#### **OVERVIEW**

HK Electric Investments is the first fixed single investment trust in Hong Kong with a focus on the power industry. We are a vertically integrated power utility and our operations comprise the generation, transmission, distribution and supply of electricity to Hong Kong Island and Lamma Island. We are the sole electricity provider to Hong Kong Island and Lamma Island with an Electricity Supply Reliability Rating of above 99.999% in each year since 1997. Our principal operating subsidiary, HEC, which was incorporated in January 1889 and first commenced operations in 1890, is one of the world's longest established utility companies.

HEC's sole power generation facility is the Lamma Power Station which, as at 30 September 2013, had an aggregate installed capacity of approximately 3,737 MW. As at 30 September 2013, we provided electricity to approximately 568,000 registered customers on Hong Kong Island and Lamma Island.

Our operations are subject to a Scheme of Control entered into with the Hong Kong Government. Under the terms of the Scheme of Control, we are entitled to full recovery of our total operating costs from our Gross Tariff Revenue, and a permitted level of earnings based principally on a return on HEC's capital investment in electricity generation, transmission and distribution assets. The first Scheme of Control was entered into in 1980 for a term of 15 years beginning on 1 January 1979 and it was renewed in 1993 for a similar term until the end of 2008.

The current Scheme of Control was entered into on 7 January 2008 for a term of ten years from 1 January 2009 to 31 December 2018, with an option for the Hong Kong Government to extend it for a further term of five years ending on 31 December 2023. If the Hong Kong Government does not exercise its option to extend the Scheme of Control for a further term of five years after 31 December 2018, the current Scheme of Control provides that for the period from 1 January 2019 to 31 December 2023, through reasonable arrangements determined by the Hong Kong Government after consultation with us, we will continue to be entitled to earn from the market the same Permitted Return annually which we currently earn under the Scheme of Control (after recovery of tax and total operating costs and subject to any deduction of certain interest on borrowed capital for the financing of Fixed Assets and other applicable deductions, with the assets to be taken into account for calculating the Permitted Return to include only assets that continue to be used in HEC's Electricity Related activities, and not to include any assets acquired or invested in after 31 December 2018 unless they have been reasonably and prudently purchased for use in HEC's Electricity Related activities and only if the purchase of such assets has been approved by the Hong Kong Government). For further details, see "Scheme of Control and Regulatory Overview".

# **COMPETITIVE STRENGTHS**

We believe that our strong market position in the electricity market in Hong Kong is a result of our competitive strengths which are set out below:

Favourable business profile governed by the well-established Scheme of Control entered into with the Hong Kong Government

Our operations are subject to the Scheme of Control entered into with the Hong Kong Government, which provides for a 9.99% Permitted Return on the total value of our Average Net Fixed Assets for each financial year, other than those attributable to our Average Renewables Net Fixed Assets for that year for

which the Permitted Return is 11% on the total value of our Average Renewables Net Fixed Assets for that year. Our Net Fixed Assets have increased from approximately HK\$46.6 billion in FY2008 to approximately HK\$49.3 billion in FY2012, which represented a compound annual growth rate of approximately 1.5% over this period.

The Scheme of Control has an established track record of stability and transparency since its initial implementation in relation to HEC, which was first entered into in 1980 for a term of 15 years beginning on 1 January 1979 and has since been renewed on two occasions, and is widely regarded as a regulatory framework that is able to deliver to efficient operators a favourable business risk profile, comparable to that of regulated electric utilities in other markets such as the United Kingdom and Australia. The Scheme of Control provides for financial incentives designed to promote prudent and efficient investment by us to ensure reliable electricity supply to our customers.

# Vertically integrated operations with captive customer base

We are a vertically integrated operator which generates, transmits, distributes and supplies electricity to approximately 568,000 registered customers on Hong Kong Island and Lamma Island as at 30 September 2013, where stable demand is underpinned predominantly by commercial and residential customers. Our unique market position is difficult to replicate due to an established customer base within a developed market, the lack of indigenous fuel supply, the scarcity of suitable land in Hong Kong to support the establishment of a new power utility company, the difficulties in building new transmission and distribution networks in a highly urbanised and congested city with existing underground utilities, as well as the significant upfront investment that would be required to build a competitive and efficient customer service infrastructure to participate in retail competition.

# Well-established local brand and long-term relationship with customers

Established in 1889, we are Hong Kong's oldest power company and one of the longest established utility companies in the world. We are also one of most well-established and highly regarded brand names in Hong Kong. In June 2013, our service to small and medium enterprises resulted in us being named the "Best SME's Partner" for 2013 by the Hong Kong General Chamber of Small and Medium Business. We are committed to excellent customer services and we aim to exceed our customers' expectations and achieve total customer satisfaction by continually improving our services. Our ongoing commitment has led to us being named "Public Service of the Year (Public Utility)" for three consecutive years in 2010, 2011 and 2012 by the Asia Pacific Customer Service Consortium.

# Established supply reliability and operational excellence

We consider it imperative to maintain high efficiency while complying with all regulatory requirements. Our facilities and systems are operated to the highest international standards, with our Electricity Supply Reliability Rating maintained at above 99.999% in each year since 1997. We consider the reliability rating of electricity supply as one of our self-pledged customer service standards which we have consistently achieved. We also take pride in the continued supply of uninterrupted power to our customers despite the vulnerability of our service area to adverse weather conditions such as typhoons due to the geographic proximity of Hong Kong to the South China Sea. According to "The Global Competitiveness Report 2013-2014" dated 3 September 2013, which was published by the World Economic Forum, Hong Kong's quality of electricity supply (which the report defines as the lack of interruptions and lack of voltage fluctuations) was ranked first among 148 countries.

We emphasise prevention and prudence in our approach to network design, repair and maintenance, upgrades and monitoring, which we believe contributes to our reliable performance. Our electricity generation, transmission, distribution and supply systems have been progressively computerised since the late 1970s with the continuous upgrading and introduction of advanced technologies. We monitor our network around the clock, and utilise early detection and advanced diagnostic techniques to help prevent problems from occurring. We also take steps to ensure reliable and quality fuel supply through close monitoring of our supply chain and diversification of our fuel procurement.

# Competitive tariff levels to other developed markets

Our overall tariff levels are competitive to other developed markets regionally and internationally such as Singapore, Tokyo, Sydney and Berlin. For further details, see "Industry Overview — The Electricity Market in Hong Kong — Tariffs". We also apply a progressive tariff system to both domestic and commercial customers to allow low consumption households and small and medium enterprises to enjoy lower tariffs and to encourage efficient use of energy. Our consistent business priority, which focuses on supply reliability, operational performance and cost control, ensures that tariffs in our service area remain at affordable and competitive levels.

# Strong and experienced management team

Each member of our senior management team has extensive experience in his or her area of expertise, such as electricity supply, investment and finance, human resources management and communications. Our General Managers in charge of our electricity supply operations are all experienced engineering professionals, who are highly knowledgeable in energy infrastructure development and construction, power assets operation and maintenance as well as project development and management. Throughout the years, we have provided extensive training to our employees and strive to retain talent within the firm from which we nurture our future leaders. Our General Manager (Generation), General Manager (Transmission & Distribution), General Manager (Projects), General Manager (Group Commercial) and General Manager (Corporate Development) have all served with us for more than 30 years. Many of our senior managers also have extensive experience working overseas through secondments to other power businesses of PAH. Our Chief Executive Officer, Mr. WAN Chi Tin, has worked for HEC and the PAH group of companies since 1978, holding various positions including chief executive officer of Powercor Australia Limited and CitiPower Pty, which are overseas power businesses that PAH has invested in.

## Track record of prudent financial performance

During the Track Record Period, we have maintained a strong financial position with stable earnings and cashflow from our operations. Our net cash flow from operating activities was approximately HK\$6,616.3 million, HK\$6,437.8 million, HK\$6,689.7 million and HK\$5,934.6 million for FY2010, FY2011, FY2012 and 9M2013, respectively, whereas our profit after taxation was approximately HK\$4,678.7 million, HK\$4,434.5 million, HK\$4,471.1 million and HK\$3,328.7 million during the same periods, respectively.

#### **BUSINESS STRATEGIES**

We aim to continue our excellence in supply reliability, provision of world-class customer service, dedication to greener energy and constructive and on-going dialogue with our stakeholders to deliver a sustainable and optimal performance for the Holders of Share Stapled Units, our customers and the environment.

# Maintain world-class supply reliability

Our service areas are Hong Kong Island and Lamma Island. Maintaining the highest level of supply reliability is critical to Hong Kong's economic and commercial prosperity. We aim to maintain operational excellence at all times through further network expansion, enhancement and improvement, as well as implementation of more advanced and intelligent systems.

We carry out continuous asset enhancement work to upgrade our system. In addition to burying most of our transmission and distribution lines directly underground, six dedicated cable tunnels have been built to accommodate some of the 275 kV cable circuits. This not only ensures that our system is less affected by external events such as extreme weather conditions but also allows us flexibility to expand our capacity in the future.

Our system control centre has adopted advanced energy and distribution management systems with smart grid features to ensure safe, reliable and efficient operations across our entire transmission and distribution networks. We have upgraded our system through the deployment of intelligent programmes to enhance the work efficiency of the system control centre and increased automation of our control process. A roadmap was developed in 2012 to prepare our computer system for future developments such as low carbon fuel mix and the increasing use of smart devices.

#### Provide outstanding customer service

Excellent customer service is core to our business philosophy. We are able to achieve enhanced customer satisfaction as a result of continuous efforts to introduce innovative and value-added services. We have dedicated ourselves to a rigorous set of 18 customer service standards. We value customer opinions and feedback and conduct regular meetings with our customer liaison group and routine customer satisfaction surveys.

We require all of our customer-facing staff to receive training on customer service skills to reinforce our service-oriented culture. We also continue to tailor our services to key customer groups, including offering one-stop support to small and medium enterprises, providing free energy audits to business customers to encourage smart use of electricity and supporting energy efficiency and conservation campaigns for our customers.

# Continue focusing on greener energy

We were one of the first utility companies to introduce green energy to Hong Kong with the installation of Lamma Winds which was Hong Kong's first commercial-scale wind turbine station. To this end, we have been expanding our investment in solar and wind energy sources as well as striving to achieve a cleaner fuel mix.

Our strategic 2014-2018 Development Plan, which covers the period from 1 January 2014 to 31 December 2018, envisions further expansion of our generation capacity to low-emission energy. We currently maintain approximately 30% of our electricity output from natural gas and approximately 70% of our electricity output from coal.

In addition, we have further continued our efforts to reduce emissions and our carbon footprint through the use of clean technology and cleaner fuel, improvements and upgrades within our generation process, and better energy management of our operations. All our coal-fired units are now using ultra low sulphur diesel oil as start-up fuel instead of heavy fuel oil to cope with the Hong Kong Government's policy of cutting sulphur dioxide emissions. Furthermore, we have installed flue gas desulphurisation plants at six coal-fired units and low nitrogen oxide burners at five coal-fired units to reduce our emissions during power generation.

We have undertaken green initiatives in our business, such as the adoption of the "4R" (Reduce, Reuse, Recycle and Recover) philosophy in our operations. Furthermore, we have been stepping up efforts towards achieving energy efficiency and promoting clean energy through various public engagements, school project sponsorships and the provision of related energy efficiency/audit services. We are also a supporter of the Hong Kong Government's promotion of electric vehicles to improve roadside air quality. We have built seven electric vehicle standard charging stations and four quick charging stations in car parks across Hong Kong Island, which are free for use by the public until the end of 2014. Moreover, we are using electric vehicles as part of our corporate fleet to help reduce roadside emissions.

#### Engagement with the community and stakeholders

We actively engage in discussions with our various stakeholders including employees, customers, shareholders, business partners, non-governmental organisations, local communities, the government and opinion leaders. We have an on-going schedule of formal and informal engagements with each of these groups and take their suggestions into consideration during our various business decision making processes.

We are an integral part of the Hong Kong community, and attach importance to our social responsibility. A corporate social responsibility committee, consisting of members of our senior management, spearheads our wide variety of corporate social responsibility strategies and campaigns.

# Strive for prudent financial and operational management and deliver sustainable returns to the Holders of Share Stapled Units

We strive for prudent financial and operational management in all aspects of our business to ensure that we are able to deliver sustainable returns to the Holders of Share Stapled Units.

We intend to maintain a strong balance sheet and an appropriate gearing ratio. We may use a combination of bank loans, bonds and other types of debt and equity instruments to fund future acquisitions and asset enhancements. We will consider diversifying our sources and tenors of financing in the future to minimise our financing costs and concentration risks. We will seek to manage the risk of potential interest rate and foreign exchange volatility through the use of fixed-rate borrowings, swaps and other hedging instruments.

We rigorously manage operating costs amidst rising international fuel prices and inflation. We aim to adopt and maintain an optimal capital structure, leverage our business profile to access cost effective funding and maintain sufficient flexibility for us to implement prudent capital expenditure programmes while continuously returning cash to the Holders of Share Stapled Units.

#### **SELECTED OPERATING STATISTICS**

Set out below are our selected operating statistics during the Track Record Period:

_	FY2010	FY2011	FY2012	9M2013
Installed capacity (MW)				
Gas turbines and standby units	555	555	555	555
Coal-fired units	2,500	2,500	2,500	2,500
Gas-fired combined cycle unit	680	680	680	680
Wind turbine and photovoltaic system <sup>(1)</sup>	1	1	2	2
Total (MW)	3,736	3,736	3,737	3,737

_	As at 31 December			As at 30 September
_	2010	2011	2012	2013
Number of switching stations <sup>(2)</sup>	25	25	25	24
Number of zone substations <sup>(2)</sup>	27	27	27	27
Number of distribution substations <sup>(3)</sup>	3,710	3,741	3,755	3,770
		FY2010	FY2011	FY2012
System maximum demand <sup>(4)</sup> (MW)		2,510	2,498	2,494
Annual increase/(decrease) (%)		` '	(0.5	) (0.2)
Annual load factor <sup>(5)</sup> (%)		55.8	55.9	56.6
Thermal efficiency <sup>(6)</sup> (%)			36.2	36.0
Plant availability <sup>(7)</sup> (%)		85.6	84.4	84.6
Capital expenditure <sup>(8)</sup> (HK\$ million)		2,427	2,887	2,613

#### Notes:

- (1) The 800 kW wind turbine was installed in September 2005. The 550 kW TFPV system was installed in July 2010 and its expansion to approximately 1 MW was completed in March 2013.
- (2) Save for the Rumsey Street 132/11 kV zone substation, which is located within government premises, we are the registered owner of the properties on which our switching stations and zone substations are located.
- (3) We are the registered owner of the properties on which 16 of our distribution substations are located. The interests in the properties on which the rest of our distribution substations are located are owned by third parties.
- (4) "System maximum demand" refers to the highest electricity demand of our customers as a whole.
- (5) "Annual load factor" refers to the ratio of average electricity demand to the system maximum demand.
- (6) "Thermal efficiency" refers to the ratio of the electricity generated from a power plant to the fuel input.
- (7) "Plant availability" refers to the percentage of time that a power plant is able to produce electricity by taking into account the outage hours of the generating units that are completely out of service.
- (8) "Capital expenditure" refers to expenditure incurred for the acquisition and/or upgrading of our fixed assets, which generate future economic benefits to us.

#### **OUR OPERATIONS**

Our operations comprise the generation, transmission, distribution and supply of electricity to Hong Kong Island and Lamma Island.

# A. Generation of Electricity

#### 1. Lamma Power Station



Lamma Power Station

#### Overview

Since January 1990, Lamma Power Station has been our sole power generation facility and is located on an approximately 85.8-hectare site at Po Lo Tsui on Lamma Island. The lease of the site of the Lamma Power Station was granted to us by the Hong Kong Government in December 1978 for a term ending on 30 June 2047.

As at 30 September 2013, the Lamma Power Station had an aggregate installed capacity of approximately 3,737 MW, which comprised the following generating units:

- (i) eight coal-fired units (comprising three 250 MW units (L1, L2 and L3) and five 350 MW units (L4, L5, L6, L7 and L8)), which have an aggregate installed capacity of 2,500 MW;
- (ii) five oil-fired gas turbine units (comprising one 55 MW unit (GT1A and GT1B (twin)) and four 125 MW units (GT2, GT3, GT4 and GT6)), which have an aggregate installed capacity of 555 MW;
- (iii) two gas-fired combined cycle units (comprising one 335 MW unit (L9) and one 345 MW unit (GT57)), which have an aggregate installed capacity of 680 MW;

- (iv) one wind turbine unit at Lamma Winds, which has an aggregate installed capacity of 800 kW; and
- (v) a cluster of thin film photovoltaic (or TFPV) systems (i.e., our solar power system), which, after completion of the recent expansion of our TFPV systems in March 2013, have an aggregate installed capacity of approximately 1 MW.

The eight coal-fired units have been generating approximately 70% of the electricity from the Lamma Power Station each year since 2010. The two gas-fired combined cycle units have been used as our base-load machines (i.e., the generating units are running continuously except in the event of maintenance) for the Lamma Power Station since October 2006 and January 2010, respectively. The five oil-fired gas turbine units are presently used for "peak lopping", which is a process by which generation is used for short periods of time to meet necessary demands for peaks in load as well as serving as a back-up for emergency operations in the event any of our other generators fail.

Construction and Development of the Lamma Power Station

Construction of the Lamma Power Station commenced in 1978 and was developed in three stages:

#### (i) Stage One (1978 - 1983)

Stage one comprised the construction of three 250 MW coal-fired units together with common station facilities and auxiliary plants (including water/oil/coal/ash handling and storage plants, coal jetty and coal yard). It was completed in December 1983.

# (ii) Stage Two (1983 - 1993)

Stage two comprised the construction of three 350 MW coal-fired units with semi-outdoor-type coal-fired boilers, one 55 MW and six 125 MW oil-fired open cycle gas turbine units. It was completed in September 1993.

# (iii) Stage Three (1988 - 2001)

Stage three comprised the construction of an ash lagoon, extension of the coal jetty and two 350 MW coal-fired units, which were completed in August 2001.

In March 2002, to meet the increasing demand for electricity, two of the 125 MW oil-fired open cycle gas turbine units (which were completed during stage two of the development of the Lamma Power Station) were converted into a combined-cycle block with the addition of two heat recovery steam generators and one steam turbine, which created an aggregate electricity generation capacity of 345 MW. The oil-fired gas turbines of the combined-cycle block were further converted in February 2008 to use natural gas as the primary fuel to generate electricity.

#### Lamma Extension

In the mid-1990s, we identified the need to build an extension to the Lamma Power Station to meet the expected growth in the demand for electricity in Hong Kong. The Lamma Extension was developed on a 22-hectare reclaimed land adjoining the Lamma Power Station, which is linked by two short bridges. With the aim of improving the environment of Hong Kong in the long term, in particular minimising the emissions resulting from electricity generation, the Lamma Extension was designed to accommodate six gas-fired combined cycle units with a total installed capacity of 1,800 MW. The first 335 MW gas-fired combined cycle unit and associated gas receiving station at the Lamma Extension were commissioned and commenced commercial operations in October 2006.

## 2. Electricity Generation from Coal-Fired, Gas-Fired and Oil-Fired Generating Units

# Coal-Fired Generating Units

Our eight coal-fired generating units are designed for 100% coal firing but are also able to use oil firing for lower output as backup fuel. However, for economic reasons, all eight coal-fired units burn 100% coal under normal operating conditions, with oil firing mainly used for start-up, shutdown or flame stabilisation at low loads.

Coal first enters our coal-fired generating units through the coal bunker, coal feeder, pulverising mill and finally the boiler. Inside the boiler, the burning pulverised fuel generates heat which turns water into steam. The steam moving under high pressure hits the turbine blades to turn the shaft of a three-pressure stage steam turbine. The turbine is connected to the generator which produces electricity. In 2010 and each year thereafter, approximately 70% of the electricity from the Lamma Power Station was generated by the eight coal-fired generating units.

#### Gas-Fired Generating Units

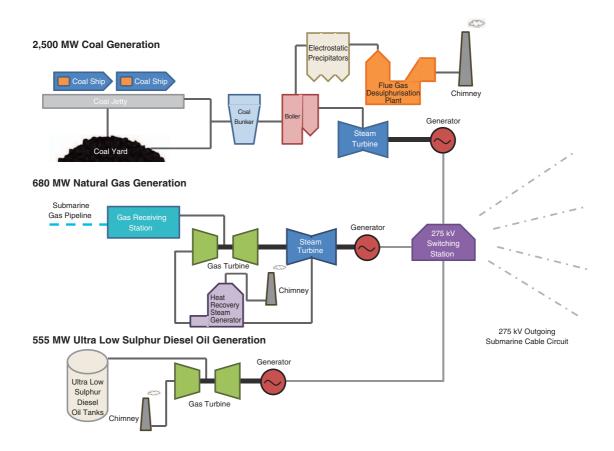
We introduced the use of natural gas as fuel to generate electricity at the Lamma Power Station with our first 335 MW gas-fired combined-cycle unit, which started commercial operations in October 2006. Natural gas-fired electricity generation is environmentally friendly as it emits almost no sulphur dioxide and dust particulates, while nitrogen oxide and carbon dioxide emission are greatly reduced compared to coal-fired generating units. Our 335 MW gas-fired combined-cycle unit is the most efficient generating unit among all the existing generating units at the Lamma Power Station. Our second gas-fired combined-cycled unit, which was converted to use natural gas as the primary fuel in February 2008, has a lower thermal efficiency compared to current modern technology but is still more efficient and outperforms our coal-fired generating units in terms of emissions.

Combustion of the natural gas generates power in the gas turbine. A heat recovery steam generator utilises the waste heat from the flue gas of the gas turbine exhaust to produce steam that drives a steam turbine, which increases the electricity generation capacity and boosts the overall thermal efficiency of the unit. In 2010 and each year thereafter, approximately 30% of the electricity from the Lamma Power Station was generated by the two gas-fired combined cycle units.

# Oil-Fired Generating Units

Ultra low sulphur diesel oil is utilised by our five open cycle oil-fired gas turbine units to generate electricity. Oil is burned in the gas turbine combustion chambers to produce mechanical energy that in turn drives the generator to produce electricity. Even though the open cycle oil-fired gas turbine units have relatively lower thermal efficiency and are significantly more costly to run, their quick starting characteristics and capacity flexibility are instrumental in load peak lopping and responding to contingencies.

A simplified diagram illustrating our electricity generation process at the Lamma Power Station is set out below:



# 3. Renewable Energy Generation

As part of our renewable energy programme, we also generate electricity from wind and solar energy sources. Since 2010, over 1.0 million kWh of renewable electricity was generated and transferred to our distribution network each year. With the completion of the extension of the solar energy system in Lamma Power Station in March 2013, our annual renewable electricity generation capacity has been increased to approximately 2.0 million kWh.

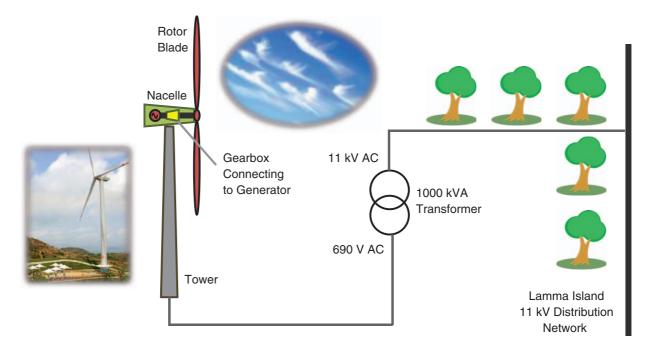
# Wind Power Generation at Lamma Winds



Lamma Winds

Lamma Winds is Hong Kong's first commercial-scale wind turbine station located at Tai Ling on the northern part of Lamma Island. Commissioning and testing of the wind turbine first took place in September 2005 and October 2005, respectively, and full commercial operations commenced in February 2006.

A simplified diagram illustrating the electricity generation process of Lamma Winds is set out below:



Lamma Winds — 800 kW Wind Turbine

The Lamma Winds turbine has a rated power of 800 kW and is designed for a service life of 20 years. The wind turbine uses the profile of the rotor blades to transform the lift forces generated by wind into a rotating motion. The rotor blade shaft drives the generator via a gearbox to produce electricity. The electricity generated is transmitted to the nearby 11 kV power grid via a power cable. Lamma Winds is operated and monitored remotely by the central control rooms at the Lamma Power Station.

From its commencement of commercial operations in February 2006 until 30 September 2013, Lamma Winds has produced approximately 6.9 million kWh of electricity, which has saved approximately 2,500 MT of coal from being used and avoided carbon dioxide emissions of approximately 5,800 MT during the same period.

Subject to the determination of the fuel mix policy for electricity generation in Hong Kong by the Hong Kong Government, which is currently under review, we intend to further expand our wind power generation capacity by developing an offshore wind farm in the Southwest Lamma Channel. For details, see "— Future Expansions — Expansion of Wind Power Generation" below.

# Solar Power Generation

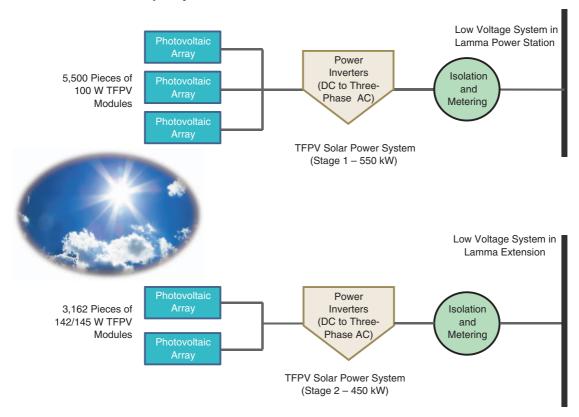


TFPV modules at the Lamma Extension

In July 2010, we completed the installation of a 550 kW commercial-scale solar power system, which is the largest of its kind in Hong Kong and also the first large scale project applying amorphous silicon TFPV panels in Hong Kong. In May 2012, the generating capacity of our solar power system was increased to 934 kW. In March 2013, we completed a further expansion of the solar power system to increase its generating capacity to approximately 1 MW. It is expected that the expanded solar power system will generate over 1.1 million kWh of electricity annually, which is equivalent to reducing 915 tonnes of carbon dioxide emissions or planting approximately 39,000 trees based on the carbon audit guidelines issued by the EPD and EMSD in 2010.

A simplified diagram illustrating the electricity generation process of our TFPV solar power system at the Lamma Power Station is set out below:

# TFPV Solar Power System in Lamma Power Station Total Installed Capacity – 1 MW



The solar power system now comprises 8,662 amorphous silicon TFPV modules situated on rooftops and open areas at various locations at the Lamma Power Station, covering an area of approximately 13,000 sq. m. The power generated from these solar panels is fed directly to our 380/220 V low voltage system via inverters, distribution boards and power cables.

From its initial commissioning in July 2010 to 30 September 2013, our solar power system generated approximately 2.8 million kWh of electricity, which is equivalent to reducing approximately 2,310 MT of carbon dioxide emissions or planting approximately 101,000 trees based on the carbon audit guidelines issued by the EPD and EMSD in 2010.

# 4. Reliability and Monitoring of Electricity Generation

#### Reliability

To ensure the reliability of our electricity supply, we have sufficient reserve capacity in our generating units to serve as a backup in the event of failure of any of our generating units. To maximise the overall thermal efficiency of the Lamma Power Station, we normally operate our 335 MW gas-fired combined cycle unit to its maximum capacity given it is our most efficient unit at Lamma Power Station. This operation mode also enables us to meet our contractual obligation for natural gas off-take and statutory emission caps. We are required by our specified process licence, which is issued by the EPD pursuant to the Air Pollution Control Ordinance and the Air Pollution Control (Specified Process)

Regulations (details of which are set out in "Scheme of Control and Regulatory Overview — Environmental Regulations — The Laws and Regulations Relating to Air Quality Control") for the operation of the Lamma Power Station and is renewable every two years, to prioritise the running of our generating units according to their environmental performances. Our specified process licence also stipulates a set of air emission limits for certain air pollutants from different emission sources during operation as well as the requisite monitoring, reporting and compliance requirements. In the event one of our two gas-fired combined cycle units experiences any failure, our coal-fired units or quick start open cycle gas turbine units are able to make up for any loss in electricity generation.

Furthermore, we have a publicly available specification ("**PAS**") 55 asset management system for our apparatus and an ISO 9001 quality management system for our core business processes, each of which allows us to maintain a high level of reliability in our electricity supply and enables system audit by external auditors on an asset-by-asset basis. The PAS 55 is a specification for the optimised management of physical assets, which was published by the British Standards Institution together with the Institute of Asset Management, and is the first internationally recognised specification for asset management. The ISO 9001 is one of the standards within the range of ISO 9000 international standards that provide guidance to organisations on quality management systems. For further details regarding ISO 9000, see "— Supply of Electricity" below.

During the Track Record Period, we did not experience any power outages which had a material adverse effect on our business and operations.

# Monitoring

The two central control rooms at the Lamma Power Station, which monitor the operation of all of our electricity generating units, are the operational "nerve centres" of the Lamma Power Station. Our computerised systems are installed for automated information display and system control. We also have a specially designed on-line monitoring device which monitors the composition, flow, pressure and temperature of the natural gas delivered through our submarine pipeline from Guangdong LNG Terminal to our gas receiving station at the Lamma Power Station. Gas facilities will be shut down automatically to ensure safety if any gas leakage is detected. Our central control rooms monitor, control and operate the systems 24 hours a day, all year round, and work in conjunction with our systems control centre at Ap Lei Chau to ensure that a safe and reliable power supply is delivered to our customers.

In addition, our generation, transmission and distribution management system is controlled and managed by our system control centre at Ap Lei Chau. Our system control centre operates 24 hours a day all year round to ensure that electricity is delivered to our customers safely, efficiently and reliably and also helps to co-ordinate equipment outages and to handle power system emergencies.

Our system control centre has two major functions:

- "generation and transmission control", which monitors and controls the generation and transmission network, including the three 132 kV submarine cable circuits interconnected with CLP Power through the energy management system ("EMS"); and
- (ii) "distribution control", which monitors and controls the distribution network via the distribution management system ("DMS").

The EMS and DMS employ the Siemens EMPOWER Spectrum systems, which were commissioned in July 1999 with the hardware subsequently upgraded in November 2008. Both the EMS and DMS are built with full redundancy for all hardware to ensure that no function is lost due a single component failure and increase reliability. In addition to the normal supervisory control and data acquisition functions, the EMS and DMS also feature automatic control functions and advanced functions to provide our engineers with real time analytical reports on the status of the power system. The automated routine control also improves our operational efficiency and enables our engineers to locate and isolate faulty apparatus in the distribution network within a short period of time, greatly reducing the time of electricity supply outage.

# B. Transmission and Distribution of Electricity

#### 1. Overview

Our electricity networks can be divided into two major types of network:

- "transmission network", which consists of 275 kV and 132 kV switching stations and transmission lines, is designed to transfer bulk electricity from the Lamma Power Station to zone substations located near load centres; and
- (ii) "distribution network", which consists of 22 kV, 11 kV and 380/220 V distribution substations and circuits, distributes electricity from our zone substations and distribution substations to our customers.

We transmit the electricity that we produce at the Lamma Power Station through ten submarine 275 kV 550 MVA cable circuits to various switching stations on Hong Kong Island. From these 275 kV switching stations, electricity is stepped down through 11 units of 365 MVA and two units of 300 MVA supergrid transformers to 132 kV for secondary transmission. From 275 kV and 132 kV, the voltage is further stepped down to either 22 kV or 11 kV at our 27 zone substations for supply to our customers. For our general low voltage customers, the voltage is stepped down from 22 kV or 11 kV to 380/220 V at the distribution substations, which are mainly located inside our customers' buildings, for supply to our customers' switchboards. There are also some high voltage customers who accept our electricity supply directly at 11 kV. Our transmission and distribution networks also include dedicated traction substations, which supply 525 V direct current to trams, and infeed substations, which supply 33 kV to the mass transit railway network.

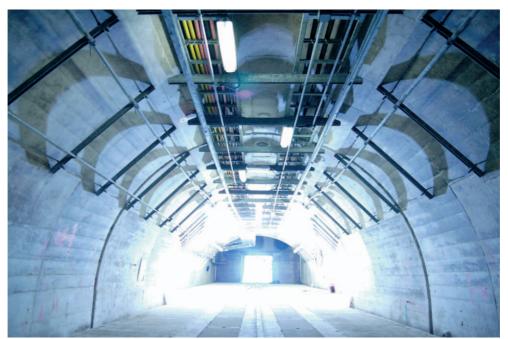
# 2. Transmission and Distribution Lines

As at 30 September 2013, our transmission and distribution networks consisted of the following circuits:

Type of Circuit	Approximate Length (in km)
275 kV cable (underground and submarine)	168.4
132 kV overhead line	25.4
132 kV cable (underground and submarine)	264.5
22 kV cable	472.1
11 kV cable	3,035.4
380/220 V cable	2,081.5

Over the last two decades, we have been gradually retiring the use of our existing 132 kV overhead lines, which were constructed in the 1960s, to improve our system reliability and to eliminate their visual impact. It is our long-term strategy to phase out the remaining overhead lines. Since our transmission and distribution networks are almost entirely underground, this enhances the reliability of our electricity supply even under adverse weather conditions, such as typhoons.

In addition to burying our transmission lines directly underground, we have also built six dedicated cable tunnels to house our transmission lines. We were the first power company in Hong Kong to build cable tunnels in our transmission network. In addition to reducing the risk of cable damage under adverse weather or other contingency conditions, which enhances the reliability of our electricity supply, the use of underground cables and cable tunnels also eliminate obstruction to land development, thereby helping to preserve the environment. Furthermore, given that the cable routes in our cable tunnels are more direct, the cable lengths of our transmission lines are shorter, which results in greater cost effectiveness, and reduces the risk of third party damage to our transmission lines under public roads. Despite the relatively higher initial construction costs for cable tunnels, cable tunnels make provision for the installation of future circuits. In addition, the benefit of our cable tunnels has been proven in recent years as we have been able to install new 22 kV and 275 kV cable circuits in the two cable tunnels, which were completed in 1988 and 1993, respectively, with minimal disruption to public traffic, much lower trench excavation cost and shorter cable route lengths. It is our long-term strategy to install progressively additional transmission and distribution cables through our cable tunnels to improve the robustness of our transmission and distribution networks and thereby our supply reliability.



Wah Fu-Bowen Cable Tunnel, the first cable tunnel in Hong Kong

# 3. Monitoring

Our transmission and distribution networks, which comprised 24 switching stations, 27 zone substations and 3,770 distribution substations as at 30 September 2013, are monitored and controlled from our system control centre at Ap Lei Chau 24 hours a day. Our system control centre balances generation and loads in real time and ensures reliable operations of our generation, transmission and distribution systems. All our substations are equipped with remote control and monitoring facilities so that

the operation of switchgear and auxiliary equipment can be activated remotely from our system control centre. The condition of our substations is also continuously monitored from our system control centre. In the event of any failure of our transmission or distribution lines, restoration of electricity supply is achieved remotely from the system control centre and is normally carried out within a few minutes of a supply interruption. If electricity supply is unable to be remotely restored at our system control centre, emergency repair teams are despatched to the scene from our operations department, which is operated 24 hours a day, to respond to our customers' calls on power interruptions. On average, our response time in urban areas is less than 28 minutes.

# 4. Improvements and Protection to Transmission and Distribution Networks

We conduct regular network reliability and operational reviews to further enhance the supply reliability of our transmission and distribution networks. As highlighted in "— Our Operations — Generation of Electricity — Reliability and Monitoring of Electricity Generation", we have a PAS 55 asset management system to ensure that our assets are continuously enhanced to maintain our supply reliability. We deploy advanced diagnostic techniques to identify and replace weak components in our transmission and distribution networks, enabling us to avert potential cable faults that might adversely affect supply. Furthermore, all of our switching stations, zone substations and distribution substations are equipped with monitoring facilities and alarms as well as automated isolation mechanisms for faulty equipment to ensure that they are adequately protected.

The Electricity Supply Lines (Protection) Regulation (Chapter 406H of the Laws of Hong Kong) (the "ESLP Regulation"), further details of which are set out in "Scheme of Control and Regulatory Overview", regulates certain works which are carried out in the vicinity of our underground electricity cables and overhead electricity lines with the aim of preventing electrical accidents and power interruption. The ESLP Regulation requires that, among other things, any person who carries out certain works in the vicinity of underground electricity cables or overhead electricity lines must take reasonable steps and measures to prevent the occurrence of an electrical accident or an interruption to the supply of electricity arising from those works.

#### C. Supply of Electricity

We have maintained an Electricity Supply Reliability Rating of above 99.999% in each year since 1997. We believe this Electricity Supply Reliability Rating is the result of the good design, prudent operation and effective maintenance of our generation, transmission and distribution systems carried out by our experienced and dedicated workforce ranging from our senior management to frontline employees.

In addition, our transmission networks are connected by three 132 kV cross-harbour interconnector submarine cable circuits to the transmission networks of CLP Power, which supplies electricity to Kowloon, the New Territories, Lantau, Cheung Chau and most outlying islands. The interconnection of our transmission network with that of CLP Power allows us and CLP Power to provide emergency support to each other in the event of generator failure or other system disturbance, thereby reducing the risk of loss of electricity supply to customers.

We were the first in the Hong Kong electricity supply industry to obtain ISO quality certification for our operations and services from the Hong Kong Quality Assurance Agency. We first applied for the ISO quality certification in 1995 and as at the Latest Practicable Date, we have obtained a total of nine ISO 9001 certificates for our three major divisions (transmission and distribution, generation and projects (construction)). The ISO 9001 is an international standard on quality system, which provides guidance to organisations who want to ensure that their products and services consistently meet customers' requirements and that quality is consistently improved. We believe that our ISO 9001 certification demonstrates our continuous commitment to quality services and aim to continue our pursuit for further improvement in quality management.

We have also obtained two Hong Kong Laboratory Accreditation Scheme ("HOKLAS") ISO 17025 certificates (chemical testing and environmental testing) for our chemistry laboratory at the Lamma Power Station and one HOKLAS certificate for our standards laboratory under our transmission and distribution division. The HOKLAS accreditation is an official recognition meeting international standards of the quality management system set up to assure competent testing and calibration and to upgrade the standard of testing and management of Hong Kong laboratories.

#### **COMPETITION**

There are currently only two suppliers of electricity in Hong Kong, being us and CLP Power. Although the relevant scheme of control agreements entered into by us and CLP Power separately with the Hong Kong Government do not define a licensed area for our operations or the operations of CLP Power, in practice, we are the only supplier of electricity to customers on Hong Kong Island and Lamma Island while CLP Power is the only supplier of electricity to customers in Kowloon, the New Territories, Lantau and other outlying islands.

There are a number of unique local factors which make it difficult to introduce competition to the Hong Kong electricity market. They include an established customer base within a developed market, the lack of indigenous fuel supply, the scarcity of suitable land in Hong Kong to support the establishment of a new power utility company, the difficulties in building new transmission and distribution networks in a highly urbanised and congested city with existing underground utilities, as well as the significant upfront investment that would be required to build a competitive and efficient customer service infrastructure to participate in retail competition.

Furthermore, under the terms of the Scheme of Control, the Hong Kong Government will take into account all relevant factors including the availability of new reliable and environmentally sound supply sources, safety, reliability and efficiency as well as compatibility with the environmental and economic needs of the community before it implements any changes to the electricity supply regulatory framework. The Scheme of Control also provides that in the period prior to 1 January 2016, the Hong Kong Government will discuss with us regarding the market readiness, potential future changes to the electricity supply regulatory framework and transition issues.

For further details regarding the electricity industry in Hong Kong, see "Industry Overview".

#### CAPITAL EXPENDITURE IN THE 2014-2018 DEVELOPMENT PLAN

A capital expenditure plan setting out our future levels of capital expenditure has been set out in the 2014-2018 Development Plan, which was approved by the Executive Council on 10 December 2013. The 2014-2018 Development Plan provides for an estimated total investment of approximately HK\$13.0 billion in new and existing capital projects over its five year term. Our approved capital expenditure under the 2014-2018 Development Plan includes investments in our power generation system (approximately HK\$6.1 billion, inclusive of the estimated HK\$3.0 billion in relation to the L10 Project), our transmission and distribution networks (approximately HK\$5.3 billion) and our customer and corporate services development (approximately HK\$1.6 billion). This estimated total capital expenditure of approximately HK\$13.0 billion represents an increase of approximately 5.7% over the approved total capital expenditure of approximately HK\$12.3 billion under the 2009-2013 Development Plan, and is expected to be funded by cash from our operating activities, bank loans and/or other debt markets fund raising activities. The estimated total capital expenditure as approved under the 2014-2018 Development Plan represents our continued commitment to provide a safe and reliable electricity supply to our customers.

#### **FUTURE EXPANSION**

#### **Expansion of Wind Power Generation**

To further expand our renewable energy generating capacity, we submitted a proposal to the Hong Kong Government for the development of an offshore wind farm in the Southwest Lamma Channel in February 2010. In May 2010, the Hong Kong Government approved the environmental impact assessment report for our proposed offshore wind farm and an environmental permit for the project was issued in June 2010.

Full year wind measurements for the proposed offshore wind farm were completed in February 2013 and a project feasibility study was submitted to the Hong Kong Government for approval in April 2013. Results from the wind measurements have indicated better-than-expected power generation capacity. Subject to the Hong Kong Government's approval, we plan to conduct a further study to investigate the soil conditions at the proposed site and to ascertain the seabed conditions to facilitate the conceptual design of the wind turbine foundation.

The proposed offshore wind farm is currently intended to be located at an approximately 600-hectare site featuring up to 33 wind turbines, each with a generation capacity of up to approximately 3.0 MW to 3.6 MW. It is expected that the offshore wind farm will have a total generating capacity of up to approximately 100 MW and an annual production of up to approximately 175 million kWh of electricity, which will represent approximately 1% to 2% of our annual electricity output, and is capable of meeting electricity demand of approximately 50,000 households on Hong Kong Island. The operation of the proposed offshore wind farm is expected to save approximately 62,000 tonnes of coal from being used and avoid approximately 150,000 tonnes of carbon dioxide emissions each year. The outcome of our proposed offshore wind farm is subject to the determination of the fuel mix policy for electricity generation in Hong Kong by the Hong Kong Government, which is currently under review.

# **Expansion of Gas-Fired Generation**

Pursuant to our vision to further expand our generation capacity for low-emission energy and sustain and/or improve our supply reliability, we intend to increase our gas-fired generation. Gas-fired generation is more fuel-efficient and produces lower levels of emissions than coal-fired generation. The useful lives of the generating units have been established under the Scheme of Control after consulting

the original equipment manufacturer. Subject to the approval of the Hong Kong Government, we plan to retire at least three coal-fired units and one converted gas-fired combined cycle unit which will reach the end of their useful lives within the next five to ten years. The Hong Kong Government is currently reviewing the optimum arrangements and the need to continue operating any of these ageing units after the end of their useful lives before the Hong Kong Government determines the fuel mix policy for electricity generation in Hong Kong. The capacity of the Lamma Extension to accommodate additional gas-fired combined cycle units will provide us with the potential to increase our gas-fired generation progressively to reduce emissions and our carbon footprint in response to the Hong Kong Government's fuel mix policy, which is currently under review, and the requirements of the Air Pollution Control Ordinance. The planned retirement of the three coal-fired units and the one converted gas-fired combined cycle unit will not create any material adverse impact on the Permitted Return as the four units are approaching the end of their depreciation period along with their useful lives. In this regard, the respective values of the units are close to zero contribution in terms of the overall value of the Average Net Fixed Assets when calculating the Permitted Return.

Although the proposed expansion of our gas-fired generation capacity will not require an expansion of the current transmission capacity of our submarine pipeline from the Guangdong LNG Terminal to the Lamma Power Station, it would take approximately one year for the supply of additional natural gas to be arranged to meet the demand of our proposed expansion of our gas-fired generation capacity. In the past few years, we have been approached by various PRC and international gas suppliers soliciting our interest for new gas supply. Given that the Hong Kong Government is currently reviewing the fuel mix policy for electricity generation in Hong Kong, other than the gas supply contracts that we have in place with CNOOC Gas and Guangdong Dapeng, we are not in a position to negotiate with any gas suppliers on the firm requirements for our future gas supply pending the review and approval of the fuel mix policy for electricity generation in Hong Kong by the Hong Kong Government. For further details regarding our current gas supply contracts, see "— Fuel Supply — Natural Gas" below.

# **FUEL SUPPLY**

#### A. Coal

The primary fuel for electricity generation at the Lamma Power Station is coal, which is sourced predominantly from Indonesia, Australia and Russia. Since 2010, approximately 70% of the electricity generated by us was produced from generating units burning coal. Our coal supplies are delivered directly by vessels from overseas ports to our two jetties located at the Lamma Power Station. These two jetties, which are designed to accommodate up to 100,000 DWT coal vessels, and a dedicated navigation channel facilitate the delivery of coal from overseas to the Lamma Power Station. Coal is unloaded from the coal vessels via a conveyer belt system and is either delivered to the boiler house for immediate consumption or delivered and stored in the coal yard (north and south side) of the Lamma Power Station.

We purchased approximately 2.7 million, 3.2 million and 2.3 million MT of coal for FY2010, FY2011, FY2012 and 9M2013, respectively. We purchase coal through a competitive sourcing and evaluation process, which focuses on the coal prices, environmental health and safety performance and quality management of qualified coal suppliers, among which Tiger Energy Trading Pte. Ltd. ("Tiger Energy Trading"), a wholly-owned subsidiary of Sakari Resources Limited, and Banpu Public Company Limited ("Banpu"), a company listed on The Stock Exchange of Thailand, are our two major suppliers of coal. Both Tiger Energy Trading and Banpu are independent third parties of the Company. Tiger Energy

Trading is our largest supplier of coal during the Track Record Period, having supplied approximately 0.7 million, 1.0 million, 1.3 million and 0.9 million MT of coal, which represents approximately 26.9%, 32.2%, 39.3% and 37.3% of our aggregate coal purchased for FY2010, FY2011, FY2012 and 9M2013, respectively.

Our coal supply contracts with each of Tiger Energy Trading and Banpu generally range from approximately four months to three years and are for a fixed number of shipments of coal during the contract period. The duration of our coal supply contracts may be extended by mutual agreement between us and each of Tiger Energy Trading or Banpu. Each of our coal supply contracts sets out the tonnage and quality of coal to be supplied for each shipment. The price of our coal is based on the market price of the particular type of coal supplied to us and is subject to adjustment depending on the quality of the coal which we receive. We are generally required to pay for our coal by telegraphic transfer within 14 banking days from the day of receipt of the provisional invoice from our suppliers.

#### B. Natural Gas

We started using natural gas in our fuel mix from 2006 onwards. Since 2010, approximately 30% of the electricity generated per year by us was produced from generating units burning natural gas. The natural gas is supplied mainly from Australia and Qatar in liquefied form and re-gasified at the Guangdong LNG Terminal, which is operated by Guangdong Dapeng, a joint venture in which PAH owns 3% interest as at 30 September 2013. An approximately 92 km submarine pipeline, which is 20 inches in diameter and is designed to operate at a pressure of between 80 to 90 bars, is used to transport the re-gasified natural gas from the Guangdong LNG Terminal to the Lamma Power Station, where it is filtered, heated and pressure-adjusted at the gas receiving station before being delivered to our gas-fired combined cycle units for electricity generation. The submarine pipeline commenced commercial operations in September 2006 and is wholly-owned by us.

The natural gas that we use is purchased by PAH and is supplied under long-term take-or-pay Gas Supply Contracts with two suppliers, CNOOC Gas, a wholly-owned subsidiary of China National Offshore Oil Corporation, and Guangdong Dapeng, a joint venture in which CNOOC Gas also owns 33% interest as at 30 September 2013. Both CNOOC Gas and Guangdong Dapeng are independent third parties of the Company. CNOOC Gas and Guangdong Dapeng are our only suppliers of natural gas. CNOOC Gas supplied approximately 15.9 million, 15.4 million, 15.9 million and 11.5 million GJ of natural gas, which represents approximately 50.4%, 49.1%, 50.3% and 52.6% of our aggregate natural gas purchased for FY2010, FY2011, FY2012 and 9M2013, respectively, whereas Guangdong Dapeng supplied approximately 15.7 million, 16.0 million, 15.7 million and 10.4 million GJ of natural gas, which represents approximately 49.6%, 50.9%, 49.7% and 47.4% of our aggregate natural gas purchased for the same periods, respectively.

Take-or-pay provisions are standard in gas sales contracts and provide that PAH must pay for specified quantities of natural gas annually, even if we are unable to take up such quantities. The CNOOC Gas Supply Contract with CNOOC Gas is for a term of five years ending on 31 December 2014 (renewable for another five years) whereas the Dapeng Gas Supply Contract with Guangdong Dapeng is for a term of 25 years ending on 27 September 2031 (renewable for a period of up to 12 months to allow for any outstanding make up gas (that is the amount of natural gas to make up for the shortfall in the delivery of the prescribed quantity of natural gas for the relevant contract year) to be recovered from Guangdong Dapeng). Both CNOOC Gas and Guangdong Dapeng issue an invoice for the sale of natural gas on a bi-weekly basis and settlement is made by telegraphic transfer within ten working days after each two week invoice period.

With effect from 8 December 2013, the CNOOC Gas Supply Contract was novated by PAH to HEC pursuant to the novation deed entered into between PAH, HEC and CNOOC Gas dated 22 November 2013. As a result, the Group will purchase natural gas from CNOOC Gas directly pursuant to the CNOOC Gas Supply Contract. After the Listing, PAH will continue to purchase natural gas from Guangdong Dapeng pursuant to the Dapeng Gas Supply Contract and will meet and defray all costs and expenses payable under the Dapeng Gas Supply Contract. The natural gas purchased by PAH from Guangdong Dapeng pursuant to the Dapeng Gas Supply Contract will then be on-sold to HEC pursuant to the Gas On-sale Agreement, further details of which are set out in "Connected Transactions — Non-exempt Continuing Connected Transactions — On-sale of Gas from PAH to HEC". It is the intention of PAH and us that, once the consent of Guangdong Dapeng is obtained and the novation deed between PAH, the Group and Guangdong Dapeng becomes effective, the Dapeng Gas Supply Contract will be novated by PAH to the Group.

# C. Ultra Low Sulphur Diesel Oil

Ultra low sulphur diesel oil is shipped by barges to our jetties at the Lamma Power Station. Upon arrival, the ultra low sulphur diesel oil is pumped through the pipelines for storage at the oil tank farm at the Lamma Power Station. We purchased approximately 43,534, 13,331, 16,151 and 1,620 MT of ultra low sulphur diesel oil for FY2010, FY2011, FY2012 and 9M2013, respectively. We purchased ultra low sulphur diesel oil, through tender, from two suppliers, Shell Hong Kong Limited ("Shell") and Sinopec (Hong Kong) Petroleum Company Limited ("Sinopec"). Both Shell and Sinopec are independent third parties of the Company. Sinopec is our largest supplier of ultra low sulphur diesel oil during the Track Record Period, having supplied approximately 7,538, 13,331, 16,151 and 1,620 MT of ultra low sulphur diesel oil, which represents approximately 17.3%, 100.0%, 100.0% and 100.0% of our aggregate ultra low sulphur diesel oil purchased for FY2010, FY2011, FY2012 and 9M2013, respectively. Our oil supply contracts with each of Shell and Sinopec are for a period of two years, which upon expiry are subject to tender. We are generally required to pay for our ultra low sulphur diesel oil within 30 calendar days against certified invoices from our suppliers provided that the ultra low sulphur diesel oil meets our requirements.

We have on average approximately six weeks of fuel reserves (comprising coal, natural gas and ultra low sulphur diesel oil) in order to prepare ourselves for any potential short-term shortages in our fuel supply. There was no material disruption in our coal, natural gas and ultra low sulphur diesel oil supplies during the Track Record Period. The aggregate purchases from our five largest suppliers accounted approximately 85.3%, 81.9%, 85.0% and 84.9% of our aggregate purchases for FY2010, FY2011, FY2012 and 9M2013, respectively. Purchases from our largest supplier represented approximately 39.8%, 38.6%, 41.3% and 44.7% of our aggregate purchases during the same periods, respectively.

None of the Directors, their associates or any Holders of Share Stapled Units (which to the knowledge of the Directors own more than 5% of the Share Stapled Units) has any interest in any of our five largest suppliers during the Track Record Period.

#### REPAIR AND MAINTENANCE

Under the framework of PAS 55 for asset management, we follow a prudent and cost-effective system in carrying out our maintenance and repair work. We have adopted on-line plant condition monitoring and predictive maintenance to enhance the availability of our generation plants and transmission and distribution equipment for the reliable supply of electricity to our customers. In addition to factory training and direct participation in plant construction, we provide continual refreshment training to our operation and maintenance teams. In addition, we regularly arrange experience sharing and bilateral visits to other owners/users of plant/equipment to advance the technical knowledge and skills of our operation and maintenance teams. We carry out repair and maintenance work with in-house resources led by our own engineers and technicians with occasional support from supervisors of original equipment manufacturers. For cost effectiveness, minor jobs and supply of low skill labours are outsourced where appropriate. To ensure speedy restoration to service after repairs and reduce equipment down time, we maintain sufficient inventory of certain spare equipment and parts for our power station and network.

The aggregate costs of repairs and maintenance expenses of the Lamma Power Station were approximately HK\$36.8 million, HK\$45.0 million, HK\$48.3 million and HK\$24.0 million for FY2010, FY2011, FY2012 and 9M2013, respectively, which represent approximately 1.3%, 1.6%, 1.6% and 1.0% of our aggregate operating expenses during the same periods, respectively.

#### **INFORMATION TECHNOLOGY**

Our information technology team is responsible for developing and maintaining information technology systems to support our business operations. Our computer system covers the generation, transmission and distribution management system, which is controlled and managed by our system control centre at Ap Lei Chau. For details of our system control centre, see "— Our Operations — Reliability and Monitoring of Electricity Generation — Monitoring" above.

Cyber security of our information technology systems is important to us. We conduct a biennial review on the protection of our information technology system to ensure that they meet the requirements of international standards, in particular the standards prescribed by the North American Electric Reliability Corporation, which is the electric reliability organisation for North America.

# **CUSTOMERS**

As at 30 September 2013, we had approximately 568,000 registered customers on Hong Kong Island and Lamma Island. For 9M2013, we sold an aggregate of 8,315 million kWh of electricity, with commercial, domestic and industrial customers accounting for approximately 6,125 million kWh, 1,944 million kWh and 246 million kWh, which represents approximately 73.7%, 23.4% and 2.9% of our aggregate electricity sold, respectively.

We charge three different tariff rates for our domestic, commercial and industrial customers:

- (i) "domestic tariff", which applies to our domestic customers, is charged in unit blocks and is based on the consumption of units of electricity (in kWh) in a month;
- (ii) "commercial, industrial and miscellaneous tariff", which applies to our commercial and industrial customers, is charged in unit blocks and is based on the consumption of units of electricity (in kWh) in a month; and

(iii) "maximum demand tariff", which is only applicable to our commercial and industrial customers, is charged according to demand charge and energy charge. The demand charge is based on the maximum demand in kVA, while the energy charge depends on the consumption of units of electricity (in kWh) in a month. Maximum demand tariff is beneficial to electrical installations with a high load factor, which applies to our customers who consume a high level of electricity over a long period of time with a steady load.

For each tariff rate, we charge our customers a minimum monthly charge. We offer a concessionary tariff scheme for our elderly, disabled, single-parent family and unemployed domestic customers whereby they are entitled to receive a 60% discount for the first 200 units of electricity consumed in a month plus exemption from the payment of a security deposit and minimum monthly charge for electricity. Furthermore, to encourage energy conservation, we offer a "super saver discount" of 5% on electricity bills to our domestic customers who do not use more than 100 units of electricity in a month.

The aggregate turnover attributable to our five largest customers was less than 30% of our aggregate turnover for FY2010, FY2011, FY2012 and 9M2013, respectively.

The following table sets out the units sold and the average net tariff of different categories of customer during the Track Record Period.

_	FY2010	FY2011	FY2012	9M2013
	(Millions of kWh)			
Units sold				
Commercial	8,124	8,081	8,164	6,125
Domestic	2,472	2,482	2,541	1,944
Industrial	337	334	331	246
Total	10,933	10,897	11,036	8,315
Annual increase/(decrease) (%)	0.1	(0.3)	1.3	N/A
_	FY2010	FY2011	FY2012	9M2013
	(Hong Kong cents per kWh)			
Average net tariff				
Basic tariff	94.5	93.0	93.9	94.6
Fuel clause charge	25.4	30.2	37.0	40.2
Rate Reduction Rebate <sup>(1)</sup>	(0.1)	(0.1)		
Net tariff	119.8	<u>123.1</u>	130.9	<u>134.8</u>

Note:

We strive to provide quality service to our customers. Initiatives designed to help us to achieve this objective include the setting up of a customer liaison group in 1992 as a channel for the exchange of views between us and our customers, the provision of concessionary tariff schemes for the elderly and the under-privileged, the provision of bills and brochures in four common Braille languages, a text-based

<sup>(1)</sup> Rate reduction rebate is only applicable from January 2010 to May 2011.

homepage and audio guides for the visually-impaired, short message system enquiry service for the hearing-impaired and the publication of services pamphlets in various languages. Our customer emergency services centre at our system control centre at Ap Lei Chau provides a 24 hour enquiry service for our customers in the event of an emergency outage in our electricity supply.

In order to facilitate the settlement of customer bills, we offer a variety of payment methods, including autopay, payment by various electronic means, by mail and in person at our customer centre(s) or our pay-in centre in Central or any branches of the Hong Kong Post Office, 7-Eleven, Circle K or VanGo convenience stores or CRVanguard superstores/shops.

We recognise the importance of using internet technology to connect with our customers, and since October 1999, our customers have been able to review account information and opt for monthly electronic bills via the internet through our account-on-line service. In 2005, we relaunched our website and introduced "Electricity @ Home" and "Electricity @ Office" to enable our customers to conduct an energy survey to estimate their monthly and annual electricity consumption and the annual savings if energy efficient appliances are used. As at 30 September 2013, we have published a total of 18 service standards which cover core customer service activities and have obtained nine ISO 9001 certifications for customer related services and major business processes which reflect our dedication to providing quality service.

During the Track Record Period, we have won various customer relationship excellence awards, including the following:

- "Public Service of the Year (Public Utility)" award for 2010, 2011 and 2012, which was awarded by the Asia Pacific Customer Service Consortium;
- "Contact Center of the Year (Under 50 Seats)" award for 2010, which was awarded by the Asia Pacific Customer Service Consortium;
- "Inbound Contact Centre of the Year (Under 50 Seats) Silver" award for 2010 and 2011 and "Inbound Contact Centre of the Year (Under 50 Seats) — Gold" award for 2012, which was awarded by the Hong Kong Call Centre Association;
- "Service Retailers of the Year Retail (Services) Category" award for 2011, 2012 and 2013, which was awarded by the Hong Kong Retail Management Association;
- "Best Practice Award in the Customer Experience Management Category" for 2012, which
  was awarded by the Best Practice Management Group;
- "Best SME's Partner" award for 2011, 2012 and 2013, which was awarded by the Hong Kong General Chamber of Small and Medium Business; and
- "Hong Kong Star Brands Award (Enterprise)" for 2013, which was awarded by the Hong Kong Small and Medium Enterprises Association, Hong Kong Trade Development Council and Hong Kong Productivity Council.

#### **MARKETING**

During the Track Record Period, we conducted activities to encourage the public to switch to electric cooking, which has many benefits such as providing a quiet, clean and cooler cooking environment. Our home management centre provides cooking and special interest courses to students and the public to promote electric living as well as supporting various events such as the Marathon Cooking Contest and the "Little Master Chef" Cooking Contest, which allows students and the public to experience the benefits and enjoyment of electric cooking.

#### **EMPLOYEES**

We endeavour to encourage a community spirit within our employees that thrives on mutual respect and equal opportunities. In particular, we have an equal opportunities policy that ensures zero tolerance of any discrimination, harassment, vilification or victimisation in the workplace. We have a diverse workforce and all of our employees are hired according to qualifications, capabilities and areas of expertise.

We have a longstanding policy of seeking to maintain an efficient workforce while continually reviewing our manpower requirements and improving employee productivity. We base our human resources strategy and policy on five principles — Synergy, Holistic Development, Ideal Workplace, Nurturing Future Leadership and Excellence, so as to encourage every employee to "SHINE". We aspire to provide our employees with the ideal workplace and our sustained investment in employee relations is reflected in the years of service of our employees. As at 30 September 2013, our employees have an average tenure of 20 years with us.

We believe that honesty, integrity and fairplay are important assets in business. In order to ensure that all our employees act in the best interests of the Company at all times and that our reputation is not tarnished by dishonest acts or corrupt practices, we require all our employees to attend a mandatory "Code of Conduct" training as part of the orientation process. For those employees who work closely with our customers and suppliers, they would go through refresher training on a regular basis.

As at 30 September 2013, we had a total of 1,691 full-time employees, who are all based in Hong Kong. The table below sets out the breakdown of our full-time employees by category as at 30 September 2013:

Category	Number
Corporate Development	41
Generation	605
Group Commercial	84
Group Finance	11
Human Resources and Administration	38
Information Technology	124
Projects	128
Public Affairs	8
System Control	35
Transmission and Distribution	617
Total	1,691

As at the Latest Practicable Date, certain employees of the PAH Group, who were engaged in the support and operations of HEC, have been transferred, or are expected to be transferred as soon as practicable, to HEC. As at the Latest Practicable Date, 133 of such employees had their employment contracts transferred to HEC in accordance with Hong Kong employment laws.

We place importance on our collaborative approach to employee relations. Within HEC, we have established seven joint consultation panels that act as important platforms to impart our employees' views while also acting as a medium for us to convey our policies to employees. As at 30 September 2013, the joint consultation panels comprise 73 elected members from all levels of our workforce (excluding management staff) and meet regularly with our management. We also engage in dialogue with trade unions upon their request.

We enter into individual employment contracts with our employees to cover matters such as wages, employee benefits, confidentiality and grounds for termination. We set targets for our employees based on their position and department and periodically review their performance. The results of such reviews are used in their salary reviews, bonus awards and promotions appraisals. Our employee remuneration package typically comprises one or more of the following elements: basic salary, discretionary annual bonus, incentive payments payable upon the attainment of certain annual goals, contributions to the Mandatory Provident Fund or Occupational Retirement Scheme Ordinance plans and electricity allowances on Hong Kong Island and Lamma Island which are commensurate with the seniority and years of service of our employees. The relative weight of each of these elements in an employee's remuneration package will depend on his or her seniority and department.

Our aggregate employee costs were approximately HK\$383.1 million, HK\$388.9 million, HK\$432.9 million and HK\$374.3 million for FY2010, FY2011, FY2012 and 9M2013, respectively, which represent approximately 13.2%, 13.5%, 14.4% and 16.0% of our aggregate operating expenses during the same periods, respectively.

During the Track Record Period, we did not experience any strikes, work stoppages, labour disputes or actions which had a material adverse effect on our business and operations.

# **Training and Development**

Training and development is an essential part of the working life of our employees regardless of seniority. One of our principles is to inculcate strategic thinking and management principles among our employees to encourage personal growth. For FY2012, each of our employees spent an average of approximately 40 hours in training relating to both professional and personal development while trainees received in total approximately 2,552 hours of training.

#### **INSURANCE**

We maintain insurance in respect of a number of risks and which are in line with what is normal in our industry. The levels of coverage are assessed relative to our assessment of the risk exposure.

As at the Latest Practicable Date, we had, among others, the following insurance coverage: (i) industrial all risks insurance (which covers physical loss and damage to infrastructure, plant and equipment associated with the generation, transmission and distribution of electricity and non-power generating assets such as data processing equipment), (ii) pollution insurance (which covers loss arising from contamination as a result of damaged submarine cables), (iii) third party liability insurance and

terrorism insurance and (iv) other insurance policies which are customary for our industry and/or required by law. Our insurance policies are purchased from a number of insurers through our insurance brokers, who help to determine which insurance packages provide the appropriate coverage and pricing for us.

There are, however, certain types of risks that are not covered fully or at all by these insurance policies, including, among other things, acts of war, natural disasters, civil commotion and asbestos related claims. The Group will, in the future, obtain additional insurance policies as and when required.

On 1 October 2012, a passenger catamaran collided with one of our passenger launches near Lamma Island. The collision resulted in loss of life and injuries. As at the Latest Practicable Date, claims have been made, and we expect further claims to be made, against us in respect of which we have insurance policies taken out for the passenger launch, our employees and other passengers. Other than the claims relating to this collision, there have been no major insurance claims made by us under such policies during the Track Record Period. The Directors do not expect these claims to have a material adverse effect on our financial condition as a whole. For further details regarding the collision incident, see "— Legal and Regulatory Matters — Litigation, Claims and Arbitration" below.

#### **PROPERTIES**

As at 30 September 2013, HEC was the registered owner of 67 properties, which are all located in either Hong Kong Island or Lamma Island. Our properties are primarily used for power generation or as substations or for office, residential or commercial purposes. As at 30 September 2013, the 67 properties, of which HEC was the registered owner, comprise the following:

- two properties on which the Lamma Power Station and the Lamma Extension were situated (but excluding the properties on which the Lamma Winds and the pulverised fuel ash lagoon of the Lamma Power Station were situated as they were leased or licensed from the Hong Kong Government);
- (ii) 43 properties which were used as substations;
- (iii) two properties which were used as a substation and as office premises, respectively;
- (iv) five properties which were used as commercial premises;
- (v) four properties which were used as residential premises; and
- (vi) 11 properties which were used for other power related purposes.

One residential property and three commercial properties were transferred to the PAH Group on 21 October 2013 as they were no longer required for our Electricity Business. Currently, the permitted usage of most of HEC's properties are for electricity related purposes only.

The Directors confirm that, as at 30 September 2013, no single property interest which forms part of our non-property activities had a carrying amount (within the meaning of the Companies Ordinance (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Chapter 32L of the laws of Hong Kong) (the "Exemption Notice") and Chapter 5 of the Listing Rules) of 15% or more of our total assets.

In light of the above, pursuant to Section 6(2) of the Exemption Notice, this prospectus is exempted from compliance with the requirements of Section 342(1)(b) of the Companies Ordinance in relation to paragraph 34(2) of the Third Schedule to the Companies Ordinance, which requires a valuation report to be prepared in respect of all interests in land or buildings. Pursuant to Chapter 5 of the Listing Rules, valuations of our properties are not required to be included in this prospectus.

As a power utility in Hong Kong, we are given permission under the Land (Miscellaneous Provisions) Ordinance (Chapter 28 of the Laws of Hong Kong), subject to the approval of the Hong Kong Government, for the purpose of laying our transmission lines and distribution lines in and over unleased land in Hong Kong. Other rights for our cable routes, including the associated structures such as tunnels and landing points, are granted either in the form of license, wayleave or short term tenancy with the Lands Department of the Hong Kong Government.

#### INTELLECTUAL PROPERTY

As at the Latest Practicable Date, we had 14 trademarks and 23 domain names, which are registered in HEC's name and are or may be material to our business. The "Hongkong Electric & Device" and "Hongkong Electric" trademarks have been duly registered by HEC in Hong Kong. As at the Latest Practicable Date, one patent as set out in "Appendix VII — Statutory and General Information — Further Information about the Business — Intellectual Property" has been assigned to HEC by PAH pursuant to an assignment agreement on 31 October 2013. An application has been made with the Patents Registry in Hong Kong on 11 November 2013 for the registration of such assignment.

As at the Latest Practicable Date, we have not been engaged in litigation or legal proceedings relating to the violation of intellectual property rights. For further details of our intellectual property, see "Appendix VII — Statutory and General Information — Further Information about the Business — Intellectual Property".

#### **ENVIRONMENTAL MATTERS**

As a major utility company in Hong Kong, we support the Hong Kong Government's proposal to reduce greenhouse gas emissions as set out in the Hong Kong Government's public consultation document, "Hong Kong's Climate Change Strategy and Action Agenda", which was published in September 2010 and recognise our responsibility to preserve the environment of Hong Kong. As at the Latest Practicable Date, we have obtained three ISO 14001 certificates and one ISO 50001 certificate (for the Administration Building at Lamma Power Station) from the Hong Kong Quality Assurance Agency. ISO 14001 is one of the standards within the range of ISO 14000 international standards that provide guidance to organisations on environmental management, which cover, among other things, the minimisation of business operations or processes that negatively affect the environment and the continuous improvement of environmental performance. ISO 50001, an international energy management standard, specifies the requirements for organisations to establish an energy management system to enhance their overall energy performance, including energy efficiency, use and consumption.

We are committed to supporting sustainable development, and one of the long-term goals of the Lamma Power Station is green and clean electricity generation. Approximately 30% of Lamma Power Station's power output for 9M2013 was generated from natural gas, which is environmentally friendly as it emits almost no sulphur dioxide and dust particulates, while nitrogen oxide and carbon dioxide emissions are greatly reduced compared to coal-fired generating units. As highlighted in "— Future Expansions" above, we proposed expanding our renewable energy generating capacity by developing

an offshore wind farm in the Southwest Lamma Channel. We have continued to reduce emissions and our carbon footprint through the use of clean technology and cleaner fuel, improvements and upgrades within our generation process and better energy management of our operations, as further described below.

Although we are subject to extensive and increasingly stringent environmental protection laws, rules and regulations (including those related to waste disposal, air and water pollution and noise control), we believe that our operations are and have been in material compliance with those laws, rules and regulations. We regularly monitor the environmental risks to which we may be subject. For details regarding the relevant environmental protection laws and regulations which are material to our operations, see "Scheme of Control and Regulatory Overview — Key Laws, Rules and Regulations Material to the Group — Environmental Regulations".

# **Emission Control**

To support the Hong Kong Government's air quality improvement policy for the Pearl Delta Region, we have installed flue gas desulphurisation plants at six coal-fired generating units and low nitrogen oxide burners at five coal-fired generating units. We were the first power utility in Asia (excluding Japan) to install flue gas desulphurisation plants for reducing sulphur dioxide emissions during power generation. The flue gas desulphurisation plants, which adopt the limestone-gypsum wet scrubbing system, remove over 90% of the outgoing sulphur dioxide in the flue gas and create gypsum cakes which are a by-product of the flue gas desulphurisation process that can be used for industrial applications, such as making gypsum boards and cement. The use of low nitrogen oxide burners reduce the concentration of nitrogen oxide by two-thirds compared to a conventional unit.

Electrostatic precipitators installed in each boiler of our generating units remove over 99% of the fly ash in the flue gas, which is generated from the burning of fossil fuels. The three 210 metres tall chimneys at the Lamma Power Station, which were designed using advanced modelling techniques, effectively disperse the emissions at high altitudes and reduce pollutants to low concentrations when they reach ground level. We have high volume air samplers located at the boundaries of the Lamma Power Station which monitor the dust emissions from our generating units. In addition, we have five air monitoring systems in the south of Hong Kong Island and in Cheung Chau to monitor the impact of the Lamma Power Station on the quality of ambient air. Under our specified process licence, which is issued by the EPD pursuant to the Air Pollution Control Ordinance and the Air Pollution Control (Specified Process) Regulations (details of which are set out in "Scheme of Control and Regulatory Overview — Environmental Regulations — The Laws and Regulations Relating to Air Quality Control"), we are required to report our emission data to, and prepare an emission report on monthly, quarterly and yearly bases and file it with, the EPD. The specified process licence specifies the allowable emission concentrations and emission rates for nitrogen oxide, sulphur dioxide and respirable suspended particulates of all emission sources. During the Track Record Period, we have complied with the air emission standards under our specified process licence. Through our various measures to improve air quality, we have been able to reduce our nitrogen oxide, respirable suspended particulates and sulphur dioxide emissions by approximately 50%, 80% and 90%, respectively, in 2012 as compared to our emission levels in 2005.

In addition to air emission controls, we take active measures to preserve the quality of water, which is utilised in the electricity generation process. We have submerged scraper conveyers which handle furnace bottom ash from all coal-fired generating units. This significantly reduces the quantity of wastewater discharged from the Lamma Power Station. A foam suppression system comprising a retaining wall and water spray have been built to enclose and disintegrate the foam, which is created

from the cooling water used in our generating units, at the cooling water outfall. Our laboratory technicians take biological, seabed sediment and water samples from the coastline around the Lamma Power Station on a regular basis to ensure that marine life has not been affected by our operations. Under the Water Pollution Control Ordinance, we are required to obtain licences for the discharge of effluents other than domestic sewage. The licences also set limits on the effluents which we may discharge to inland and coastal waters. During the Track Record Period, we have complied with all of our obligations under our licences which are issued pursuant to the Water Pollution Control Ordinance.

For 9M2013, approximately 95% of the electricity output at the Lamma Power Station was generated by gas-fired units and coal-fired units fitted with emission control facilities. In continuing our efforts to lower emissions, we completed the modification of the six older coal-fired units in 2011 to allow them to use ultra low sulphur diesel oil. We started using ultra low sulphur diesel oil as the start-up fuel for all coal-fired units in 2012 that helped to further reduce sulphur dioxide emissions from our electricity generation process. Furthermore, as highlighted in "— Our Operations — Generation of Electricity — Renewable Energy Generation" above, the installation of Lamma Winds and the recent expansion of our solar power system has reduced our carbon dioxide emission.

# Recycling

For 9M2013, approximately 141,654 MT of coal ash from the Lamma Power Station was taken by building materials contractors for use as raw materials with all other minor solid wastes, including chemical waste, being recycled or properly handled by licensed waste collection contractors. The processes by which water is collected, used, reused and discharged at the Lamma Power Station is monitored so that a minimum quantity of water is used in the generation process and such that the discharged water will not have an adverse impact on the environment. An environment management system has also been implemented at the Lamma Power Station.

#### **CORPORATE SOCIAL RESPONSIBILITY**

Since the establishment of HEC more than 120 years ago, we believe that our corporate social responsibility efforts reflect our corporate values. We believe that our corporate social responsibility means integrating social, economic and environmental consideration into our day-to-day operations and business. We make active efforts to be socially responsible and believe in giving back to local communities and supporting charitable causes such as environmental sustainability and protection, assisting the underprivileged, community engagement and youth development, which allows us to maintain and foster relationships with our customers, government institutions and non-governmental organisations.

Over the years, we have sponsored and participated in various environmental projects including major clean-up events, green walkathons and tree planting activities. We established the HEC Clean Energy Fund in February 2006 to commemorate the commissioning of Lamma Winds and to foster environmental education in Hong Kong by promoting the better understanding and application of renewable energy in Hong Kong. In 2011, we set up a Smart Power Centre showcasing various energy conservation measures to promote the smart and safe use of electricity to the public, and also launched an iPhone application, "HK Electric Low Carbon App", to promote a low carbon lifestyle.

To promote energy conservation among the younger generation, we have embarked on the "Smart Power Campaign" since 2003 to educate the public on how they can use electricity safely and to promote energy efficiency and conservation among the public, in particular the younger generations. We have also produced an "Energy Efficiency Education Kit for Secondary School", which provides learning and teaching resources on topics of energy efficiency for students and teachers in Hong Kong.

#### **HEALTH AND SAFETY**

Our business and operations involve risks and hazards that are inherent to companies operating in the power industry and we are committed to providing a safe and healthy workplace for our employees. The risks and hazards that we face could result in damage to, or destruction of, property or generation facilities, personal injury, environmental damage, business interruption and possible legal liability. For further details, see "Risk Factors — Risks Relating to our Operations — Our assets and operations are subject to risks and hazards customary to the power industry and some of our operations could expose us to health and safety claims and accidents".

We aim to excel in occupational health and safety performance and achieve accident-free operations. Our safety management systems enable us to regularly review and improve our safety performance and minimise human errors. As at the Latest Practicable Date, we have obtained three Occupational Health and Safety Assessment Series ("OHSAS") 18001 certificates from the Hong Kong Quality Assurance Agency. The OHSAS 18001 is an international occupational health and safety management specification and is intended to help an organisation to control occupational health and safety risks. We take a proactive approach in planning and organising training and wellness programmes for our employees. Among the various health and safety measures that we have in place, we have a "Health and Safety Board" which monitors overall health and safety policies and issues, while the "Loss Prevention and Training Section" of our generation and transmission and distribution divisions focus on day-to-day health and safety matters. Our internal policies and systems are designed with a view to ensuring compliance with statutory requirements. In February 2012, our generation division and transmission and distribution division were designated "International Safe Workplaces" under the World Health Organisation's Safe Community Programme, which recognises organisations that apply best practices in proven injury prevention.

We are subject to the health and safety requirements of Hong Kong including, but not limited to, the Occupational Health and Safety Ordinance (Chapter 509 of the Laws of Hong Kong), which sets out general requirements for the safety and health protection to employees in workplaces, the Factories and Industrial Undertakings Ordinance, which imposes general duties on proprietors and persons employed in the industrial sector to ensure safety and health at work, and Gas Safety (Registration of Gas Supply Companies) Regulations (Chapter 51E of the Laws of Hong Kong), which impose a general self-regulating duty on a registered gas supply company to ensure, in carrying on its business as a gas supply company, so far as is reasonably practicable, the health and safety at work of all of its employees. We believe that we comply, and have been in compliance, with the statutory requirements in all material respects during the Track Record Period and from the end of the Track Record Period up to the Latest Practicable Date. Our liability to our employees is covered by insurance, which we are required by law to maintain. During the Track Record Period, save for the vessels collision accident on 1 October 2012, details of which are set out in "— Legal and Regulatory Matters — Litigation, Claims and Arbitration" below, there were no material accidents in the course of our operations.

#### **LEGAL AND REGULATORY MATTERS**

#### Litigation, Claims and Arbitration

As a major power utility, we are involved in legal proceedings from time to time, which arise in our ordinary course of business, such as third party damage to our underground cables. In addition, on 1 October 2012, a passenger catamaran collided with one of our passenger launches near Lamma Island. The collision resulted in loss of life and injuries and led to the following inquiry, litigation and claims.

- (i) On 22 October 2012, the Chief Executive in Council appointed The Commission of Inquiry into the Collision of Vessels near Lamma Island on 1 October 2012 (the "Commission") to inquire into the facts and circumstances leading to and surrounding the collision. We were one of the parties involved in the inquiry. The Commission released a redacted version of its report on 30 April 2013 in which, among other things, recommendations were made to improve vessel safety. We have fully implemented the recommendations made by the Commission that are applicable to our operations.
- (ii) On 19 August 2013, the Hong Kong Magistrates' Court fined us HK\$900 for failure to deploy four crew members on our passenger launch as required under its operating licence. We have filed an appeal against the conviction on 30 August 2013 and we were informed on 4 September 2013 that the prosecution has applied for a review of the level of fine. On 25 October 2013, the Hong Kong Magistrates' Court increased the fine from HK\$900 to HK\$4,500.
- (iii) In light of the loss of life and injuries as a result of the collision, claims have been made, and we expect further claims to be made against us. As at the Latest Practicable Date, we were unable to quantify the total amount of claims made and potential claims which may be made against us. We have insurance policies taken out for the passenger launch, our employees and other passengers, which we believe will provide sufficient insurance coverage for such claims. For further details regarding our insurance policies, see "— Insurance" above.

As at the Latest Practicable Date, save as disclosed above, no member of the Group was engaged in any litigation, claim or arbitration of material importance, nor, to the best of our knowledge, is any litigation, claim or arbitration of material importance pending or threatened against any member of the Group.

# **Regulatory Matters**

We have challenged the Commissioner of Rating and Valuation's assessment of certain rates and government rent which are payable by us in relation to our properties for a number of years starting from 2004/2005. We have received some, and expect to receive further, refunds of such rates and government rent from the Hong Kong Government in this regard. The Hong Kong Government and we have not been able to reach a consensus as to how those refunds should be treated, and we are in the course of resolving the appropriate manner of dealing with those refund amounts. As at the Latest Practicable Date, all such rates and government rent received have been recorded as our trade and other payables and, accordingly, the outcome of the resolution with the Hong Kong Government is not expected to have any material adverse impact on our profit.

# Key Laws, Rules and Regulations Applicable to the Group

A summary of the key laws, rules and regulations which are applicable to our operations are set out in "Scheme of Control and Regulatory Overview".

# Compliance with Laws, Rules and Regulations

During the Track Record Period and from the end of the Track Record Period up to the Latest Practicable Date, there were no material breaches or violations of the laws, rules and regulations applicable to the Group that would have a material adverse effect on our business, financial condition and results of operations taken as a whole. During the Track Record Period and from the end of the Track Record Period up to the Latest Practicable Date, we had obtained all material licences and permits necessary for our business in Hong Kong.