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Panel on Economic Development Special meeting on 10 November 2020

Updated background brief on annual tariff reviews with the two power companies

Purpose

This paper sets out the background of the Government's annual tariff reviews with the two power companies, and summarizes the major views and concerns on the subject matter raised by members of the Panel on Economic Development ("the Panel") in previous discussions.

Regulation of electricity supply in Hong Kong

Scheme of Control Agreements

2. Electricity supply in Hong Kong is regulated through the Scheme of Control Agreements ("SCAs") signed between the Government and individual power companies, namely, The Hongkong Electric Company, Limited ("HKE")¹ which supplies electricity to customers on Hong Kong Island, Ap Lei Chau and Lamma Island; and CLP Power Hong Kong Limited and Castle Peak Power Company Limited² (referred to collectively as "CLP" hereafter) which jointly supply electricity to customers in Kowloon and the New Territories including Lantau, Cheung Chau and some outlying islands.

3. The two SCAs set out the rights and obligations of the power companies and provide a framework for the Government to monitor the power companies' financial affairs and technical performance. While the previous SCAs expired in 2018, the Government entered into the current SCAs with the power companies

¹ HKE is a subsidiary of HK Electric Investments Limited.

² CLP Power Hong Kong Limited is a subsidiary of CLP Holdings Limited. Castle Peak Power Company Limited is a joint venture between CLP Power Hong Kong Limited (70%) and China Southern Power Grid International (HK) Co., Limited (30%).

on 25 April 2017.³ As advised by the Administration, the current SCAs are the greenest SCAs ever offering key features on promoting energy efficiency and conservation ("EE&C") and renewable energy ("RE"). These key features include the introduction of feed-in tariffs, expansion of the EE&C programmes to enhance the energy efficiency of a wider coverage of buildings, implementation of demand response programme, etc.. These will not only contribute to the Administration's efforts to meet the carbon intensity reduction target for 2030 but also the energy intensity reduction target for 2025 to combat climate change. Key changes of the current SCAs to the previous ones include:

- (a) duration of the current SCAs is 15 years⁴ till 31 December 2033, instead of a term of 10 years with an option to extend for five more years;
- (b) the permitted rate of return ("RoR") is lowered from 9.99% to 8% on the power companies' average net fixed assets; and
- (c) a more frequent fuel clause charge ("FCC") adjustment mechanism is introduced so that the fuel costs borne by the power companies could be reflected in the tariffs in a more timely manner.

4. Under the SCAs, the power companies have to submit development plans ("DPs"), which outline the capital projects to be implemented by the power companies and the projected basic tariff rates for each of the five years covered by DPs, for the approval of the Executive Council ("ExCo"). The major features of the 2018-2023 DPs ("the new DPs") of the two power companies approved by ExCo on 3 July 2018 in accordance with the current SCAs are listed in **Appendix I**. The projected electricity tariffs for CLP and HKE from 2020 to 2023 under the new DPs are set out in **Appendices II** and **III** respectively. As advised by the Administration, the new DPs include essential capital projects to change the fuel mix for electricity generation which will help combat climate change and further improve air quality, ensure the reliability and security of local electricity supply, and assist in turning Hong Kong into a smart city.

Tariff adjustment mechanism

5. Electricity tariff charged by the two power companies is made up of two components, namely the basic tariff and FCC, the total of which is the net tariff rate. While the basic tariff covers operating expenses, standard fuel charges and

³ Details of the SCAs with HKE and CLP are at https://www.enb.gov.hk/sites/default/files/en/node66/new_HKE_SCA_eng.pdf and https://www.enb.gov.hk/sites/default/files/en/node66/new_CLP_SCA_eng.pdf respectively.

⁴ The SCA with HKE commenced on 1 January 2019 such that the term of it will be 15 years. The SCA with CLP commenced on 1 October 2018, meaning a term of 15 years and three months.

return to the power companies, FCC reflects the changing price of fuels and is borne by consumers and payable to the power companies on a cost-pass-through basis.

6. To ensure that tariff adjustment is reasonable, the Administration is responsible for playing a gate-keeping role to control cost relating to the basic tariff. Furthermore, the Administration would use the two power companies' Tariff Stabilisation Fund ("TSF")⁵ to mitigate pressure of tariff increase, and the Fuel Clause Recovery Accounts ("FCAs")⁶ to tackle sharp fuel cost increase due to the expiry of existing fuel supply contracts or fluctuations in supply. It would also examine whether any special income of the two companies can be used to offset cost increase.

7. The following table shows the changes of the overall tariffs charged by the two power companies in previous years and the projected tariffs from 2021 to 2023 under the new DPs –

	CLP (cents/unit)				HKE (cents/unit)			
	Basic tariff	FCC	Rebates	Average net tariff	Basic tariff	FCC	Rebates	Average net tariff
2009	77.4	11.8	0	89.2	94.5	25.4	0	119.9
2010	80.1	11.5	0	91.6	94.5	25.4	-0.1	119.8
2011	80.1	14.1	0	94.2	93.0	30.2	-0.1	123.1
2012	84.2	17.8	-3.3	98.7	93.9	37.0	0	130.9
2013	84.0	22.4	-1.7	104.7	94.4	40.2	0	134.6
2014	88.4	22.4	0	110.8	101.8	33.1	0	134.9
2015	87.2	27.0	0	114.2	102.6	32.3	0	134.9
2016	88.9	24.3	0	113.2	105.5	27.9	0	133.4
2017	92.2	21.0	0	113.2	108.9	23.4	-21.9	110.4
2018 (Jan- Sept)	94.5	22.0	-1.1	115.4	109.1	23.4	-20.0	112.5
2018 (Oct- Dec)	91.0	27.8	-1.1	117.7				
2019	91.0	27.8	0	118.8	101.3	23.4	-4.6	120.1

⁵ The purpose of TSF is to accumulate the excess of net revenues of the power companies over the permitted return, so as to provide funding, where necessary, to ameliorate the impacts of tariff increases on consumers.

⁶ FCA is an account maintained by the two power companies through which the differences between the standard fuel charges (included in the basic tariff) and actual fuel prices incurred are returned to or recovered from consumers by means of a rebate or a surcharge each year.

	CLP (cents/unit)				HKE (cents/unit)			
	Basic tariff	FCC	Rebates	Average net tariff	Basic tariff	FCC	Rebates	Average net tariff
2020	92.2	30.8	-1.2	121.8	102.0	24.8	-0.4	126.4
*2021	96.5	36.2	0	132.7	110.2	27.5	0	137.7
*2022	99.1	37.4	0	136.5	114.8	29.8	0	144.6
*2023	101.9	37.4	0	139.3	115.7	36.2	0	151.9

* The projected tariffs under the new DPs

8. The Administration has also advised that the projected tariffs are only projections and the actual tariffs to be charged to consumers each year will be determined in the respective annual tariff review having regard to various factors, particularly the actual fuel costs prevailing at the time. During the entire new DP period, the average basic tariff rate is projected to increase at an annual rate of 1.4% for CLP and 1.2% for HKE while the average net tariff rate (before rebates) is projected to increase at an annual rate of 3.5% for CLP and 2.8% for HKE.

Electricity charges relief and subsidy

9. While the increasing use of natural gas together with the necessary capital investments will help bring environmental benefits to Hong Kong, they will inevitably lead to considerable rise in electricity tariff during the new DP period. To alleviate the impact of tariff increase on households during the transitional period, the Administration proposed in July 2018 to grant each residential electricity account a maximum total relief of \$3,000 over 60 months (i.e. \$50 per month) to alleviate the increase in electricity charges of eligible domestic households commencing from 1 January 2019. The funding proposal of the electricity charges relief was approved by the Finance Committee ("FC") at its meeting on 16 November 2018.

10. The Financial Secretary ("FS") announced in August 2019 a package of measures to support enterprises, safeguard jobs and relieve people's financial burden, including the provision of a one-off electricity charge subsidy of \$2,000 to each eligible residential electricity account. The subsidy was proposed to be injected into each eligible residential electricity account in 12 instalments (i.e. \$160 each for the first 11 consecutive months, and \$240 in the twelfth month). It was proposed that this subsidy could be used together with the existing subsidy schemes⁷ to cover billed electricity charges of eligible households up to

⁷ The existing subsidy schemes refer to the electricity charges subsidy schemes implemented in 2008, 2011, 2012 and 2013.

31 December 2022 or the close of the account, whichever is earlier. This funding proposal was approved by FC on 6 December 2019.

11. In December 2019, FS announced another package of helping measures which included the provision of electricity charges subsidy ("ECS") to eligible non-residential electricity accounts. It was proposed that the subsidy would cover 75% of their billed electricity charges, subject to a cap of \$5,000 per month, in respect of their electricity consumption over a four month period. The funding proposal was approved by FC on 28 February 2020.

Issues previously raised by the Panel

12. Members of the Panel have expressed views and concerns over a range of issues at previous meetings, including –

- (a) the need of raising tariff despite substantial profits from the two power companies;
- (b) higher rate of tariff charged by HKE as compared to CLP;
- (c) enhancing the monitoring of the power companies' investment on generation facilities and treatment of excessive generating capacity;
- (d) enhancing the transparency of the processes for the formulation of tariff adjustments and DPs of the two power companies so as to facilitate public monitoring;
- (e) reviewing the FCC adjustment mechanism so that tariffs could be adjusted in a timely manner in response to the change in fuel cost;
- (f) opting not to achieve the maximum permitted RoR, or using TSF reserve to offset the fuel cost increase;
- (g) providing suitable assistance to tenants of sub-divided units ("SDUs") who were overcharged by their landlords for the use of electricity as they did not have individual electricity meters;
- (h) implementing increased interconnection between the networks of the two power companies to minimize investment on new generating units;
- (i) introducing electricity suppliers to enhance market competition with a view to lowering the tariff;

- (j) separating power generation and transmission to facilitate market entry and competition;
- (k) sourcing cheaper gas supplies or importing less costly alternative fuels to reduce the pressure on tariff increase;
- (l) the safety of using nuclear power for power generation and the import of nuclear energy from the Mainland;
- (m) striking a balance between commitment to environmental protection and cost control on power generation;
- (n) stepping up the promotion of energy saving initiatives and adopting various measures to reduce electricity consumption; and
- (o) encouraging the development of distributed RE power generation facilities and networks, and providing technical support and concessions for connection to electricity grids.

Latest discussions

13. At the meeting held on 10 December 2019, the Panel was consulted on the results of the 2020 electricity tariff reviews prior to implementation. At the same meeting, the Panel also discussed the Administration's financial proposal of ECS mentioned in paragraph 11 above.

14. Members noted with concern that for 2020, the net tariff of HKE would increase by 5.2% to 126.4 cents/kWh in 2020 after counting a special rent and rates rebate of 0.4 cents/kWh, while CLP's net tariff would increase by 2.5% to 121.8 cents/kWh after taking into account a special rent and rates rebate of 1.2 cents/kWh. They urged the Administration to formulate long-term measures to stabilize future tariffs and strengthen its efforts in monitoring the power companies' sourcing of natural gas and investment on generation facilities. Some members expressed disappointment at the tariff increase, and were of the view that the permitted RoR, which was fixed at 8% of the total value of the power companies' average net fixed assets under the current SCAs, was too high, especially under this sluggish economy. A member opined that ECS was in fact a means to cover up a large increase in electricity tariff.

15. The Administration explained that the increased use of natural gas, which was cleaner yet more expensive, would unavoidably bring an increase in electricity tariff. On monitoring the two power companies, the Administration advised that it conducted annual tariff reviews and auditing reviews to examine their capital and operating expenditures, in addition to the critical assessment on

every five-year DPs of the two power companies. Regarding the long-term electricity generation in Hong Kong, the Administration advised that it had invited the Council for Sustainable Development to conduct a public engagement on Long-term Decarbonisation Strategy aiming to facilitate the drawing up of a long-term development strategy to achieve low greenhouse gas emissions. The final report would be released in 2020.

16. There was a view that instead of implementing the various relief schemes, the Administration should make direct investments in the electricity generation systems for use by the two power companies so as to reduce the capital expenditure of the two power companies and the resultant increase in tariffs in the long run. The Administration advised that the Government's SCAs with the power companies clearly defined the respective roles and responsibilities of the Government and the power companies: the Government was responsible for regulating the power companies' performance and investment, while the power companies invested, operated and delivered a reliable supply of electricity. There were no provisions in SCAs that enabled the Government to compel the two power companies to sell or lease electricity-related facilities and assets, nor were there provisions that the Government could invest in such facilities and assets. In accordance with the spirit of SCAs, the Government should avoid actions that might muddle its role as the regulator, such as turning itself into a government that had financial or operational relationship with the two power companies while being also their regulatory body.

17. Some members expressed concern that the electricity charges relief/subsidy schemes for residential electricity accounts could not cover tenants of SDUs which had no individual electricity meters. In response, the Administration advised that although these tenants could not be covered by the schemes, SDU tenants who were in need could benefit from the two power companies' programmes to support the disadvantaged groups, which were implemented using their respective Community Energy Saving Funds.

Council questions

18. At the Council meetings of 7 December 2016, 11 January, 22 March, 12 July and 25 October 2017, 23 January and 23 October 2019, and 6 May 2020, Members raised questions covering, among others, provision of electricity charges subsidy, electricity charges for tenants of SDUs, the development of RE and fuel mix for electricity generation. Hyperlinks to the relevant written replies from the Administration are provided in **Appendix IV**.

Latest development

19. At the special meeting on 10 November 2020, the Administration and the two power companies will brief the Panel on the tariff reviews for 2021.

References

20. A list of the relevant papers available on the Legislative Council Website (<http://www.legco.gov.hk>) is at **Appendix IV**.

Council Business Division 4
Legislative Council Secretariat
3 November 2020

**The 2018-2023 development plans of
the power companies**

On 3 July 2018, the Government approved the 2018-2023 development plans of CLP Power Hong Kong Ltd. and Castle Peak Power Company Ltd. ("CLP") and The Hongkong Electric Company Ltd. ("HKE") with the features below:

- (a) CLP's Development Plan (effective from 1 October 2018 to 31 December 2023 ("CLP DP Period")) –
 - (i) there will be capital projects for a total estimated capital expenditure ("CAPEX") of \$52.9 billion to be incurred during the period from 1 October 2018 to 31 December 2023;
 - (ii) there will be a decrease in average basic tariff rate by 3.5 cents/kWh, or 3.7%, to 91 cents/kWh during the period from 1 October 2018 to end 2019; and
 - (iii) the projected levels of basic tariff rate for the CLP DP Period will increase on average by 1.4% per annum; and
- (b) HKE's Development Plan (effective from 1 January 2019 to 31 December 2023 ("HKE DP Period")) –
 - (i) there will be capital projects for a total estimated CAPEX of \$26.6 billion to be incurred during the period from 1 January 2019 to 31 December 2023;
 - (ii) there will be a decrease in average basic tariff rate by 7.8 cents/kWh, or 7.1%, to 101.3 cents/kWh for the first year from 1 January 2019; and
 - (iii) the projected levels of basic tariff rate for the HKE DP Period will increase on average by 1.2% per annum.

Source: Legislative Council Brief, File Ref: ENB CR 1/4576/08 (18) Pt.28, ENB CR 2/4576/08 (18) Pt.27

CLP
Projected Tariff Rates,
Year End Balances of Tariff Stabilisation Fund and
Fuel Clause Recovery Account

(¢/kWh)	2018a* Existing Rates	2018b# Rates	2019 Rates	Projected Rates in the 2018-23 Development Plan			
				2020	2021	2022	2023
<u>Tariff Components</u>							
Average Basic Tariff Rate	94.5	91.0	91.0	93.4	96.5	99.1	101.9
Fuel Clause Charge	22.0	27.8	27.8	32.4	36.2	37.4	37.4
Average Net Tariff Rate Before Special Rebate	116.5	118.8	118.8	125.8	132.7	136.5	139.3
Special Rent and Rates Rebate	-1.1	-1.1	-	-	-	-	-
Average Net Tariff Rate After Special Rebate	<u>115.4</u>	<u>117.7</u>	<u>118.8</u>	<u>125.8</u>	<u>132.7</u>	<u>136.5</u>	<u>139.3</u>
Change in							
- Average Basic Tariff Rate		-3.5 (-3.7%)	- (0%)	+2.4 (+2.6%)	+3.1 (+3.3%)	+2.6 (+2.7%)	+2.8 (+2.8%)
- Average Net Tariff Rate Before Special Rebate		+2.3 (+2.0%)	- (0%)	+7.0 (+5.9%)	+6.9 (+5.5%)	+3.8 (+2.9%)	+2.8 (+2.1%)
- Average Net tariff Rate After Special Rebate		+2.3 (+2.0%)	+1.1 (+0.9%)	+7.0 (+5.9%)	+6.9 (+5.5%)	+3.8 (+2.9%)	+2.8 (+2.1%)

* Figures for 2018a cover the nine-month period ending 30 September 2018 before the new SCA becomes effective.

Figures for 2018b cover the three-month period ending 31 December 2018 after the new SCA becomes effective.

Average annual increase – October 2018 to December 2023

Basic Tariff Rate	1.4%
Net Tariff Rate Before Special Rebate	3.5%
Net Tariff Rate After Special Rebate	3.7%

	2018a*	Projected Balances in the 2018-23 Development Plan					
		2018b#	2019	2020	2021	2022	2023
<u>Year End Balance</u>							
Tariff Stabilisation Fund (\$Million)	827	636	452	462	455	438	423
- % of Local Sales of Electricity	2.0%	1.6%	1.1%	1.1%	1.0%	1.0%	0.9%
Fuel Clause Recovery Account (\$Million)	1,018	693	394	(767)	(614)	7	24

Source: Annex A1 to Legislative Council Brief, File Ref: ENB CR 1/4576/08 (18) Pt.28, ENB CR 2/4576/08 (18) Pt.27

HKE
Projected Tariff Rates,
Year End Balances of Tariff Stabilisation Fund and
Fuel Clause Recovery Account

	2018 Existing Rates (¢/kWh)	Projected Rates in the 2019-23 Development Plan				
		2019 Rates	2020	2021	2022	2023
<u>Tariff Components</u>						
Average Basic Tariff Rate	109.1	101.3	105.3	110.2	114.8	115.7
Fuel Clause Charge	<u>23.4</u>	23.4	<u>25.8</u>	<u>27.5</u>	<u>29.8</u>	<u>36.2</u>
Average Net Tariff Rate Before Special Rebates	132.5	124.7	131.1	137.7	144.6	151.9
Special Rent and Rates Rebate	-4.0	-2.3	-0.3	-	-	-
Special Fuel Rebate	<u>-16.0</u>	-2.3	-	-	-	-
Average Net Tariff Rate After Special Rebates	<u>112.5</u>	120.1	<u>130.8</u>	<u>137.7</u>	<u>144.6</u>	<u>151.9</u>
Change in						
- Average Basic Tariff Rate		-7.8 (-7.1%)	+4.0 (+3.9%)	+4.9 (+4.7%)	+4.6 (+4.2%)	+0.9 (+0.8%)
- Average Net Tariff Rate Before Special Rebates		-7.8 (-5.9%)	+6.4 (+5.1%)	+6.6 (+5.0%)	+6.9 (+5.0%)	+7.3 (+5.0%)
- Average Net Tariff Rate After Special Rebates		+7.6 (+6.8%)	+10.7 (+8.9%)	+6.9 (+5.3%)	+6.9 (+5.0%)	+7.3 (+5.0%)

Average annual increase – 2019 to 2023

Basic Tariff Rate	1.2%
Net Tariff Rate Before Special Rebates	2.8%
Net Tariff Rate After Special Rebates	6.2%

	2018	Projected Balances in the 2019-23 Development Plan				
		2019	2020	2021	2022	2023
<u>Year End Balance</u>						
Tariff Stabilisation Fund (\$Million)	331	329	327	326	325	269
- % of Sales of Electricity	2.4%	2.5%	2.4%	2.3%	2.2%	1.7%
Fuel Clause Recovery Account (\$Million)	979	615	413	330	289	39

*Source: Annex A2 to Legislative Council Brief, File Ref: ENB CR 1/4576/08 (18)
Pt.28, ENB CR 2/4576/08 (18) Pt.27*

List of relevant papers

Issued by	Meeting date/ Issue date	Paper
Panel on Economic Development ("the Panel")	4 July 2018 (Item I)	Legislative Council Brief
	10 December 2019 (Item V)	Administration's paper on electricity charges subsidy HKE's information paper CLP's information paper Hon SHIU Ka-chun's letter (Chinese version only) Administration's response to Hon SHIU Ka-chun's letter Background brief Minutes
	20 January 2020 (Item I)	Letter from Hon WU Chi-wai (Chinese version only) Administration's response to Hon WU Chi-wai's letter
Joint meeting of the Panel and the Panel on Environmental Affairs	29 April 2017 (Item II)	Administration's paper
Panel on Financial Affairs	4 November 2019 (Item VI)	Administration's paper
Council Meeting	7 December 2016	Council question on "Tenants of sub-divisions of flat units being overcharged for use of electricity" raised by Hon LUK Chung-hung
	11 January 2017	Council question on "Water and electricity charges of tenants in inadequate housing" raised by Dr Hon LAU Siu-lai

Issued by	Meeting date/ Issue date	Paper
	22 March 2017	<u>Council question on "Electricity charges for tenants of sub-divided units of flats" raised by Hon LEUNG Yiu-chung</u>
	12 July 2017	<u>Council question on "Feed-in tariff scheme for renewable energy power generation installations" raised by Hon Kenneth LEUNG</u>
	25 October 2017	<u>Council question on "Installation of renewable energy power generation facilities on rooftops of village houses" raised by Hon Kenneth LAU</u>
	23 January 2019	<u>Council question on "Promoting the development of renewable energy" raised by Hon Martin LIAO</u>
	23 October 2019	<u>Council question on "Future fuel mix for electricity generation" raised by Hon Kenneth LEUNG</u>
	23 October 2019	<u>Council question on "Renewable energy" raised by Hon CHAN Hak-kan</u>
	6 May 2020	<u>Council question on "Fuel mix for electricity generation" raised by Hon Kenneth LEUNG</u>