

# 管理層論述與分析

## Management Discussion and Analysis

### 宏觀經濟與行業發展

二零零五年，中國經濟保持平穩較快增長，國內生產總值比上年增長9.9%。隨著國民經濟快速增長和居民生活水平的提高，全年用電量同比增長13.5%。年內新增裝機6,600萬千瓦，使得全國總裝機容量首次突破5億千瓦，達到50,841萬千瓦，同時仍有大約2.5億千瓦的在建規模，電力需求的持續旺盛，推動了發電設備行業的快速發展。

### 訂貨情況

二零零五年，本集團新接訂單184億元，其中火電設備133億元，水電設備32.7億元，電站工程服務7.4億元，燃機9.6億元，環保產品1.3億元。本集團一方面著力提高大型機組市場佔有率，600MW火電機組的中標率是42.25%，700MW等級大型水電機組的中標率為50%；另一方面著眼行業發展方向，加快發展超超臨界、大型水電、重型燃機、核電等高新技術產品和環保產品。

### MACRO-ECONOMY SITUATION AND INDUSTRY DEVELOPMENT

In the year of 2005, China economy continued to grow rapidly. The gross domestic product grew by 9.9 per cent compared with last year. With the rapid development of economy and the increase of people's living standard, the electric power consumption for the whole year grew rapidly at the rate of 13.5 per cent compared with that of last year. The new approved start-up projects for the whole year have exceeded 66000MW, making the total installing capacity breakthrough 500000MW to 508410MW. Meanwhile, there are 250000MW projects under construction. The strong demand for electric power led to a rapid development in power generation equipment industry.

### NEW CONTRACTS

In the year of 2005, the new-receiving contracts of the Group have already amounted to Rmb18.4 billion, among which the thermal power equipments contracts have reached Rmb13.3 billion, and for hydro power equipments is Rmb3.27 billion, and Rmb740 million for engineering services, Rmb960 million for gas turbines and Rmb130 million for environment protection products. The Group on the one hand, seek to to increase the market occupation of large scale units, with the bid-win rate of 42.25 per cent for 600MW thermal power units, and 50 per cent for 700MW large scale hydro power units; on the other hand, the Group focused on the development trend of the industry, and speeded up the development of high-tech products and environment protection products including ultra super critical products, large scale hydro power units, heavy duty gas turbines and unclear power equipments.

## 管理層論述與分析(續)

### Management Discussion and Analysis – (continued)

年內本集團中標的主要專案有：2005年1月6日，與華能集團簽訂了小灣6台700MW水輪發電機製造合同，再次展現了本集團在大型水電專案上的雄厚實力；2005年4月12日，與國電公司簽訂了江蘇泰州2台百萬千瓦等級超超臨界爐、機、電專案合同，實現了百萬千瓦等級超超臨界機組爐、機、電成套供貨；2005年10月9日，與深圳能源集團簽訂了廣東河源2台600MW超超臨界機組合同，保持了本集團在該等級超超臨界專案上的領先地位；2006年1月16日，與北京太陽宮燃氣熱電有限公司簽訂了為奧運工程供電、供熱、供冷的太陽宮燃機專案，不僅進一步鞏固了本集團在重型燃機市場上的領先地位，而且開發了新機型，為後續市場開發奠定堅實基礎。此外，宣城600MW和古城2台300MW火電機組脫硫島的中標，標誌著本集團在環保事業的拓展上又邁出了重要一步；越南2台11萬千瓦循環流化床鍋爐製造合同，是國內首台具有自主知識產權的CFB產品出口，具有重大戰略意義。

In the year the winning projects include: the manufacture contract signed on 6th January 2005 for 6X700MW hydro power turbo-generators with Huaneng Group, representing the Group's strong capability in large scale hydro power projects; the contract signed on 12th April 2005 for Jiangsu Taizhou 2X1000MW ultra super critical boiler, steam turbines and generator with Guodian Company, achieving the whole set supply of 1000MW ultra super critical units; the contract signed on 9th October 2005 for Guangdong Heyuan 2X600MW ultra super critical units with Shenzhen Nengyuan Group, maintaining the Group's leading position in the field of ultra super critical projects; the contract signed on 16th January 2006 for the Taiyanggong gas turbines projects of supplying electricity, heat and cooling for the Olympic projects with Beijing Taiyanggong Gas and Power Company, further consolidating the Group's leading position in the heavy duty gas turbine market and developing the new model which has laid solid foundation for the exploration of relevant products market. In addition, the winning contracts for Xuancheng 600MW thermal power unit Desulphurization Island and Gucheng 2X300MW thermal power units Desulphurization Island marking the Group has made great progress in the development of environment protection products; the manufacture contract for 2X110MW Circulating Fluidized Bed Boilers for Vietnam is of great strategic significance, as it is the first exported product with independent intellectual property right.

## 管理層論述與分析(續)

### Management Discussion and Analysis – (continued)

#### 生產與服務

面對繁重的生產任務，本集團一方面繼續完善生產組織體系和激勵約束機制，合理安排技術改造解決生產瓶頸環節，充分挖掘、發揮公司內部生產能力；另一方面進一步規範分包、擴散管理，對合格分包廠家提供必要的技術、質量指導，提高了協作廠家的配套能力，產品產量再創歷史新高。全年共完成發電設備22,363MW（以汽輪發電機和水輪發電機組計），同比增長53.65%，其中電站鍋爐完成67台20,510MW，同比增長66.82%；電站汽輪機完成80台23,320MW，同比增長70.51%；汽輪發電機完成61台19,280MW，同比增長59.05%；水輪發電機組完成30台3,083MW，同比增長26.72%；燃氣輪機8台2,040MW。

#### PRODUCTS AND SERVICES

Though encountering heavy task, the Group on one hand continued to improve production organization system and incentive and discipline mechanism, arranged technical reconstructions to address manufacturing bottlenecks, further expanded and fully utilized the interior manufacturing capability; on the other hand, took further effort to standardize distribution and dispersion management and provide necessary direction on technology and quality to the qualified contractors for improving the cooperation with partners. Thus, the product output increased by a big margin and created the record in the history of the Group. The total output for the year was up to 22,363MW (in terms of steam turbine generator units and hydro power turbine generator units), representing an increase of 53.65 per cent compared with that of last year. Among which, 67 units of utility boiler with total capacity of 20,510MW, an increase of 66.82 per cent over last year; 80 steam turbines for power plant with total capacity of 23,320MW, an increase of 70.51 per cent over last year and 61 turbine generators with total capacity of 19,280MW, an increase of 59.05 per cent over last year; 30 units of hydro power turbo-generators with total capacity of 3,083MW, an increase of 26.72 per cent over last year, 8 units of gas turbines with total capacity of 2,040MW.

## 管理層論述與分析(續)

## Management Discussion and Analysis – (continued)

在本集團各方面的高度重視和精心組織下，重點專案進展順利。2005年5月19日，國內首台燃機半山1號機組在杭州一次性點火成功。目前，首捆11台燃機已全部成功點火，並順利通過168小時試運行。本集團成為國內唯一一家擁有11台F級燃機運行業績的設備製造商；玉環1號鍋爐主要部件已經交貨，2、3、4號鍋爐的技術準備、材料採購和產品交貨正在進行中；泰州專案鍋爐、汽輪機和汽輪發電機正在進行技術準備和材料採購，部分部件已開始製造；河源專案正在進行技術準備，主要原材料已開始採購；電站工程服務方面，韓城專案順利完成2號機組168小時的整套驗收運行，越南高岸火電專案一號機已經並網發電。蘇丹麥洛維輸變電線路專案、越南宣光水電、伊朗塔瓦茲以及蘇丹吉利二期聯合循環電站專案進展順利。

With high level of importance and well arrangements by the Group, the key point projects were in sound progress. On 19th May 2005, the first Banshan No.1 gas turbine unit in China was successfully put into operation in Hangzhou. So far, the first batch of eleven gas turbines was all put in to operation successfully and underwent the test of 168-hour trial operation. Our Group is the only manufacturer in China with the performance of 11F-class gas turbines in operation. The main components of Yuhuan No.1 boiler were delivered. The technological preparation, material purchase and product delivery for the No.2, No.3 and No.4 boiler were under progress. Taizhou project was under the progress of technological preparation and material purchase for the boilers, steam turbines and steam generators, and some of the components were being manufactured. Heyuan project was also under the progress of technological preparation while the major material was already being purchased. Regarding the power plant engineering projects, the complete set of No.2 unit of HenCheng project has undergone the 168-hour acceptance test. The No.1 unit of Vietnam CaoNgan thermal power project has started to operated. In addition, Sudan Marowei Transmission and Distribution Line projects, Vietnam Tuyen Quang hydro power project, Iran combined-cycle power station project and the second stage of Sudan El Gaili combined-cycle power station project were all in sound progress.

### 科研開發與技術引進

二零零五年，本集團共完成科研課題173項，新產品開發27項，投入科研經費3.03億元，比二零零四年增長48.5%。其中，自主開發的構皮灘水輪機模型轉輪在瑞士洛桑試驗台通過驗證，最高效率達95.17%，達到世界先進水平；列入國家「863計劃」的課題超超臨界鍋爐關鍵技術研究通過國家驗收；1,200mm長葉片的開發成功，標誌著我國汽輪機行業長葉片的科研設計能力已經具有國際前沿技術水平。

### R&D AND TECHNOLOGY INTRODUCTION

In the year 2005, the Group completed 173 items of R&D, and 27 items of new products. Total investment in R&D amounted to Rmb303 million, representing an increase of 48.5 per cent compared to that of last year. Among which, the self-developed Gopitan hydraulic turbine runner with the highest efficiency of 95.17 per cent, has passed the test of EPFL-LMH, CH-1015 laboratory, Switzerland, which has reached the international advanced level. The technology of Ultra Super Critical Thermal Power Boiler listed in the National "863 Project" has been approved by the nation. In addition, the successful development of 1,200mm Long Blade Hydraulic Turbine symbolizes our R&D capability for long blade hydro turbine has reached the leading international level.

## 管理層論述與分析(續)

### Management Discussion and Analysis – (continued)

在自主研發的同時，本集團加快技術引進步伐。以國電泰州1000MW火電機組項目為依託，本集團與東芝公司簽訂了百萬千瓦級超超臨界汽輪機和汽輪發電機技術轉讓協議；與三菱公司簽定了600MW兩缸超超臨界機組合作製造備忘錄，相關圖紙資料的消化、引進正在進行中。

#### 溢利

二零零五年，本集團實現淨溢利46,499萬元，比上年增長295.5%；每股盈利0.39元（基本），比上年增加0.29元；期末資產淨值為388,463萬元，比上年期末增加77,157萬元；每股資產淨值為3.05元，比上年期末增加0.43元。

#### 股息

董事會建議派發二零零五年度股息為每股0.061元（二零零四年度為每股0.051元）。

#### 營業額

二零零五年，本集團實現主營業務收入1,846,411萬元，比上年增長80.7%。其中，火電主機設備的營業額為1,325,371萬元，比上年增長83.9%；水電主機設備的營業額為121,410萬元，比上年增長66.7%；電站工程服務的營業額為224,890萬元，比上年增長90.5%；電站輔機及配套產品的營業額為31,669萬元，比上年增長41%；交直流電機及其他產品與服務的營業額為143,070萬元，比上年增長63.7%。2005年營業額增長的主要原因是發電設備需求旺盛，年內交貨產品較多所致。

Meanwhile, the Group speeded up its pace in technology introduction. Basing on the Guodian Taizhou 1000MW thermal power unite project, the Group signed the technology transfer agreement for the 1000MW class Ultra Super Critical Thermal Power gas turbine and gas turbine generator with Toshiba, and signed a manufacture memo for 600MW ultra super critical units with double casings with Mitsubishi. The digestion and introduction of blueprint material were still under progress.

#### CONSOLIDATED PROFIT AFTER TAX

In 2005, the Group recorded net consolidated profit of Rmb464.99 million, an increase of 295.5 per cent as compared to that of the last year. Earnings per share recorded Rmb0.39 (basic), an increase of Rmb0.29 over last year. The net assets at the end of the term recorded Rmb3,884.63 million, an increase of Rmb771.57 million compared with that of the end of last year. Net assets per share recorded Rmb3.05, and increase of Rmb0.43 compared with that to the end of 2004.

#### DIVIDEND

The Board of Directors recommended a final dividend of Rmb0.061 per share for 2005, as compared to that of Rmb0.051 in 2004.

#### TURNOVER

In 2005, the Group recorded turnover of Rmb18,464.11 million, an increase of 80.7 per cent compared to the last year. During the year under review, turnover of the thermal power main units was Rmb13,253.71 million, an increase of 83.9 per cent over last year. Turnover of hydropower main units was Rmb1,214.10 million, an increase 66.7 per cent over last year. Turnover of power plant engineering services project was Rmb2,248.90 million, an increase of 90.5 per cent compared to last year. Turnover of power plant accessories and parts was Rmb316.69 million, an increase of 41 per cent over last year. Turnover of AC/DC motors and other products and services was Rmb1,430.70 million, an increase 63.7 per cent over last year. The increase of turnover was caused by remarkable power demand and more products delivery.

## 管理層論述與分析(續)

## Management Discussion and Analysis – (continued)

年內，本集團出口收入佔主營業務收入的17.97%，主要出口亞洲及非洲地區。

During the year, the export sales and the domestic sales denominated in foreign currencies of the Group accounted for 17.97 per cent of the turnover of main business activities, which was mainly in Asia and in Africa.

### 成本

年內，本集團的主營業務成本為1,660,102萬元，比上年增加714,833萬元，增幅為75.6%。主要是主營業務收入增長所帶來的成本相應上升。

### COST

During the year, the cost of main business activities of the Group was Rmb16,601.02 million, an increase of Rmb7,148.33 million and 75.6 per cent as compared to last year. The increase in turnover of main business activities led to the corresponding increase in cost.

### 毛利及毛利率

年內，本集團營業毛利為186,309萬元，較上年增長144.2%。毛利率為10.09%，比上年上升2.62個百分點。

### GROSS PROFIT AND PROFIT MARGIN

In 2005, the gross profit of the Group was Rmb1,863.09 million, an increase of 144.2 per cent as compared to last year. The profit margin is 10.09 per cent, an increase of 2.62 per cent over last year.

其中，火電主機設備毛利為152,327萬元，毛利率為11.49%，比上年上升3.73個百分點；水電主機設備毛利為6,785萬元，毛利率為5.59%，比上年上升0.68個百分點；電站工程服務毛利為3,305萬元，毛利率為1.47%，比上年下降3.58個百分點；電站輔機及配套產品毛利為7,979萬元，毛利率為25.19%，比上年上升13.59個百分點；交直流電機及其他產品與服務的毛利為15,913萬元，毛利率為11.12%，比上年上升1.70個百分點。人民幣匯率變化是電站工程服務毛利率下降的主要原因。

Among which the profit for thermal power main units were Rmb1,523.27 million. The profit margin for thermal power main units was 11.49 per cent, an increase of 3.73 per cent compared to last year. The profit for hydropower main units was Rmb67.85 million. The profit margin for hydropower power main units was 5.59 per cent, an increase of 0.68 per cent compared to last year. The profits for power plant engineering services were Rmb33.05 million, the profit margin for engineering services was 1.47 per cent, a decrease of 3.58 per cent over last year. And the profit for power plant accessories and parts were Rmb79.79 million. The profit margin for power plant accessories and parts were 25.19 per cent, an increase of 13.59 per cent over last year. The profit for the AC/DC motors and other product and service was Rmb159.13 million. The profit margin for the AC/DC motors and other product and service was 11.12 per cent, an increase of 1.70 per cent compared to last year. The main reason for profit margin increase is that most products' prices were increased compared to the previous years, and the strategy for cost management has initially gained a satisfactory result. The main reason for profit margin decrease in engineering services project is the change of RMB exchange rate.



## 管理層論述與分析(續)

## Management Discussion and Analysis – (continued)

### 期間費用

二零零五年，本集團發生營業及管理費用支出為135,768萬元，較上年同期增加67,370萬元。其中人工成本增加約8,237萬元；計提壞帳準備、存貨跌價準備31,264萬元，比上年多計提30,046萬元；任務量增加，管理幅度及市場開發力度加大使業務經費增加約1,637萬元。

### 利息支出

二零零五年，本集團發生利息費用3,377萬元，比上年同期減少1,412萬元。主要是需於年內償還之借款減少所致。

### 資金來源及借款情況

本集團之營運及發展所需資金主要有三個來源：股東資金、客戶貸款和銀行借款。本集團之借款乃根據具體項目而安排，除特殊情況外，借款一般由旗下各子公司分別籌措，但屬於資本投資性借款須先由總公司批准。截至二零零五年十二月三十一日，本集團銀行借款總額為313,095萬元（二零零四年十二月三十一日為227,366萬元），均為按國家規定利率從各商業銀行及國家政策性銀行取得的借款。其中，須於一年內償還之借款為45,218萬元，比年初減少33,202萬元。須於一年後償還之借款為267,877萬元，比年初增加118,930萬元。

### EXPENSES DURING THE YEAR

The Group's expenses from operation and administration activities during the year of 2005 amounted to Rmb1,357.68 million, an increase of Rmb673.70 million compared to last year. Among which, labor cost increased about Rmb82.37 million; allowance for bad debt and inventories decrease of stock-in-trade was Rmb312.64 million, an increase of Rmb300.46 million compared to last year; expenses for business activities increased about Rmb16.37 million due to the enhancement of administration and marketing.

### FINANCE COSTS

During the period under review, the Group's finance cost amounted to 33.77 million, a decrease of 14.12 million over last year. This was because the number of loans of the Company has been decreased.

### FUNDING AND BORROWINGS

The Group's funding for operation and development mainly has three resources, they are shareholder capital, customer loans and bank borrowings. The borrowings of the Group will be arranged according to specific projects. Except for those special situations, the loans will be separately conducted by subsidiaries under the Group. However, the Group must approve the capital investment borrowings in advance. With the dramatic increase of contracts and prepayment, the Group has compensated for most loads for operating funds. As at 31st December 2005, the total sums of the Company borrowings are Rmb3,130.95 million (that at 31st December 2004 was Rmb2,273.66 million). The Group's borrowings are loans from various commercial banks and the State's policy banks with interest rates stipulated by the state. Among which the Group's borrowings due within one year were Rmb452.18 million, a decrease of Rmb332.02 million compared to the beginning of the year. The Group's borrowings due after one year were Rmb2,678.77 million, an increase of Rmb1,189.30 million compared to the beginning of the year.

## 管理層論述與分析(續)

## Management Discussion and Analysis – (continued)

### 股權融資

於二零零五年十二月十四日，公司進行了H股增發工作。增發H股8,530萬股，發行價格每股4.45港元，募集資金淨額37,102萬港元。同日，本公司控股股東將853萬股國有股劃轉給社保基金並轉為H股。發行後股份公司總股本增加至127,445.1萬股，其中哈電集團持有71,147萬股，佔55.83%，H股56,298.1萬股，佔44.17%。

### 存款及現金流量

於二零零五年十二月三十一日，本集團銀行存款及現金為524,771萬元，比年初減少74,949萬元。年內，本集團經營業務現金流出淨額為489,038萬元（二零零四年為流入708,334萬元）；融資業務之現金流入淨額為120,529萬元（二零零四年為流出40,870萬元）；投資業務之現金流入淨額為305,797萬元（二零零四年為流出557,705萬元）。

### 資產結構及變動情況

於二零零五年十二月三十一日，本集團資產總值為3,644,889萬元，比年初增加了543,369萬元，增長17.5%。其中，流動資產3,309,798萬元，佔資產總值的90.8%；非流動資產335,090萬元，佔資產總值的9.2%。

### EQUITY FINANCING

As at 14th December 2005, the Company further issued 85.30 million H shares. The price per share is HK\$4.45. The listing proceeds amounted to HK\$371.02 million. On the same day, the Company shareholders remitted 8.53 million shares of state share to National Social Security Fund and registered as H share. The total capital stock of the Company increased to 1,274.451 million shares. Among which 711.47 million shares were held by Harbin Power Engineering Corp, accounting for 55.83 per cent. H share amounted to 562.981 million Shares, accounting for 44.17 per cent.

### DEPOSITS AND CASH INFLOW

As at 31st December 2005, the bank deposits and cash of the Group amounted to Rmb5,247.71 million, a decrease of Rmb749.49 million over the beginning of the year. During the year, the net cash outflow used by operating activities amounted to Rmb4,890.38 million (the sum in 2004 was inflow Rmb7,083.34 million). The net cash inflow from financing activities amounted to Rmb1,205.29 million (the sum in 2004 was outflow Rmb408.70 million) and the net cash inflow used by investment activities was Rmb3,057.97 million (the sum in 2004 is outflow Rmb5,577.05 million).

### CAPITAL STRUCTURE AND ITS CHANGES

As at 31st December 2005, the total assets of the Group amounted to Rmb36,448.89 million, an increase of Rmb5,433.69 million, an increase of 17.5 per cent compared to the beginning of the year. Among which, the total current assets were Rmb33,097.98 million, representing 90.8 per cent of the total assets. The total non-current assets were Rmb3,350.90 million, representing 9.2 per cent of the total assets.



## 管理層論述與分析(續)

### Management Discussion and Analysis – (continued)

#### 負債

於二零零五年十二月三十一日，本集團負債總值為3,192,421萬元，比年初增加456,262萬元，增長16.7%。其中，流動負債總值為2,696,447萬元，佔負債總值的84.5%；非流動負債總值為495,974萬元，佔負債總值的15.5%。於二零零五年十二月三十一日本集團的資產負債率為87.6%。本集團負債增加的原因是應付賬款及預收帳款大幅度增加。

#### 股東權益

於二零零五年十二月三十一日，本公司股東權益總額為388,463萬元，比年初增加77,157萬元；每股資產淨值為3.05元。二零零五年，本公司淨資產收益率為13.29%（全面攤薄）。

#### 資本與負債比率

於二零零五年十二月三十一日，本集團的資本杠杆比率（非流動負債比股東權益總額）為1.28:1，上年為1.43:1。

#### 或有負債及抵押

二零零五年，本集團有35,500萬元銀行存款抵押用於開據信用證。

#### LIABILITIES

As at 31st December 2005, the Group's liabilities totaled Rmb31,924.21 million, an increase of Rmb4,562.62 million and 16.7 per cent compared to the beginning of the year. Among which, the total current liabilities were Rmb26,964.47 million, representing 84.5 per cent of the total liabilities. The total non-current liabilities were Rmb4,959.74 million, representing 15.5 per cent of the total liabilities. At 31st December 2005, the Group's asset liability ratio is 87.6 per cent. The reason for the dramatic increasing is the increase of the amount in payable and prepayment.

#### SHAREHOLDER'S FUND

As at 31st December 2005, the shareholder's fund of the Company totaled Rmb3,884.63 million, an increase of Rmb771.57 million over the beginning of the year. The net assets per share were Rmb3.05. In 2005, the Company's assets-income ratio was 13.29 per cent (fully diluted).

#### GEARING RATIO

As at 31st December, 2005, The Group's gearing ratio (non-current liabilities/total shareholders' fund) was 1.28:1 as compared to that of 1.43:1 of last year.

#### CONTINGENT LIABILITIES AND MORTGAGE ASSET

In 2005, the Group's pledge assets with bank deposit of Rmb355 million were used for securing trading facilities

# 管理層論述與分析(續)

## Management Discussion and Analysis – (continued)

### 資本開支及所持重大投資情況

二零零五年，本集團用於基本建設和技術改造的資本開支總額約為34,796萬元。出海口基地建設項目一期總投資30,758萬元，其中固定資產總投資28,258萬元，到二零零五年年底，累計完成投資31,087萬元，3,000噸級泊位、起重能力1,200噸的碼頭工程已經建設完成；哈鍋大型循環流化床鍋爐改造項目年內完成投資1,274萬元，累計完成投資9092萬元，項目已全面建設完成；哈汽大型燃氣輪機技術改造項目年內完成投資8,774萬元，累計完成投資9,274萬元，完成了主要設備採購。

### 匯率波動風險及相關對沖

本集團擁有部分外幣存款，於二零零五年十二月三十一日，本集團外幣存款折合人民幣81,528萬元。本集團出口及以外幣結算之業務，存在匯兌風險。年內本集團已委託中國銀行對部分外幣結算的日元採取對沖措施，以規避匯率波動風險。

### 募集資金運用

二零零五年，本公司共運用募集資金15,500萬元，主要用於出海口基地建設項目。

截至二零零五年十二月三十一日，本集團已累計運用H股募集資金11.55億元，剩餘募集資金8,500萬元及新增發股本募集資金3.9億元暫存放於銀行，將用於出海口基地二期建設及其他技術改造項目。

### CAPITAL EXPENDITURE AND IMPORTANT INVESTMENT

In the year of 2005, the Group invested Rmb347.96 million for basic construction and technology renovation. The first stage investment in Seaside Workshop Construction project of QHD was Rmb307.58 million, among which the investment in fixed assets were Rmb282.58 million. By the end of 2005, the accumulated investment was up to Rmb310.87 million. The construction of the 3,000-ton berthing port project with 1,200-ton lifting capacity was completed. The investment on HB circulating fluidized bed boiler innovation project in the year was Rmb12.74 million, and the accumulated investment was Rmb90.92 million. The project was already completed. The completed investment on HTC large-scale gas turbine innovation project in the year was Rmb87.74 million, and the accumulated investment was Rmb92.74 million. The purchase of equipments was finished.

### EXPOSURE TO FLUCTUATIONS IN EXCHANGE RATES AND RELATED HEDGES

The Group has certain amount of deposits that are in foreign currencies. As at 31st December 2005, the amount of the Group's deposits in foreign currencies was Rmb815.28 million after conversion. The export business of the Group is also settled in foreign currencies and there is exchange risk. In 2005, the Group entrusted the Bank of China to adopt hedging measures for part of the Japanese yen to avoid exposure to fluctuation in exchange.

### USE OF LISTING PROCEEDS

In the year 2005, The Group used a total of Rmb155.00 million from its listing proceed for Workshop Construction project of QHD.

As at 31st December 2005, the Group used a total of Rmb1.155 billion from its H share listing proceeds, and the remaining balance of Rmb85.00 million of listing proceeds and the Rmb390 million listing proceeds from the newly issued share were deposits in the bank and it will be used in the second stage of Workshop Construction project of QHD, and other technology renovation projects.

## 管理層論述與分析(續)

# Management Discussion and Analysis – (continued)

### 投資計劃

二零零六年本集團計劃投資5億元繼續用於出海口基地二期建設項目、超超臨界項目、大型燃氣輪機技術引進項目、聯合循環餘熱鍋爐技術引進及技術改造項目、大型抽水蓄能機組技術引進及企業信息化建設項目等，以促進產品升級換代，增強核心競爭能力。同時，本集團也將增添部分關鍵設備，解決生產瓶頸環節，擴大生產能力。尤其是核電主設備項目，公司將進一步加大投入，擴大建設規模，提高製造能力，以期能成套供應核電主設備，滿足核電發展需要。建設資金準備採取自籌、銀行貸款或發行股票等方式解決。

### 員工及薪酬

於二零零五年十二月三十一日，本集團擁有在崗員工18,849人，薪酬及福利為7.2億元。本集團採取崗位培訓、到大專院校培訓和到跨國公司培訓等多種措施培訓員工，着力創建人性化的人才培養、使用機制，全年進行各種形式的培訓共計6,523人次。實行了崗位工資制、計件工資制等多種工資制度，加強了崗位考核，把員工的個人目標與公司的目標有效結合起來，調動各方面的積極性，推動公司發展。

### INVESTMENT PLAN

In the year of 2006, in order to upgrade products and improve core competition capability, the Group is planning to invest Rmb500 million in the second stage of Seaside Workshop Construction project of QHD, nuclear power main project, ultra super critical project, large gas turbine technology transfer project, combined cycle HRSG technology renovation and technology transfer and renovation of large pumped storage units projects. At the same time, the Group will buy some key equipment to solve the bottleneck problems and to enlarge producing capability. As to the nuclear power main project, the Company will increase investment, expand the scope of construction, improve manufacture capability so as to provide whole set of nuclear power supply equipments and fulfill the requirement for nuclear power development. The construction capitals are planned to be solved by financing method such as self-financing, bank loan or issue of shares.

### STAFF AND REMUNERATION

As at 31st December 2005, the Group's total number of staff was 18,849. The remuneration and benefits were Rmb720 million. The Group adopted various measures such as on-job-training, training in universities and multinational companies to improve their qualities and established individualized mechanism for human resource training and utilization. Altogether 6,523 staffs have been trained in the year. As for remuneration, the Group adopted various salary systems, including post salary system, piece rate system, which enhanced check-up, effectively combined the staff's individual goal with the Company's target, brought all positive factors into play and speeded up the development of the Company.

## 管理層論述與分析(續)

## Management Discussion and Analysis – (continued)

### 展望

隨著國家加強和改善宏觀調控，高耗能產業將受到抑制，加上新建項目的陸續投運，電力供求矛盾逐步趨於緩和。據國家有關部門預測，二零零六年用電增幅將達到11%，同比下降2.5個百分點。雖然總體供需矛盾得到緩解，但區域性、季節性特別是時段性電力緊缺局面仍將存在，發電設備行業仍有較大的發展空間。

國家「十一•五」規劃的頒佈與實施，使得發電設備的市場需求加速向環保、高效的高新技術產品發展，核電、風電、抽水蓄能等產品已經成為市場競爭的熱點。本集團將抓住良好的發展機遇，加大機制和體制的改革與調整力度，努力提高自主創新能力，不斷增強核心競爭能力。為此，本集團在2006年將重點做好以下工作：

一是加大市場開發力度，為可持續發展奠定基礎。在採取有效措施鞏固、提高常規機組的市場佔有率的同時，加大以核電、超超臨界、燃氣輪機、大型空冷、大型抽水蓄能為代表的高新技術產品，以風電為代表的新能源產品和國際電站工程總承包專案的開發力度，重視備品、備件和維修服務市場的拓展。

### PROSPECT

As China strengthen and improve its macro control, high-consumed energy industry will be restricted, and with the new projects put into operation, the contradiction between supply and demand of electricity will be improved. It was expected that by the year 2006, the consumptions of electricity would increase 11 per cent, 2.5 per cent lower than that of last year. Although the overall situation has improved, there is still regional, seasonal and especially periodic electricity shortage in place. So, there's still room for the development of electricity generation equipment.

The promulgation and implementation of the country's "Eleventh Five-Year Plan" has speeded up the market's demand shifting for environment-friendly and efficient high-tech products, such as nuclear power, wind power, pump storage power, which have become the focus in the electricity generation equipment market. The Group will seize this development opportunity, enhance the reform and adjustment of mechanism and cooperation system, and make great effort to improve the company's independent R&D capability and the core competition capability. Especially, in the year of 2006, the Group will pay attention to the following work:

First, further reinforce the market development to lay foundation for sustainable development. The Group will take effective measures to consolidate and increase the market occupation of regular products. At the same time, it will make great effort to develop high-tech and new energy products including nuclear power, ultra super critical thermal power, gas turbine, large-scale air cooling, and wind power; to make positive action in international power plant engineering project; and to pay attention to explore the associated products and maintenance services market.

## 管理層論述與分析(續)

### Management Discussion and Analysis – (continued)

二是進一步完善生產組織體系，確保按期交貨。2006年的主要產品產量與2005年大體持平，新產品所佔額度進一步提高，全面兌現合同仍然是本集團的工作重點。本集團將加快構建、完善現代化、社會化生產組織體系，持續改進質量保證體系的運行效果，加強專案管理，確保按合同交貨。

三是堅持科技領先戰略，提高自主創新能力。本集團將積極爭取牽頭承擔國家發電新技術的研究開發工作。加強與國內科研院所、高等院校之間的技術交流與合作，加快對引進技術的消化吸收，積極開發具有自主知識產權的技術，全面增強公司自主創新能力。

四是深入分析體制、機制上存在的問題，不斷深化改革，加強管理。年內重點完善自主創新的體制架構，健全能夠煥發科技人員創新熱情的激勵機制。加大對關鍵人才、重要崗位的激勵力度，研究實施股票增值權計劃。進一步發揮資金結算管理中心的各項功能，整合公司內部資源，發揮集約化管理的效能，降低公司資金風險，提高資金使用效益。加大貸款回收力度，採取更加有效的措施控制存貨。

為適應燃機、核電、環保以及國外工程總承包等事業發展的需要，同時為了加大對人才的吸引力度，本公司正在北京接洽租用一處辦公地點，先期供營銷系統、科研開發系統使用。

二零零六年四月十四日  
於中國哈爾濱

Second, further improve production organization system and ensure delivery schedule. The output of the key products of the year 2006 will be similar to that of 2005, but the occupation of new products will increase. Contracts fulfillment is still the key task of the Group. The Group will speed up the construction and improvement of the modernization and socialization manufacturing organization system. Insisting on the quality guarantee system, the Group will enhance project management and ensure delivery according to contracts.

Third, continue to implement the strategy of technology advancement, and improve the company's independent R&D capability. The Group will make positive action to assume the national tasks in researching and developing new technology for electricity generation; strengthen the cooperation and technology exchange with domestic scientific research institutes and universities; speed up its step on the absorption of introduced technology. Fully improve the Company's capability of independent development and innovation through developing the technology with independent intellectual property right.

Fourth, analyze the existed problems of the system and mechanism, and deepen the reform and strengthen the management. The key task in the year is to improve the system for independent innovation and perfect the incentive mechanism for the technical talents. The Group will carry out more incentive measures for the key talents and important posts, and study and implement the scheme of stock appreciation rights. Also, the Group will further utilize every function of the financial settlement centre; by integrate the internal resources with integrated management, reduce the financial risk and increase the efficiency of capital utilization. In addition, the Company will strengthen the payment reclaim and carry out effective measure for inventory control.

In order to meet the requirements for the development of gas turbine, nuclear power, environment protection products and general contracts for oversea projects, as well as to enhance the measures to attract talents, the Company is arranging for an office in Beijing for marketing and R&D.

14th April 2006  
Harbin, China