

**Provision of information by CLP Power (CLP) on 2021 Tariff Review  
for the Legislative Council Panel on Economic Development**

**A. Information related to the Five-year Development Plan**

A1. Capital expenditure forecast under the approved Development Plan

<b>Categories<sup>[1]</sup> (\$ million)</b>	<b>2018<sup>[2]</sup></b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Total</b>
(A) Power Generation System	1,313	5,011	7,317				25,429
(B) Transmission & Distribution System	1,184	4,330	4,661				26,496
(C) Customer and Corporate Services Development	26	171	169				1,018
<b>Total (A + B + C)</b>	<b>2,523</b>	<b>9,512</b>	<b>12,147</b>				<b>52,943</b>

Remarks:

[1] Capital expenditure forecast breakdowns are shown on page 2.

[2] Period covering Oct - Dec 2018.

**Notes to the confidential figures:**

- Revealing CLP major capital expenditure categories would enable the suppliers to easily assess the budget estimates of certain projects that would increase their ability of price negotiations. Such might cause an increase in the costs of capital expenditure leading to an increase in future tariff level. This would also reveal CLP's future fixed assets investment as well as future profits. Any disclosure of confidential inside information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements and the Securities and Futures Ordinance. Any person using confidential inside information or any "tipping" to others for dealings may also commit an offence under the Securities and Futures Ordinance.

## Approved Major Projects in the 2018 Development Plan

Generation

No.	Projects	\$billion
1	New Combined Cycle Gas Turbine Unit (D1)	
2	New Combined Cycle Gas Turbine Unit (D2)	
3	Replacement of Combustion System of Black Point Power Station	
4	Water Management Facilities at Castle Peak Power Station	
5	Hong Kong Offshore LNG Terminal (including the gas pipeline to Black Point Power Station)	
6	Landfill Gas Renewable Energy Generation at WENT (Phase 1 and 2)	
7	Replacement & Refurbishment of obsolete/aged equipment in Black Point Power Station, Castle Peak Power Station and Penny's Bay Power Station [hundreds of work items]	10.8

Transmission & Distribution

No.	Projects	\$billion
	<u>Meeting Load Requirements</u>	
1	Cable Installation inside Tuen Mun - Chek Lap Kok Link Tunnels	
2	Establishment of Hung Shui Kiu 'A' Substation	
3	Enhancement of Clean Energy Transmission System	
4	Upgrading of SHE-TSE Overhead Line	
5	Upgrading of BKP-CPK Overhead Line	
6	Establishment of South East Kowloon 'C' Substation	
7	Establishment of Fanling North Substation	
8	Establishment of Queen's Hill Substation	
9	Meeting Load Requirements - Others (Other projects < \$100m and many thousands of projects to meet customer demand)	8.0
	<u>Meeting Government/ Infrastructure Requirements</u>	
10	Establishment of Ho To West Substation	
11	Establishment of Airport 'E' Substation	
12	Reinforcement of Cheung Sha Substation	
13	Establishment of 2 x 132kV Cheung Sha - Integrated Waste Management Facilities (IWMF) Circuit	
14	Establishment of Desalination Plant Substation	
15	Establishment of Hong Kong-Zhuhai-Macao Bridge Substation	
16	Establishment of Airport 'F' Substation	
17	Meeting Government/ Infrastructure Requirements - Others (Other projects < \$100m and hundreds of projects to support Government's new railways, roads, bridges and redevelopment projects)	1.8
	<u>Maintaining Supply Reliability &amp; Quality</u>	
18	400kV Tower Lines Reinforcement for Super Typhoon	
19	Maintaining Supply Reliability & Quality - Others (Other projects < \$100m and many thousands network reinforcement projects to maintain supply reliability & quality)	4.3
	<u>Replacement &amp; Refurbishment</u>	
20	132kV Oil-filled Cable Replacement	
21	11kV Switchgear Refurbishment	
22	132kV Switchgear Refurbishment	
23	Asset Replacement & Refurbishment - Others (Other projects < \$100m and hundreds of projects to replace aged equipment)	2.1
24	Network Operation Systems (System Control, Protection, Telecommunications)	1.3
25	Advanced Metering Infrastructure Development	
26	Miscellaneous (Other projects < \$100m)	1.9

Customer and Corporate Services

No.	Projects	\$billion
1	Customer Billing & Services System & Centre Facilities	0.4
2	Corporate System Development (data storage, backup infrastructure & security system) and other support services	0.6

Total 52.9

Notes to the confidential information:

Since a lot of work is in progress under individual projects, revealing the capital expenditure forecast would not be appropriate.

Such projects may be in the tendering stage or maybe at a commercially sensitive stage. As a result, revealing such confidential figures would not be in the interest of customers.

## A2. Actual capital expenditure under the approved Development Plan Period

Categories (\$ million)	2018 <sup>[1]</sup>	2019	2020 <sup>[2]</sup>	2021 <sup>[3]</sup>
(A) Power Generation System	1,353	4,513	5,118	
(B) Transmission & Distribution System	1,217	4,414	4,346	
(C) Customer and Corporate Services Development	25	170	181	
<b>Grand Total (A+B+C)</b>	<b>2,595</b>	<b>9,097</b>	<b>9,645</b>	

[1] Period covering Oct - Dec 2018.

[2] Projected figures per 2021 Tariff Review pending year-end accounting audit and verification.

[3] As projected and forecast in the 2021 Tariff Review submission.

**Notes to the confidential figures:**

- Revealing CLP major capital expenditure categories would enable the suppliers to easily assess the budget estimates of certain projects that would increase their ability of price negotiations. Such might cause an increase in the costs of capital expenditure leading to an increase in future tariff level. This would also reveal CLP's future fixed assets investment as well as future profits. Any disclosure of confidential inside information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements and the Securities and Futures Ordinance. Any person using confidential inside information or any "tipping" to others for dealings may also commit an offence under the Securities and Futures Ordinance.

## A3. Tariff Component by year - Five-year development plan forecast compared with annual tariff review

Tariff Component (cents/ kWh)	2018 <sup>1</sup>	2018 <sup>2</sup>	2019	2020		2021		2022		2023	
	Actual Tariff	DP Forecast/ Tariff Review <sup>3</sup>		DP Forecast <sup>4</sup>	Annual Tariff Review	DP Forecast <sup>4</sup>	Annual Tariff Review	DP Forecast <sup>4</sup>	Annual Tariff Review	DP Forecast <sup>4</sup>	Annual Tariff Review
(A) Basic Tariff	94.5	91.0		93.4	92.2	96.5	93.7	99.1		101.9	
<i>Increase/(Decrease)%</i>											
-- Annual		-3.7%		2.6%	1.3%	3.3%	1.6%	2.7%		2.8%	
-- Since Sep 2018		-3.7%		-1.2%	-2.4%	2.1%	-0.8%	4.9%		7.8%	
(B) Fuel Clause Charge <sup>5</sup>	22.0	27.8		32.4	30.8	36.2	28.1	37.4		37.4	
<i>Increase/(Decrease)%</i>											
-- Annual		26.4%		16.5%	10.8%	11.7%	-8.8%	3.3%		0%	
-- Since Sep 2018		26.4%		47.3%	40.0%	64.5%	27.7%	70%		70%	
(C) Rent and Rates Special Rebate	-1.1	-1.1	-*	-	-1.2	-	-	-		-	
(D) Net Tariff	<b>115.4</b>	<b>117.7</b>	<b>118.8*</b>	<b>125.8</b>	<b>121.8</b>	<b>132.7</b>	<b>121.8</b>	<b>136.5</b>		<b>139.3</b>	
<i>Increase/(Decrease)%</i>											
-- Annual		<b>2.0%</b>	<b>0.9%*</b>	<b>5.9%</b>	<b>2.5%</b>	<b>5.5%</b>	<b>0.0%</b>	<b>2.9%</b>		<b>2.1%</b>	
-- Since Sep 2018		<b>2.0%</b>	<b>2.9%*</b>	<b>9.0%</b>	<b>5.5%</b>	<b>15.0%</b>	<b>5.5%</b>	<b>18.3%</b>		<b>20.7%</b>	

\* The Special Rent & Rates Rebate at 1.1 cents per unit was discontinued starting 18 February 2019 when the refund received from Government in 2018 was used up.

1. Period covering Jan - Sep 2018.
2. Period covering Oct - Dec 2018.
3. The two exercises were done at the same time.
4. The tariff rates for 2020 to 2023 are projections only 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 Development Plan & fuel costs.
5. In accordance with the Monthly Fuel Cost Adjustment Mechanism agreed with the Government, the Fuel Clause Charge (FCC) will be automatically adjusted on a monthly basis after the new Scheme of Control Agreement (SCA) came into effect on 1 October 2018 to reflect changes in actual price of fuel used.

**B. Materials related to tariff adjustments**

## B1. The proposed tariff adjustment

	2020 Tariff ¢ / kWh	2021 Tariff ¢ / kWh	Adjustment %
Basic Tariff	92.2	93.7	1.6%
Fuel Clause Charge	30.8	28.1	-8.8%
Rent and Rates Special Rebate	-1.2	-	N/A
Net Tariff	121.8	121.8	0.0%

## Year-end Balance (\$ million)

- Tariff Stabilisation Fund	1,527	728
- Fuel Clause Account	252	35

## B2. The rationales for the proposals of tariff adjustment

	<b>Rationales for tariff adjustment</b>	<b>Tariff impact (¢/kWh)</b>
(1)	<b>Basic Tariff</b>	
(a)	<b>Average Net Fixed Asset</b> Increase from █████ billion in 2020 to █████ billion in 2021, the majority of which is related to investment in our generation facilities and transmission & distribution network to meet supply reliability, customer demand and to support the decarbonisation of electricity generation	+1.4
(b)	<b>Operating expenses</b> Increase of operating expenses per unit sold is 1.5¢/kWh, attributed by depreciation, Government Rent & Rates, insurance expense and others	+1.5
(c)	<b>Local electricity sales</b> Decrease from 33,899GWh in 2020 to █████GWh in 2021 (breakdown see Note i)	+1.8
(d)	<b>Tariff Stabilisation Fund Balance</b> Drawdown of TSF balance in 2021	-3.1
(e)	<b>Others</b> Changes in taxation, interest and Standard Fuel Cost, etc.	-0.1
	<b>Sub-total (Basic Tariff):</b>	+1.5

	<b>Rationales for tariff adjustment</b>	<b>Tariff impact (¢/kWh)</b>
(2)	<b>Fuel Clause Charge (FCC)</b>	
(a)	<b>Fuel Cost</b>  Decrease in fuel cost per unit sold is -2.2 ¢/kWh	-2.2
(b)	<b>Fuel Clause Account balance</b>  Fuel Clause Account balance decreases by \$217 million from \$252 million in 2020 to \$35 million in 2021	-0.7
(c)	<b>Under-recovery of fuel cost in 2020</b>  Adjustments arisen from difference between planned FCC and actual FCC	+0.2
	<b>Sub-total (Fuel Clause Charge):</b>	-2.7
(3)	<b>Rent &amp; Rates Special Rebate</b>	+1.2
	<b>Grand Total:</b>	<b>0.0</b>

**Notes to the confidential figures:**

- a. Forecast Average Net Fixed Assets (ANFA) values might reveal future 2021 profits. Any disclosure of confidential inside information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements and the Securities and Futures Ordinance. Any person using confidential inside information or any “tipping” to others for dealings may also commit an offence under the Securities and Futures Ordinance.
- b. Disclosure of future sales growth might indicate to suppliers CLP’s underlying demand which could increase their bargaining power in setting prices leading to higher prices to be borne by Hong Kong citizens. This might also reveal CLP’s future fixed assets investment as well as future profits. Any disclosure of confidential inside information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements and the Securities and Futures Ordinance. Any person using confidential inside information or any “tipping” to others for dealings may also commit an offence under the Securities and Futures Ordinance.

Note i**Local Sales Forecast**

	2020 Forecast		2021 Forecast	
	This Submission GWh	Incr./ (Decr.) over 2019 %	This Submission GWh	Incr./ (Decr.) over 2020 Forecast %
Local sales				
• Commercial	12,937	(4.8)		
• Residential	10,015	6.0		
• Infrastructure & Public Services	9,323	(2.7)		
• Manufacturing	1,624	(2.3)		
Total Local Sales	<u>33,899</u>	<u>(1.1)</u>		

**Notes to the confidential figures:**

Disclosure of future sales growth might indicate to suppliers CLP's underlying demand which could increase their bargaining power in setting prices leading to higher prices to be borne by Hong Kong citizens. This might also reveal CLP's future fixed assets investment as well as future profits. Any disclosure of confidential inside information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements and the Securities and Futures Ordinance. Any person using confidential inside information or any "tipping" to others for dealings may also commit an offence under the Securities and Futures Ordinance.

Note ii

<b>Fuel consumed (‘000 terajoules)</b>	<u>2020 Forecast</u>	<u>2021 Forecast</u>
• Coal	66.1	
• Natural Gas	130.9	
• Oil	1.8	
• Others (include Interconnection)	12.8	
<b>Total</b>	<b>211.6</b>	
<b>Average Fuel Price (HK\$ per gigajoule)</b>	<u>2020 Forecast</u>	<u>2021 Forecast</u>
• Coal	20.0	
• Natural Gas	84.1	
• Oil	93.7	
• Others (include Interconnection)	106.7	
<b>Total</b>	<b>65.5</b>	
<b>Fuel Cost (\$ million)</b>	<u>2020 Forecast</u>	<u>2021 Forecast</u>
• Coal	1,324	
• Natural Gas	11,013	
• Oil	168	
• Others (include Interconnection)	1,364	
<b>Total</b>	<b>13,869</b>	
Standard Fuel Cost	3,367	
Fuel Cost exceeding Standard Fuel Cost	10,502	

**Notes to the confidential figures:**

Disclosure of fuel demand and price forecasts would materially disadvantage CLP in negotiations in setting price or volume delivery terms with fuel suppliers, resulting in higher prices and hence increased fuel clause charges to be borne by Hong Kong citizens.

The underlying calculations in Average Fuel Price (HK\$ per gigajoule) have been performed using more decimal places for “Fuel consumed (‘000 terajoules)” and “Fuel Cost (\$ million)” than are presented. If the calculations are reperformed using the data presented, some minor differences in the numbers may arise.

Note iii

<b>Items for Non-Fuel Expenses</b>	<b>Forecast Expense for 2020 (\$ million)</b>	<b>Forecast Expense for 2021 (\$ million)</b>
Operating Costs		
Payroll	1,605	
Material & Services	2,224	2,233
Loan Charges	41	
Government Rent & Rates	745	804
Fixed Asset Disposal	349	328
Power Purchase from PSDC	565	582
Exchange Difference	-	
Sub-total for Operating Costs:	5,529	5,663
Nuclear Power Purchase	5,734	5,769
Provision for Asset Decommissioning	153	132
Depreciation	5,108	5,454
Total Non-fuel Operating Expenses before Operating Interest and Taxation:	16,524	17,018
Operating Interest	1,071	
Taxation	1,772	
Total Non-fuel Operating Expenses:	19,367	19,859

**Notes on the confidential figures:**

- The 2021 figure is a budget based on the expected number of employees and salary adjustments. Inappropriate release of the information to the public before it is communicated to staff would jeopardise relations between CLP and its employees.
- Disclosure of this confidential funding information could materially affect CLP's borrowing cost, leading to increased costs to Hong Kong citizens.
- Disclosure of this confidential currency exchange information could materially affect CLP's ability to make currency exchange at the lowest cost, leading to increased costs to Hong Kong citizens.
- Disclosure of this information may enable calculation of Operating Interest.