

**For information on
3 February 2012**

Legislative Council Panel on Economic Development

Supplementary information provided by the Power Companies on Five-year Development Plan and Annual Tariff Reviews

The 2012 tariff adjustment proposals made by the power companies last year have aroused widespread concerns in the community. At the meeting of the Legislative Council Panel on Economic Development on 23 December, the motion moved by Hon CHAN Kam-lam on demanding the power companies to reduce their tariff increases in response to the appeals of the community was passed. In early January this year, Hon Jeffrey LAM, Chairman of the Panel, and Hon CHAN Kam-lam, Member of the Panel, wrote to the Environment Bureau separately, asking for the provision of further information on the 2012 tariff increase proposals and the five-year Development Plans by the power companies through the Bureau. The two power companies are willing to submit further information, on a confidential basis and following the format set out in the annexes, for reference by Panel Members¹. This Paper aims to explain the key points of relevant data to assist Members in understanding the Government's major considerations in scrutinizing the five-year Development Plans and the 2012 tariff adjustment proposals of two power companies.

THE ELECTRICITY MARKET AND THE TARIFF ADJUSTMENT MECHANISM

2. All along, to cope with the orderly development of Hong Kong economy, we have been adopting the Scheme of Control Agreements (SCAs) signed with the power companies as the regulatory framework for the electricity market. The SCAs allow the power

¹ The following annexes containing concrete information will be submitted separately by the two power companies at Panel meeting -

CLP: Annex 1A "Information relevant to the Five-year Development Plan"
Annex 1B "Information relevant to the 2012 Tariff Review"
HEC: Annex 2A "Information relevant to the Five-year Development Plan"
Annex 2B "Information relevant to the 2012 Tariff Review"

companies to make long term investments for the local electricity supply and improvement in services by providing a relatively stable investment environment to the power companies. The SCAs applicable to the two power companies have been in operation since the 1960's and 1970's respectively, and provide a stable electricity supply in the economic development of the Hong Kong society. When the earlier SCAs were due to expire in 2007, we consulted the Legislative Council (LegCo) on the future electricity regulatory framework in Hong Kong. The then main opinion was to extend the related regulatory framework, while the Government should start studying the development of the future electricity regulatory framework in Hong Kong after the expiry of the current SCAs. The SCAs signed between the Government and the two power companies in 2008 were concluded against this background.

3. Under the framework of the SCAs, the Government has worked out the five-year Development Plan covering the period from 2009² to 2013 with the two power companies separately. The Development Plans set out the power companies' medium-term projection for the market development, including electricity demand and sales forecasts, investments in capital projects (such as emission control installations, environmental friendly power generators, transmission and distribution systems etc.), and fuel price forecasts, etc. They involve voluminous projections for the local electricity market and investments of two power companies. The Development Plans serve to facilitate forward-looking forecast in the medium term by both the regulatory authority and the regulated parties on the electricity market development, investments and tariff levels.

4. However, the data on the two power companies' capital investments and levels of tariff adjustment in the Five-year Development Plans are not the final data on the actual investments and tariff increases in each year. This is because a second level of scrutiny is in place when the Government regulates the annual investments and tariff adjustments of two power companies. Every year, the tariff adjustment proposals submitted by two power companies are subject to the annual Tariff Review with the Government. Through the two-level scrutiny of Five-Year Development Plan and Annual Tariff Review, the Government critically examines the capital investment and all related expenses in the year to ensure that, on the basis of their medium-term development forecast, investments by the power companies are necessary and reasonable. Any excessive, premature, unnecessary or unreasonable

² CLP's Five-year Development Plan started from October 2008.

investment is taken out, so as to ensure that the general public needs not to bear any unreasonable tariff increase.

FIVE-YEAR DEVELOPMENT PLANS

5. The information provided by CLP Power Hong Kong Limited (CLP) on its current Five-year Development Plan is set out in Annex 1A and that provided by The Hongkong Electric Company Limited (HEC) in Annex 2A. As pointed out in the document³ we submitted to LegCo in end 2008, CLP's capital investments in the Five-year Development Plan period were estimated at \$39.9 billion, while those of HEC were \$12.3 billion. The major capital investment items of the two companies are power generation systems (including emission control projects and post-commissioning engineering projects and other generation systems), transmission and distribution systems as well as customer and corporate services. Transmission and distribution systems account for the major share of the investments, followed by power generating systems. A detailed breakdown of the Five-year Development Plans is set out in Item 1 "Capital expenditure forecasts under the approved Five-year Development Plan" of Annexes 1A and 2A.

6. Item 2 "Actual capital expenditure in the Five-year Development Plan Period" of Annex 1A and 2A sets out the costs actually incurred to date by the power companies on each type of projects since the implementation of the Five-Year Development Plans. It shows that, since the implementation of the Five-year Development Plans, different levels of variance can be seen between the actual expenditure of the power companies and the corresponding forecasts in the Five-Year Development Plans. This involves the scheduling of work programmes, and is also closely related to the Government's gate-keeping efforts every year. The focus of the gate-keeping efforts will be further explained later in this Paper. It is noteworthy that any shortfall in the investment amount as compared to the original forecast for each item in a particular year will not be automatically carried forward for spending in the remaining years of the Development Plan period. The capital investment made by the power companies in each year is still subject to detailed examination by the Government.

7. Item 3 "Tariff Components by year - Five-year development plan forecasts compared with annual tariff reviews" of Annex 1A and 2A sets out the year-by-year estimates of tariffs based on annual capital

³ Please refer to LegCo documents ENB CR 1/4576/08 Pt. 6 and ENB CR 2/4576/08 Pt.4.

expenditure forecast made at the time of formulating the Five-year Development Plans, and the actual tariff adjustments after the Government's gate-keeping efforts. The figures show that, based on the cumulative adjustments since 2008, the actual Basic Tariff increase of the two power companies after the Administration's gate-keeping efforts has been lower than the original forecast. However, changes in Fuel Clause Charge show a higher increase as compared to the forecasts made during the formulation of the Development Plans in 2008. The two power companies have attributed this to the fluctuations in international fuel prices over the past few years.

ANNUAL TARIFF REVIEWS

8. The data submitted by CLP on its 2012 tariff adjustment is set out in Annex 1B and that by HEC in Annex 2B. Items 1 and 2 of Annexes 1B and 2B set out the components and the rationale of the original proposals submitted by the two power companies for their 2012 tariff increases. Both companies proposed a double-digit increase initially. The Government examines the power companies' tariff adjustment proposals every year. The scope of review covers five focuses, including capital expenditure, operating expenses, Tariff Stabilisation Fund (TSF) balance, Fuel Clause Recovery Account (FCA) balance and other revenue. The actual tariff increase after examination is lower than that initially proposed by the power companies every year. So, the original tariff increases proposed by the power companies are for reference only.

9. Despite several rounds of discussions, on 13 December the power companies were still unable to resolve the queries raised by the Government over the rationale for the tariff increases. After the Executive Council meeting on 13 December demanding the power companies to reconsider the magnitude of tariff increases, HEC lowered its tariff increase from around 8% to 6.3%. It also announced on 16 December a change in tariff structure, resulting in a Net Tariff increase of 4.97% or below, a level lower than inflation, for 90% of its residential customers. CLP announced a lower tariff increase from 9.2% to 7.4% on 21 December; and further brought it down to 4.9% on 30 December. The components and the rationale of 2012 tariff increase, including a breakdown of Fuel Clause Charge items with increases in each item, are shown in Items 3 and 4 of Annexes 1B and 2B. We have the following observations regarding the five focuses of our scrutiny :

- (a) **Capital expenditure** : Both CLP and HEC have agreed to submit capital expenditure forecast for 2012 in item 2 of Annexes 1A and 2A for Panel Members' reference in the meeting, despite the price sensitive nature of such information. The capital expenditure on preparatory work for additional generation capacity initially proposed by CLP has been taken out in the final proposal.
- (b) **Operating expenses** : The itemised operating expenses under the final tariff proposal of the power companies vis-à-vis those in 2011 are set out in Item 5 of Annexes 1B and 2B. Operating expenses are part of the Basic Tariff and are fully reflected in the tariff of the year. As a gatekeeper, we will ensure proper costs control by the power companies to avoid the passing on of any unnecessary operating costs to the consumers.
- (c) **TSF balance** : The purpose of the TSF is to accumulate the excess of net revenue of the power companies over the Permitted Return; and to provide funding, when necessary, to mitigate the impact of tariff increases on the consumers. We scrutinize in each year the power companies' projected year end TSF balances, the purpose of which is to prevent the power companies from accumulating excessive TSF balance to cover up future shortfall when they are unable to earn up to Permitted Return. In CLP's calculation of its final tariff increase, the projected TSF balance by end 2012 is \$120 million; while that for HEC is over \$100 million.
- (d) **Fuel Charge** : As part of the tariff components, fuel charge is passed through on the basis of actual spending (see Item 4 of Annexes 1B and 2B). At times of relatively heavy pressure on tariff increase, the power companies can lower the level of increase by increasing the negative balance projected for the FCA, hence mitigating the impact on people's livelihood and enterprises. In their final 2012 tariff proposals, CLP projected that the negative balance would increase from \$260 million by end 2011 to \$830 million by end 2012, while HEC projected an increase in negative balance from around \$1 billion by end 2011 to around \$1.4 billion by end 2012.

- (e) **Other revenue** : We will keep in view if there is any additional revenue of the two companies in coming year to ensure timely recognition of such revenue for the benefit of the consumers. An example is the rebate of government rent and rates in the current year.

10. The yearly changes in Net Tariff of the two power companies from 2008 to 2012 are tabulated as below :

Net tariff (cent/unit)	2008	2009	2010	2011	2012
CLP	91.1 ⁴	89.2	91.5	94.1	98.7
HKE	127.4	119.9	119.8	123.3	131.1

ABOUT THE CONFIDENTIALITY ARRANGEMENT FOR DISCLOSURE OF INFORMATION

11. Regarding the confidentiality arrangement for the information provided, the power companies have requested the Government to reflect to the Panel that as the information is related to the financial projections and data in the business operations of the two power companies being commercial entities and of their holding companies being listed corporations, it is of a non-public commercially confidential and price sensitive nature. Any disclosure of such information will constitute a breach of obligations to their investors and will have significant implications on their commercial operations. The power companies are also of the view that they are obliged to keep certain commercial information confidential as a contractual obligation with third parties (such as suppliers). They could only disclose such information to related parties under reasonable confidentiality arrangement or else they might be held legally liable due to breach of contract terms. Moreover, the two power companies consider that disclosure of sensitive information may affect their competitiveness and bargaining power in the market, affecting adversely commercial negotiations, tendering and cost control. The customers may eventually suffer as they may hence need to bear a higher cost of electricity supply.

⁴ In 2008, CLP's Net Tariff was 91.1 cents/unit from January to September, and 88.4 cents/unit from October to December.

12. Based on the above considerations, the power companies have requested the Panel and related officers to treat the confidential information, which they will submit at the Panel meeting, in strict confidence according to generally acceptable business practices.

Environment Bureau
February 2012

[Detailed Information will be submitted to Members for reference in the meeting in the form of confidential document.]

**Provision of Commercially Sensitive Information by
the Power Companies in response to the request
of Economic Development Panel of the Legislative Council**

I. Information related to Five-Year Development Plan

1. Capital expenditure forecasts under the approved Five-year Development Plan

Categories (\$ million)	2009	2010	2011	2012	2013	Total
(A) Power Generation System						
- Emission Reduction Project						
- Post-commissioning projects & Other power generation system(s)						
Sub-total						
(B) Transmission & Distribution System						
(C) Customer and Corporate Services Development						
Total						

2. Actual capital expenditure in the Five-year Development Plan Period

Project Categories (\$ million)	2009	2010	2011 ⁺	2012 Forecasts
(A) Power Generation System				
- Emission Reduction Project				
- Post-commissioning projects & Other power generation system(s)				
Sub-total				
(B) Transmission & Distribution System				
(C) Customer and Corporate Services Development				
Total				

⁺ Provisional figures, subject to final verification and annual audit.

3. Tariff component by year –Five-year development plan forecasts compared with annual tariff review

Tariff Component (cents/ kWh)	2008	2009	2010		2011		2012		2013
	Actual Tariff	DP Forecast / Annual Tariff Review*	DP Forecast	Annual Tariff Review	DP Forecast	Annual Tariff Review	DP Forecast	Annual Tariff Review	DP Forecast
(A) Basic Tariff <i>Increase/(Decrease)% -- Annual</i> <i>-- Since 2008</i>									
(B) Fuel Clause Charge <i>Increase/(Decrease)% -- Annual</i> <i>-- Since 2008</i>									
(C) Rate Reduction Reserve Rebate									
(D) Special Rebate									
(E) Net Tariff <i>Increase/(Decrease)% -- Annual</i> <i>-- Since 2008</i>									

* The two exercises were done at the same time.

[Detailed Information will be submitted to Members for reference in the meeting in the form of confidential document.]

II. Materials related to tariff adjustments

1. The power companies' original tariff adjustment proposal submitted to the Administration before the announcement of tariff adjustment on 13 December 2011

	2011 Tariff cents/kWh	2012 Original Tariff Proposal cents/kWh	Adjustment %
Basic Tariff			
Fuel Clause Charge			
Net Tariff			

Year End Balance
(\$ billion)

Tariff Stabilisation Fund
Fuel Clause Recovery
Account

2. The rationales and calculation methods of the Original Proposal submitted by the power companies

	Rationales for Tariff Increase	Tariff impact (cents / kWh)
(1)	Basic Tariff	
(a)	Increase in Average Net Fixed Asset (Increase from \$xx billion in 2011 to \$xx billion in 2012; the major categories and reasons)	
(b)	Increase in operating expenses (Increase from \$xx billion in 2011 to \$xx billion in 2012; the major categories and reasons)	
(c)	Increase / decrease in local sales of electricity (Increase / decrease from xx billion kWh in 2011 to xx billion kWh in 2012; the major category for the change and reasons)	
(d)	Increase / decrease in sales of electricity to Mainland (if applicable) (Increase / decrease from xx billion kWh in 2011 to xx billion kWh in 2012; the reasons for the change)	
(e)	Increase / Decrease in Tariff Stabilisation Fund balance (Increase / decrease from \$xx billion at end of 2011 to \$xx billion at end of 2012; the change in \$xx billion as compared with that in 2011)	
(f)	Others	
	Sub-total (Basic Tariff):	
(2)	Fuel Clause Charge	
(a)	Increase in Fuel Price (Increase of fuel expenses from \$xx billion in 2011 to \$xx billion in 2012, please refer to Note 1 under Item 4 for details)	
(b)	Correction of over- / under-recovery of Fuel Clause Charge in 2011 (that is the amount of total fuel clause charge above / below the difference of actual fuel cost and standard fuel cost) (The amount of over- /under-recovery of fuel clause charge was \$xx billion in 2011)	

(c)	<p>Increase in the Fuel Clause Recovery Account deficit to reduce the tariff increase</p> <p>(The debit balance of Fuel Clause Recovery Account increase from \$xx billion at end of 2011 to \$xx billion at end of 2012; the change of \$xx billion as compared with 2011)</p>	
(d)	Others	
	Sub-total (Fuel Clause Charge):	
	Total:	

3. Rationales and Calculations of the Final Adjustment Proposal of the Two Power Companies

(i) Final Tariff Adjustment

	2011 Tariff cents/kWh	2012 Final Tariff Proposal cents/kWh	Adjustment %
Basic Tariff			
Fuel Clause Charge			
Net Tariff			
Year End Balance (\$ billion)			
Tariff Stabilisation Fund			
Fuel Clause Recovery Account			

(ii) **Rationales for the Tariff Increase**

	Rationales for Tariff Increase	Tariff impact (cents / kWh)
(1)	Basic Tariff	
(a)	Increase in Average Net Fixed Asset (Increase from \$xx billion in 2011 to \$xx billion in 2012; the major categories and reasons)	
(b)	Increase in operating expenses (Increase from \$xx billion in 2011 to \$xx billion in 2012; the major categories and reasons)	
(c)	Increase / decrease in local sales of electricity (Increase / decrease from xx billion kWh in 2011 to xx billion kWh in 2012; the major category for the change and reasons)	
(d)	Increase / decrease in sales of electricity to Mainland <i>(if applicable)</i> (Increase / decrease from xx billion kWh in 2011 to xx billion kWh in 2012; the reasons for the change)	
(e)	Increase / Decrease in Tariff Stabilisation Fund balance (Increase / decrease from \$xx billion at end of 2011 to \$xx billion at end of 2012; the change of \$xx billion as compared with that in 2011)	
(f)	Others	
	Sub-total (Basic Tariff):	
(2)	Fuel Clause Charge (Please refer to Item 4 below for details)	
	Sub-total (Fuel Clause Charge):	
(3)	Special Rebate (if applicable)	
	Sub-total (Special Rebate):	
	Total:	

4. Breakdown of Fuel Clause Recovery Account and their impact on tariff increase proposed by the power companies

	Rationales for Tariff Increase	Tariff impact (cents / kWh)
(a)	<p>Increase in Fuel Price</p> <p>(Increase of fuel expenses from \$xx billion in 2011 to \$xx billion in 2012, what are the reasons ? (For example, change in international fuel price, replacement of old contract of natural gas with new one, change of terms in fuel contract etc) (please refer to detailed information in Note 1)</p>	
(b)	<p>Correction of over- / under-recovery of Fuel Clause Charge in 2011 (that is the amount of total fuel clause charge above / below the difference of actual fuel cost and standard fuel cost)</p> <p>(The amount of over- /under-recovery of fuel clause charge was \$xx billion in 2011)</p>	
(c)	<p>Increase in the Fuel Clause Recovery Account deficit to reduce the tariff increase</p> <p>(The debit balance of Fuel Clause Recovery Account increase from \$xx billion at end of 2011 to \$xx billion at end of 2012; change of \$xx billion as compared with 2011)</p>	
(d)	Others	
	Total:	

Note 1

Fuel Consumed (Tera-joules)	<u>2011 Forecast</u>	<u>2012 Forecast</u>
• Coal		
• Natural Gas		
• Oil		
Total	<hr/>	<hr/>

Average Fuel Price (HK\$ / GJ)	<u>2011 Forecast</u>	<u>2012 Forecast</u>
• Coal		
• Natural Gas		
• Oil		
Total		

Fuel Cost (\$ million)	<u>2011 Forecast</u>	<u>2012 Forecast</u>
• Coal		
• Natural Gas		
• Oil		
Total	<hr/>	<hr/>

- Standard fuel costs
- Fuel cost exceeding standard cost

5. Detailed items of Operating Expenses and the respective Forecasts

Expenses Items other than Fuel Cost	2011 Forecasted Expenses (\$ million)	2012 Forecasted Expenses (\$ million)	Change %
Operating Expenses			
Employee Expenses			
Materials & Services			
Administration Expenses			
Loan Charges			
Government Rent & Rates			
Disposal of Fixed Assets			
Exchange Loss / (Gain)			
Pumped Storage Service Fee <i>(if applicable)</i>			
Others (Please specify)			
Sub-total for Operating Expenses:			
Purchase of Nuclear Power <i>(if applicable)</i>			
Provision for asset decommissioning			
Depreciation			
Operating Interest			
Taxation			
Total Operating Expenses other than Fuel Cost :			