**Daya Bay’s 20 years of excellence demonstrates potential of nuclear power**

In 1985, the Chinese Government and CLP jointly developed the first commercial nuclear power plant in Mainland China – the Guangdong Daya Bay Nuclear Power Station. It is CLP’s first large scale power project in the Mainland and represents our first step into lower emission power generation. Since its commissioning in 1994, Daya Bay has maintained a record of outstanding operational and safety performance. But beyond these achievements, Daya Bay may also serve as a role model for future nuclear plants and demonstrate the potential importance of nuclear power in meeting China’s energy objectives.

Since 1994, a total of 193.845 billion kWh of electricity has been transmitted to Hong Kong, meeting about one-fourth of the city’s electricity demand. Compared with a coal-fired power station of similar capacity, it is estimated that Daya Bay has prevented a cumulative consumption of 63.18 million tonnes of coal and 150 million tonnes of carbon dioxide emissions. To put the environmental benefit into perspective, it is equivalent to planting over 445,600 hectares of woodland – roughly 57 times the size of Hong Kong Island.

The power from Daya Bay forms the base-load portion of CLP’s electricity supply at very competitive price ranges. It has also contributed significantly to our world-class supply reliability of 99.999% in Hong Kong. Daya Bay’s performance is of world standard – its operation, reliability and safety rank high on the performance indices of the World Association of Nuclear Operators. The station is also a frequent winner in the Safety Challenge Competition organized by French electricity utility Electricite de France.

Over the past two decades, Daya Bay has showcased the benefits of nuclear power in providing a safe and reliable electricity supply at a competitive price with virtually no emissions to the environment. For this reason China is expected to expand its nuclear generating capacity to achieve its challenging climate change targets. Based on Daya Bay’s experience, a working culture of rigour and openness has been crucial in driving the power station’s excellent performance. This fundamental should be reinforced as the Chinese nuclear programme poised for rapid growth in the future.

*The article is contributed by Ir PC Lo with the coordination of the Environmental Division.*