

# Business Review - Year at a Glance



## January 01

Hongkong Electric International refinanced its investment in Australia, signing an A\$617 million (about HK\$3.57 billion) term loan facility with 11 international financial institutions.

## February 02

Opening ceremony held for Hong Kong's first wind power station, Lamma Winds. The naming competition for the wind turbine attracted about 4,000 submissions. An exhibition area on renewable energy has been set up adjacent to the wind turbine.

## March 03

Submitted a 260-page response on the Stage II Consultation on the Future Development of the Electricity Market in Hong Kong.



## July 07

Won three Customer Relationship Excellence Awards, presented by the Asia Pacific Customer Service Consortium, for high quality and efficient customer service and reliable electricity supply.

## August 08

Promoted green cooking with the opening of the Electric Commercial Kitchen Centre. Electric cooking offers emission-free, low noise and energy efficient cooking with minimal waste heat.

## September 09

Participated in the Power-Gen Asia Conference & Exhibition held in Hong Kong. A keynote address was delivered and several presentations made. More than 300 visitors visited the Hongkong Electric booth.



## April 04

Established the Clean Energy Fund to celebrate the commissioning of Lamma Winds. The aim of the fund is to enhance public awareness of and promote the study and development of renewable energy.



## May 05

Received the “Excellent Class Indoor Air Quality Certificate” from the Environmental Protection Department for the Hongkong Electric Centre in recognition of good indoor air quality.



## June 06

Successfully conducted pressure testing of the 93km submarine gas pipeline from the LNG Terminal in Shenzhen to Lamma Power Station.



## October 10

Lamma Power Station Unit 9, our first combined cycle gas-fired unit, began commercial operation.



## November 11

Launched the Smart Power Campaign 2006/07 with a focus on supply reliability. The year-long campaign stresses the importance of electricity, and emphasises energy conservation.



## December 12

Awarded ‘Power Deal of the Year’ for the Ratchaburi power station project financing by Project Finance International.

# Business Review



Our engineers undertake a schedule of daily maintenance checks. This attention to detail underpins our impressive record of 99.999% supply reliability.

## HONG KONG OPERATIONS

### Generation

The high standard of reliability in electricity supply which Hong Kong residents have come to expect and which Hong Kong as an international financial centre has come to rely on has been made possible through our long-term planning and investment in electricity infrastructure, and to our committed and skilled workforce.

Our ongoing programme to reduce emissions at the Lamma Power Station continued to progress in 2006 with the commissioning of our first gas-fired combined cycle unit, Unit 9, in October 2006. The addition of Unit 9 brought the total generating capacity of the Lamma Power Station from 3,420 MW to 3,755 MW. Unit 9, together with its associated infrastructure is located on the Lamma Power Station Extension site which was constructed specifically for the operation of gas-fired generating units. Gas for Unit 9 is supplied through a 93km submarine gas

pipeline from the Guangdong Dapeng Liquefied Natural Gas Terminal in Shenzhen. Unit 9 will enable us to reduce emission levels at Lamma as well as help to meet future electricity demand.

During the year, contracts were awarded for the installation of flue gas desulphurisation (FGD) plants for Units 4 and 5. In addition, plans are being prepared for the installation of low nitrogen oxide burners for those units. The two FGD plants are in addition to the three existing FGD units which we have already installed. Following completion of the installation work, which is scheduled for 2010, more than 90% of electricity generated at the Lamma Power Station will be generated by gas and by coal-fired units fitted with FGDs and low nitrogen oxide burners resulting in reduced emission levels being achieved.



Lamma Winds, Hong Kong's first wind turbine which was erected on Lamma Island was officially commissioned in February 2006 and had from the date of commissioning to the end of the year generated 700,000 kWh of electricity, representing a load factor of approximately 3 hours full load per day. The wind turbine and the adjacent exhibition centre has become a popular educational tool on renewable energy with more than 50 visits being arranged during the year for professional, environmental and educational bodies. Lamma Winds is our first venture into renewable energy and is providing valuable information on the operation of wind turbines and their potential as a source of renewable energy for Hong Kong.

The plant ownership scheme, which aims to empower staff by making them responsible for plant performance at the Lamma Power Station, has proven successful and is to be expanded.

The scheme is part of our continuing efforts to improve reliability and reduce operating costs at the power station.

Overall efficiency of the generating units increased in 2006 due to the higher efficiency of Unit 9, the new gas-fired combined cycle unit.

In order to mitigate the impact of higher fuel costs, we continued to source and use a wide variety of coal during the year while still maintaining the reliability of the generating units. It is expected that coal prices will continue to be high during 2007 as demand for coal in the region remains strong.

# Business Review



Hong Kong's position as a leading financial centre relies upon uninterrupted power. The Company's state-of-the-art System Control Centre is at the heart of control and monitoring procedures for the transmission and distribution system.

## Transmission and Distribution

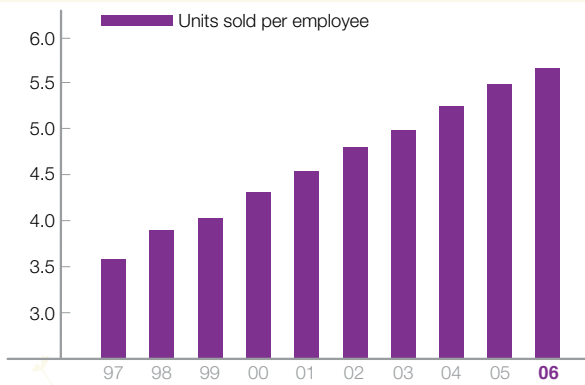
For the tenth consecutive year, a world class supply reliability of over 99.999% was achieved. Supply reliability has been consistently above 99.999% since 1997. System maximum demand increased by 1.2% to 2,597 MW in 2006 from 2,565 MW in 2005. The number of customers increased from 555,826 to 559,167. Unit sales of electricity were 10,773 million kWh in 2006, an increase of 0.2%. The low growth in unit sales in 2006 was primarily due to a cooler than normal summer and the effect of various energy saving initiatives. Of the 10,773 million kWh of electricity sold in 2006, commercial sales made up 74.1%, domestic sales 22.0% and industrial sales 3.9%.

## Investment in Supply Network

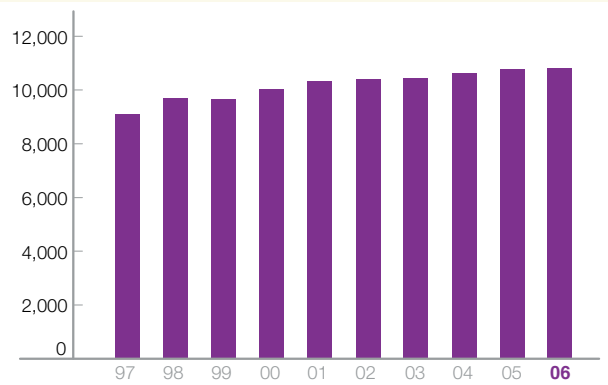
Maintaining a reliable transmission and distribution network is key to the high reliability standards we have achieved. During the year, the installation of two 275kV submarine cables between Lamma Island and Cyberport on Hong Kong Island was completed with circuit 1 being commissioned in June 2006 and circuit 2 scheduled to be commissioned in April 2007. Cable laying works from Cyberport to the Marsh Road 275kV switching station in Wanchai have been completed while construction of the Marsh Road switching station is underway. This project together with other network reinforcement and development works currently underway are part of our ongoing programme to strengthen and improve our transmission and distribution network.



**Productivity** 1997-2006 (millions of kWh)



**Units Sold** 1997-2006 (millions of kWh)



# Business Review



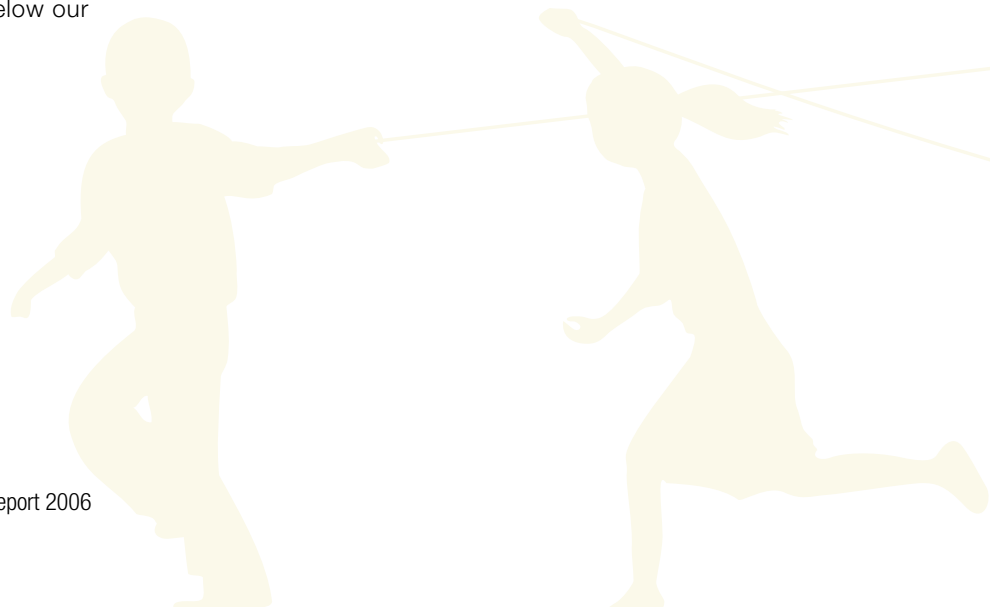
Our employees strive for ever higher service standards for the benefit of our customers.

## Customer Service

All of our pledged customer service standards were achieved or surpassed in 2006. For the sixth successive year, a record number of commendations were received from customers. In addition, we received three top awards in the Customer Relationship Excellence Awards 2006 in recognition of our high quality customer service, efficient integration of various customer service function teams and high reliability of electricity supply. The average waiting time for calls to the customer emergency service centre was 4.16 seconds, down from 5 seconds in 2005 and well below our service target of less than 9 seconds.

## Customer Service Enhancements

In 2006, we introduced new bill payment options, through credit card auto-pay and bill payment at 7-Eleven stores. The customer centre at North Point was renovated to provide a more comfortable environment for visiting customers and a video phone service was launched at the Central pay-in centre to facilitate processing enquiries and requests. A mobile SMS enquiry service is now available for hearing-impaired customers.

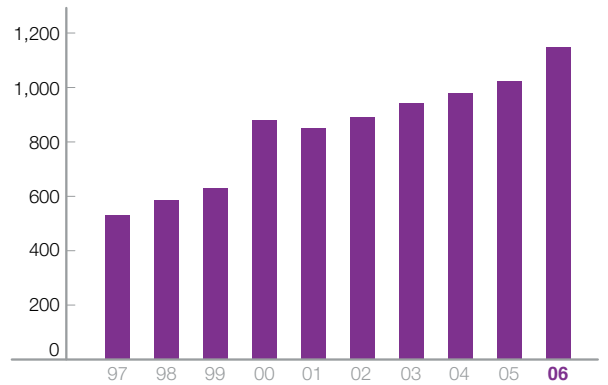




### Electric Commercial Kitchen

In July 2006, a new Electric Commercial Kitchen Centre was opened which displays a wide range of electric commercial cooking equipment. The kitchen has attracted considerable interest from commercial customers. Electric cooking offers emission free, low noise and energy efficient cooking with minimal waste heat.

Written Commendation Statistics 1997-2006





# Business Review



Hongkong Electric believes in "safety first". We give high priority to the safety of our employees and the general public. More than 14,000 hours of extensive safety and technical training were provided to 2,250 staff and contractors before the arrival of natural gas at Unit 9.

## Health and Safety

A continuous accident-free operation is the environment we aim to create with a "safety first" culture in all our businesses. Our divisional managers are proactive in organising health and safety activities for employees and contractors at their respective worksites.

In preparation for receiving the first natural gas to our gas handling facilities at the Lamma Power Station in June we established a safety management system for natural gas. A natural gas safety team, comprising members from the Projects Division, operations, maintenance, technical services, safety and chemistry staff of Generation Division, and a gas advisor, remained in place throughout 2006. The team is expected to continue with its work in 2007, gathering more experience in using natural gas,

and refining the operation and maintenance systems for the natural gas facilities. Extensive safety training for dealing with natural gas was conducted in 2006 by two gas-safety specialists. Technical training on natural gas facilities by the manufacturers' engineers was conducted in the first half of 2006.

In September, the Company won three awards in the 2006 Hong Kong Occupational Safety & Health Forum, the Gold Award in Safety Technological Achievement, the Silver Award in Best Presentation and the Meritorious Award in Safety Promotion. In October, the Company again won the Occupational Safety and Health Quiz Cup Championship jointly organised by the Labour Department and the Occupational Health & Safety Council. This is the ninth time we won this award since 1997.



**SAFETY  
FIRST**

### **Improving our Talent Base**

We place a high priority on training and career development. In 2006, we continued to organise training seminars, workshops and on-the-job training exercises in such areas as technical skills, safety, quality management, environmental awareness, and computing skills.

Trainees and apprentices continued to be employed as part of our ongoing programme to develop our employee base.

# Business Review



The Company's "Caring Always" programme responds to the needs of the less advantaged in society. At major festivals during the year, the Company brightens the lives of people in need with food items prepared using electric cooking.

## Community Activities

The Company continued to be involved in charitable organisations and causes in 2006 supporting some 65 community, environmental and professional projects.

During the year, a wide range of activities were arranged under the Smart Power Campaign whose 2006 campaign focused on promoting public understanding of renewable energy.

Celebrating its second anniversary in July 2006, the Hongkong Electric volunteers team (with a membership of more than 700, over one-third of the Company's employees), continued to undertake community activities. Since mid 2004, the team

has undertaken more than 5,000 man-hours of voluntary service. Caring for the elderly and improving the environment remained the two focuses of our voluntary service in 2006. In addition, the volunteers team also supported community programmes to help or raise funds for charitable organisations, including assisting in the annual Green Power Hike, selling flags and raffle tickets for the Community Chest and assisting other non-profit-making organisations' fundraising activities. To tie in with the Company's expertise in electric cooking, a new programme called "Caring Always" was launched in September in which Hongkong Electric volunteers using electric cooking would make food items for people in need at major festivals during the year.





Assisting students in need continued to be a priority last year for the Hongkong Electric Centenary Trust with the Trust providing sponsorship to outstanding secondary school students in Hong Kong.

Sponsorship was also provided for promoting lifelong learning and volunteerism among Hong Kong senior citizens through the “University of Third Age” (U3A) project jointly organised by the Company and the Hong Kong Council of Social Service. Funding from the Trust has allowed six non-profit-making organisations to establish U3A self-learning centres operated by and for senior citizens.

The Company received two awards from the Community Chest in June, for being one of the top-ten fundraising organisations for the Employee Contribution Programme and as a Gold Donor for the Corporate and Employee Contribution Programme. We were also awarded the “Caring Company” logo by the Hong Kong Council of Social Service for the fourth consecutive year.



Hongkong Electric is an environmentally-responsible company. Extensive landscaping at our Lamma Power Station and active participation in “green” activities are just part of our commitment to the environment.

## Environmental Activities

In February 2006, the Hongkong Electric Clean Energy Fund was established to celebrate the commissioning of Lamma Winds. Its objectives are to increase public awareness of renewable energy, and to promote the study and application of renewable energy by students in Hong Kong. During the year, 12 schools and universities were selected to receive funding for various renewable energy projects.

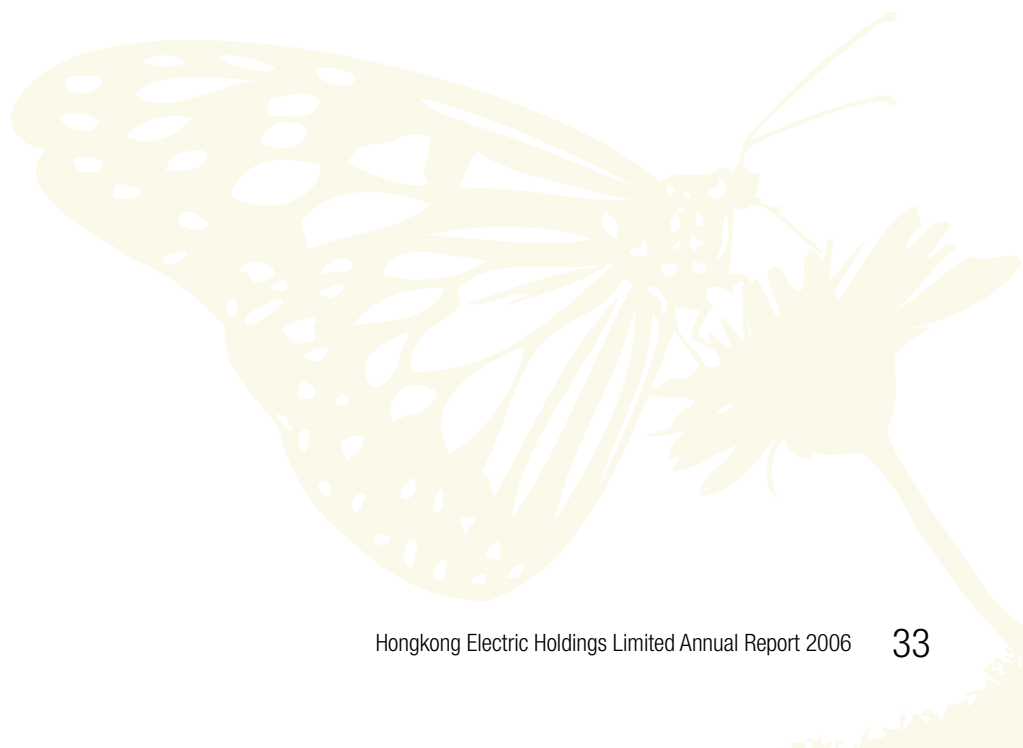
As part of our programme of conserving resources, we continued to collect wastewater and rainwater for reuse and to use ash for land reclamation at the Lamma Power Station Extension. In addition, through various initiatives, we were able to reduce our company-wide consumption of paper and non-rechargeable batteries.

2006 marked the eleventh consecutive year that the Company was the title sponsor for the annual “Clean Up the World in Hong Kong Campaign” organised by Green Power. The event saw the active participation by Hongkong Electric volunteers in addition to the Company’s sponsorship. It was also the second year of the three-year “Green Lamma Green” project, which aims to promote sustainable development on Lamma Island. A tree planting day was organised jointly with the Conservancy Association in April, where Hongkong Electric volunteers joined with students and local residents on Lamma to plant approximately 600 seedlings and provide tree caring to those planted the year before along the family trail.



### **Environmental Performance Award**

The Business Environment Council in February recognised the Company's environmental initiatives and achievements in three major areas – commitment to environmental protection, improvement in environmental performance and compliance with environmental legislation – awarding the Company the 2005 Hong Kong Award for Industries, Environmental Performance Award.





Hongkong Electric International (HEI), the Company's international investment arm, invests in businesses that offer a high degree of earnings predictability. CitiPower, one of HEI's investments, lights up the Melbourne metropolitan area.

### **INTERNATIONAL OPERATIONS**

Internationally, the Company looks for investment opportunities that will increase earnings so as to increase the proportion of our earnings derived from operations outside Hong Kong. The focus of our investment activities is on power generation, transmission and distribution in order to capitalise on our technical expertise. In 2006, our overseas investments continued to perform satisfactorily with increased earnings from our Australian electricity distribution businesses (after taking into account our lower attributable interest on those businesses in 2006) and higher dividends from our gas distribution business in the U.K.

### **Australian Operations**

#### **ETSA Utilities**

ETSA Utilities in which the Company has a 27.93% interest is the sole electricity distributor in the state of South Australia. The business achieved a strong financial and operational performance in 2006 with higher distribution throughput as a result of underlying growth and the weather.

#### **Powercor Australia Limited and CitiPower I Pty Ltd**

Powercor is Victoria's largest electricity distributor while CitiPower operates a distribution network across the Melbourne metropolitan area. The Company has a 27.93% interest in both businesses. The businesses recorded strong financial results in 2006 with higher distribution revenue as a result of increased electricity usage and a higher customer base. Network reliability was at near record highs at Powercor while CitiPower maintained its status as one of the most reliable networks in Australia.



## **U.K. Operations**

### **Northern Gas Networks Limited**

Northern Gas Networks in which the Company has a 19.9% interest operates a gas distribution network in the North of England. It is one of four regional gas distribution networks in the U.K. with 36,000 km of distribution gas pipeline delivering gas to approximately 2.5 million homes and businesses. Increased dividends were received from the business in 2006.

## **Thailand Operations**

### **Ratchaburi Power Company Limited**

Construction of the 1,400 MW gas-fired power station in Ratchaburi Thailand in which we have a 25% interest is on schedule. The two 700 MW gas-fired combined cycle generating units are expected to enter into commercial operation in March and June respectively in 2008.

## **Associated Technical Services Limited**

Associated Technical Services (ATS) specialises in a full range of professional consultancy and engineering services both in Hong Kong and internationally. In 2006, ATS secured six new international projects and three new projects in Hong Kong while completing projects in Singapore and Libya.