where they comprise a present obligation the settlement of which is expected to result in an outflow of resources embodying economic benefits.

For the year ended December 31, 2001, there was no material difference in the recognition of regulatory assets and liabilities between IFRS and US GAAP.

e. *Impairment of Long-lived Assets*

The carrying amount of fixed assets under IFRS is reviewed periodically in order to assess whether the recoverable amount has declined below the carrying amount. When such a decline occurs, the carrying amount is reduced to the recoverable amount based on the expected future cash flows generated by the asset discounted to their present value or the asset's net selling price. A subsequent increase in the recoverable amount is written back to the income statement when circumstances and events that led to the write-down cease to exist.

Under US GAAP, long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is evaluated by a comparison of the carrying amount of assets to future undiscounted net cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amounts of the assets exceed the fair value of the assets. Subsequent reversal of impairment is not permitted. Assets to be disposed of are reported at the lower of the carrying amount or fair value less cost to sell.

For the year ended December 31, 2001, no differences arose in respect of the timing and the amount of impairment in long-lived assets recognized.

Differences between IFRS and US GAAP which affect the equity and net income of the Company and its subsidiaries are summarized below:

|   | Note | Net income         |                  |                  |
|---|------|--------------------|------------------|------------------|
|   |      | For the year ended |                  |                  |
|   |      | December 31,       |                  |                  |
|   |      | 2001               | 2000             | 1999             |
|   |      | Rmb'000            | Rmb'000          | Rmb'000          |
| <b>Balance under IFRS</b> .....                                   |      | 3,450,658          | 2,515,830        | 1,868,175        |
| <b>Impact of US GAAP adjustments:</b>                             |      |                    |                  |                  |
| Recording of housing benefits provided by HIPDC .....             | (a)  | (26,152)           | (26,152)         | —                |
| Effect of the difference in negative goodwill under US GAAP ..... | (b)  | (87,091)           | —                | —                |
| <b>Balance under US GAAP</b> .....                                |      | <u>3,337,415</u>   | <u>2,489,678</u> | <u>1,868,175</u> |
| Basic earning per ordinary share under US GAAP(Rmb) (i) .....     |      | <u>0.59</u>        | <u>0.44</u>      | <u>0.33</u>      |
| Basic earning per equivalent ADS under US GAAP(Rmb) (i) .....     |      | <u>23.45</u>       | <u>17.63</u>     | <u>13.23</u>     |
| Diluted earning per ordinary share under US GAAP(Rmb) (i) .....   |      | <u>0.58</u>        | <u>0.44</u>      | <u>N/A</u>       |
| Diluted earning per equivalent ADS under US GAAP(Rmb) (i) .....   |      | <u>23.07</u>       | <u>17.52</u>     | <u>N/A</u>       |

- (i) *Earning per ordinary shares and per equivalent ADS were calculated by dividing the net income for the financial year under US GAAP by the weighted average number of ordinary shares and ADS in issue during the financial year. On a diluted basis, both net income for the financial year and the weighted average number of ordinary shares and ADS outstanding for the financial year were adjusted on the assumption that the convertible notes had been fully converted at the beginning of the year.*

|  |     | Equity             |                   |
|--|-----|--------------------|-------------------|
|  |     | As of December 31, |                   |
|  |     | 2001               | 2000              |
|  |     | Rmb '000           | Rmb '000          |
| <b>Balance under IFRS</b> .....  |     | 28,293,530         | 23,779,735        |
| <b>Impact of US GAAP adjustments:</b>  |     |                    |                   |
| Recording of capital contribution arising from acquisition of Shandong Huaneng .....       | (b) | 862,922            | —                 |
| Effect of the difference in negative goodwill under US GAAP .....                          | (b) | (87,091)           | —                 |
| Reversal of equity component of convertible notes ..                                       | (c) | (510,506)          | (510,506)         |
| Reversal of adjustment to opening retained earnings arising from adoption of IFRS 39 ..... | (c) | 463,921            | —                 |
| <b>Balance under US GAAP</b> .....   |     | <u>29,022,776</u>  | <u>23,269,229</u> |

In preparing the summary of difference between IFRS and US GAAP, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Accounting estimates have been employed in these financial statements to determine reported amounts, including realizability, useful lives of assets and other areas. Actual results could differ from those estimates.

### **Unaudited Pro Forma Results of Operation**

As if the acquisition of Shandong Huaneng had been completed on January 1, 2000, the unaudited pro forma combined net operating revenue and net profit of the Company and Shandong Huaneng for the year ended December 31, 2000 were Rmb15,453 million and Rmb3,174 million, respectively and the unaudited pro forma basic earnings per share of the Company for the year ended December 31, 2000 was Rmb0.56. The unaudited pro forma information do not purport to represent what the results of operations would actually have been if the acquisition of Shandong Huaneng had been completed as of the assumed date or to project the results of operations of any future date. Pro forma operating results are for information purpose only.

### **Reclassifications**

The reconciliation of net income and shareholders' equity from IFRS to US GAAP as presented above include those items which have a net effect on net income or shareholders' equity. There are no other major GAAP differences not included in the reconciliation which would affect the classification of assets and liabilities or income and expenses.

### **Cash Flow Statement**

The Company and its subsidiaries adopt IFRS 7 "Cash Flow Statements". Its objectives and principles are similar to those set out in the Statement of Financial Accounting Standard Number 95 "Statement of Cash Flows". There is no material difference in the cash flow statements of the Company and its subsidiaries between these two standards for each of the year in the three-year period ended December 31, 2001.

### **Statement of Comprehensive Income**

Under US GAAP, certain items shown as components of common equity must be more prominently reported in a separate statement as components of comprehensive income. However, for each of the year in the three-year period ended December 31, 2001, apart from the net income, there was no other comprehensive income which should be included in the statement of comprehensive income.

### **New Accounting Pronouncement**

During 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 141, Business Combination ("SFAS 141"), Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets ("SFAS 142"), Statement of Financial Accounting Standards No. 143, Accounting For Asset Retirement Obligations ("SFAS 143") and Statement of Financial Accounting Standards No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets ("SFAS 144").

- (i) SFAS 141 addresses financial accounting and reporting for business combinations and requires that the purchase method of accounting to be used for all business combinations initiated after June 30, 2001.



- (ii) SFAS 142 changes the existing accounting treatment of goodwill and other intangible assets whereby these assets will no longer be systematically amortized, but instead will be reviewed for impairment each year and written down and charged to results of operations when their carrying amount exceeds their estimated fair value.
- (iii) SFAS 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs.
- (iv) SFAS 144 addresses financial accounting and reporting for the impairment or disposal of long-lived assets. The changes in SFAS 144 improve financial reporting by requiring that one accounting model be used for long-lived assets to be disposed of by sale, whether previously held and used or newly acquired, and by broadening the presentation of discontinued operations to include more disposal transactions. SFAS 144 also resolved significant implementation issues related to impairment.

SFAS 141, SFAS 142, SFAS 143 and SFAS 144 are effective for fiscal years beginning after December 15, 2001. The Company has not completed its assessment of the effects of adopting these new accounting pronouncements.



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