

**LEGISLATIVE COUNCIL BRIEF**

**CLP POWER HONG KONG LIMITED  
CASTLE PEAK POWER COMPANY LIMITED  
2008 DEVELOPMENT PLAN**

**INTRODUCTION**

At the meeting of the Executive Council on 23 September 2008, the Council ADVISED and the Chief Executive ORDERED that the 2008 Development Plan (DP) proposed by the CLP Power Hong Kong Limited (CLP Power) and Castle Peak Power Company Limited (CAPCO)<sup>1</sup> (hereinafter referred to collectively as “CLP”) which includes the following features should be approved -

- (a) capital projects amounting to \$39.9 billion during the DP period, i.e. 1 October 2008 to 31 December 2013;
- (b) reduction of Basic Tariff by 10% on 1 October 2008; and
- (c) projected average annual increase in Basic Tariff for the period of October 2008 to December 2013 are below the forecast inflation of Government’s Medium-Range Forecast .

**JUSTIFICATIONS**

2. CLP’s prevailing Financial Plan<sup>2</sup> for January 2005 to September 2008 under the existing Scheme of Control Agreement (SCA) will expire on 30 September 2008. Pursuant to the new SCA, CLP submitted its 2008 DP covering the period 1 October 2008 to 31 December 2013 in March 2008, which details, inter alia, CLP’s electricity demand forecasts, proposed capital projects and projected Basic Tariff for each year up to December 2013.

3. With the assistance of an independent energy consultant,

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<sup>1</sup> CAPCO is a generating company jointly owned by CLP Power (40%) and ExxonMobil Energy Limited (EMEL) (60%).

<sup>2</sup> The Development Plan in the new SCA is called the Financial Plan under the current SCA.

Nexant Inc. (Nexant), we have reviewed the financial, technical and environmental aspects of the DP, with a view to accepting only those capital expenditure proposals which are considered absolutely necessary to ensure that the public will enjoy reliable and safe electricity supply at reasonable costs. After protracted discussions, CLP submitted its revised 2008 DP in mid-September 2008 with key features summarized in the following paragraphs.

## **KEY FEATURES AND ASSESSMENT**

### **I. Load and Sales Forecast**

4. We have reviewed CLP's load and sales forecasts as they would affect the need for new generating capacity to ensure reliable electricity supply and tariff projections. Both Nexant and the Government Economist (GEcon) have examined CLP's maximum demand and sales forecasts in the DP.

5. The forecasts of Nexant and GEcon were based on economic data available in early 2008 (viz Gross Domestic Product (GDP) growth of 4.5% per annum for 2008-2012 and 3.6% in 2013). The latest GDP figures announced by Government in August 2008 confirms that the forecast for 2008 remains at 4-5%. CLP projects local sales to grow at an average annual rate of 1.9%. CLP's demand forecasts are close to our forecast.

### **II. Capital Projects**

6. In conjunction with Nexant, we have critically reviewed the need, timing and proposed budget of the capital projects proposed by CLP. After lengthy discussion, CLP has agreed to reduce its proposed CAPEX by 30% to \$39.9 billion. The annualized CAPEX would be broadly on par with the annualized CAPEX under the current Financial Plan taking into account inflation.

#### ***(A) Generation System***

7. In the revised 2008 DP, CLP has proposed to -

- (a) retrofit the four coal-fired generating units at Castle Peak Power Station (Units B1 to B4) with Flue Gas Desulphurization (FGD) plant and Selective Catalytic Reduction (SCR) plant for reducing emissions;
- (b) carry out post-commissioning projects for replacement of worn-out or aged equipments and improvement work for the plants at Black Point and Castle Peak; and
- (c) exclude the proposed Liquefied Natural Gas (LNG) terminal project costing \$10.4 billion following the signing of the Memorandum of Understanding between the National Energy Administration and the HKSAR Government on Supply of Natural Gas and Electricity to Hong Kong on 28 August 2008.

8. To improve regional air quality, the Government and Guangdong reached a consensus to reduce, on a best endeavours basis, the emission of four major air pollutants in the region by 2010. To meet the emission reduction targets, the Environmental Protection Department (EPD) has imposed emission caps on CLP's emissions upon the renewal of its Specified Process Licences. Nexant considers the scope and cost of the proposed emission reduction projects acceptable. Nexant also considers that the post-commissioning projects are necessary and justified for ensuring operational reliability and the proposed budgets reasonable.

9. CLP first proposed to build an LNG terminal at South Soko Island to address the supply uncertainty from Yacheng gas field in its 2006 Financial Plan and incorporated the project with updated details in the original 2008 DP submitted in March 2008. The Chief Executive reached a consensus with Vice Chairman of the National Development and Reform Commission (NDRC) and Administrator of the National Energy Administration on 28 August 2008 on the continuous supply of nuclear electricity and natural gas to Hong Kong in the coming two decades. The sustained supply of clean energy from the Mainland will greatly reduce the need for Hong Kong to build an LNG terminal within its territory. CLP has subsequently dropped this project and excluded the project from its revised 2008 DP submitted in September 2008.

***(B) Transmission and Distribution System***

10. Projects include new substations, additional circuits, improved control equipment, or reinforcement of existing system to ensure that adequate transmission and distribution facilities are in place to meet new demands, maintain reliability of supply and safety of CLP's systems. We share Nexant's view that the capital expenditure on these projects are justified and reasonable. We will monitor the projects through the annual review in the light of actual demand build-up.

### ***(C) Customer and Corporate Services Development***

11. Projects relating to customer and corporate services include metering system development, service centre improvements and information system development. We share Nexant's views that the capital expenditure on these projects are justified and reasonable.

## **III. Financial Aspects of the DP**

12. The Government announced at the time of signing the new SCAs with the power companies on 7 January 2008 that the lowering of their permitted rate of return from the existing 13.5%-15% to 9.99% should bring a double-digit reduction in Basic Tariffs (not including fuel cost adjustments).

13. The current average Basic Tariff is 88.1 cents/kWh but owing to Special Rebate of 2.1 cents/kWh applicable until 30 September 2008, the effective rate is 86 cents/kWh. In the revised DP, CLP has proposed to reduce the average Basic Tariff to 77.4 cents/kWh while not extending the Special Rebate, thereby reducing the effective Basic Tariff by 10% or 8.6 cents/kWh between 1 October 2008 and 31 December 2009. This is in line with Government estimate of a double-digit Basic Tariff reduction under the new SCA.

14. However, the reduction in Basic Tariff will be partly offset by an increase of 5.9 cents/kWh in Fuel Clause Charge to cover the rising fuel cost which is not to be taken into account in the determination of the Basic Tariff under the SCA. The average Net Tariff, which includes Fuel Clause Charge, will be reduced by 2.7 cents/kWh, from the current rate of 91.1 cents/kWh to 88.4 cents/kWh, representing a reduction of 3% from its current level. Details are set out in the table below :

(Cents per Unit)

	Basic Tariff Rate	% Decrease	Fuel Clause Charge	Rate Reduction Reserve Rebate	Net Tariff	% Decrease
Current Tariff Rates up to Sept 2008	86.0 <sup>@</sup>	-	5.9	(0.8)	91.1	-
New Tariff Rates from Oct 2008	77.4	10.0	11.8	(0.8)	88.4	3.0

<sup>@</sup> Net of 2008 Special Rebate of 2.1 cents per unit

15. Nexant has advised that CLP's forecast average coal price of about US\$130/ton until end 2009 is not unreasonable. For reference, average coal price has increased by 67% from US\$90/ton in January 2008 to over US\$150/ton in August 2008. Under the SCA, CLP has the right to pass on to the consumers by way of charges from time to time the difference between the standard cost of fuels as agreed between the Government and CLP, and the actual cost of fuels to CLP. We will monitor coal price movement and discuss with CLP regarding the timing and magnitude of any Fuel Clause Charge adjustment.

16. CLP's projected annual average increase in Basic Tariff and Net Tariff are below the forecast inflation of Government's Medium-Range Forecast. As the Basic Tariff for October 2008 to December 2009 is approved as part of this DP, such tariff will be implemented when the new SCA becomes effective on 1 October 2008. The tariff rates for 2010-2013 are only projections and the actual tariffs to be charged to consumers each year will be determined in the preceding year, following discussions between Government and CLP during the annual Tariff Review, taking into account any variations in the components of the DP.

### **Tariff Stabilization Fund**

17. Under the new SCA, Tariff Stabilization Fund (TSF)<sup>3</sup> serves to accumulate and provide funds to ameliorate tariff increases or facilitate tariff reduction where appropriate.

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<sup>3</sup> The Tariff Stabilization Fund in the new SCA is called the Development Fund under the current SCA.

18. In our negotiation with CLP, we have also persuaded CLP to draw down its TSF from \$2,117 million in end 2007 to about \$150 million by end 2009, which will be the lowest since 1982 and represents only 0.5% (or 2 days) of CLP's projected local sales revenues in 2009. This projected balance is also well below the TSF cap of 8% of local sales revenue allowed in the new SCA. The year-end TSF balance is expected to be kept under \$200 million in the ensuing years of the DP period. This arrangement will address a long time criticism of CLP's large surplus in its TSF account.

## **IMPLICATIONS OF THE PROPOSAL**

### **Environmental Implications**

19. Natural gas consumption in 2008 and 2009 will be about 70% of the maximum daily intake by CLP before 2003. The level will be increased to about 80% in 2010 and then levelled off at 70% for 2011-2013, when CLP's proposed emission reduction projects are completed by phases between 2009 to 2011. To ensure the meeting of the emission caps requirements, CLP will continue to increase the use of ultra low sulphur coal for their coal-fired units.

20. CLP's emission reduction proposal is practical and cost-effective for meeting the intended emission caps for 2010 and beyond. The proposed increase of natural gas consumption, together with the use of ultra low sulphur coal is instrumental for Hong Kong to meeting its air quality objectives. It would also help alleviate the visibility, smog as well as acid rain problems plaguing the Pearl River Delta region.

### **Sustainability Implications**

21. A sustainability assessment of CLP's 2008 DP shows that CLP's proposal should contribute positively to the economic development of Hong Kong by ensuring that reliable, safe and efficient electricity supply will continue to be delivered to consumers at reasonable costs.

## **PUBLICITY**

22. A press release announcing the Executive Council's decision will be issued.

## **ENQUIRIES**

23. Any enquiry on this brief should be addressed to Mr Frankie Lam, Principal Assistant Secretary for the Environment (Financial Monitoring), at 2594 6742.

**Environment Bureau**  
**23 September 2008**