

**2013 Tariff Review****Annex HEC-A**

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

**Provision of information by Hongkong Electric Company Limited (HKE)  
for Economic Development Panel of the Legislative Council**

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

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

<b>Categories<sup>1</sup> (\$ million)</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012-2013<sup>+</sup></b>	<b>Total</b>
(A) Power Generation System					
Emission Reduction Projects	573.5	438.9	216.6	447.3	1,676.3
Post-commissioning Projects & Other Power Generation System(s)	400.4	727.0	781.0	842.4	2,750.8
Sub-total	973.9	1,165.9	997.6	1,289.7	4,427.1
(B) Transmission & Distribution System	1,213.0	1,296.7	1,361.4	2,294.3	6,165.4
(C) Customer and Corporate Services Development	507.1	222.0	309.7	703.9	1,742.7
<b>Grand Total</b>	<b>2,694.0</b>	<b>2,684.6</b>	<b>2,668.7</b>	<b>4,287.9</b>	<b>12,335.2</b>

Note 1: Detailed breakdown of capital expenditure shown on page 2.

<sup>+</sup>Revealing HK Electric major capital expenditure categories in 2013 would enable the suppliers 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 future tariff level. This would also reveal HK Electric's future fixed assets investment as well as future profits. Any disclosure of confidential information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements. Any person using confidential information or any "tipping" to others for dealings may also commit an offence under the Securities and Futures Ordinance.

## 2013 Tariff Review

## Annex HEC-A

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

Approved 2009-2013 Development Plan – Project Capital Expenditure			
Project No.	Project	Remark	Project Total CapEx (HK\$M)
<b>G.1 Generation – Emission Reduction Projects</b>			
G.1.1	Coal-fired Units L2, L4, L5 FGD and Low NOx Retrofit		654.6
G.1.2	Coal-fired Units L2-L6 Start Up Fuel Conversion from Heavy Fuel Oil to Ultra Low Sulphur Diesel		52.9
G.1.3	CCGT Unit GT57 Reliability Upgrading and Emission Performance Improvement		
G.1.4	CCGT Unit L9 Reliability Enhancement		339.1
<b>G.2 Generation – Post-commissioning Projects &amp; Other Power Generation System(s)</b>			
G.2.1	Upgrade Coal-fired Units Operating Efficiency and Reliability – Including Upgrading L4, L5 Steam Turbine Efficiency and Replacing L6 Control System		
G.2.2	Improve and Upgrade Coal Conveying and Handling System		190.4
G.2.3	New Store Building for Gas Generation Facilities		101.4
G.2.4	Improve and Upgrade Common Facilities, Power Export Transmission Facilities and Other Auxiliary Plants		
<b>T&amp;D Transmission &amp; Distribution Projects</b>			
T&D.1	Marsh Road Substation and Associated Transmission Cable Circuits		717.5
T&D.2	Cable Replacement for Kennedy Road-Davis 132kV Circuits		
T&D.3	Cable Replacement for North Point-Parker 132kV Circuits		223.1
T&D.4	Power Supply to MTRC West and South Island Lines		
T&D.5	New Compact Zone Substation in Eastern District		
T&D.6	Reinforce Eastern District 275kV System for Phasing Out 132kV Overhead Lines		269.6
T&D.7	Construct New Distribution Network to Supply New Customers		
T&D.8	Construct 22kV Distribution Network to Promote Electricity Supply Reliability		
T&D.9	Replace North Point 132kV Station EHV Switchgear		
T&D.10	132kV & 275kV Transmission System Improvement & Reliability Upgrade		
T&D.11	HV/LV Distribution Systems Reinforcement		
<b>C. Customer &amp; Corporate Services Projects</b>			
C.1	Replace and Upgrade IT Systems for Corporate Applications Including (1) HK Electric Customer Information System (HECIS); and (2) Enterprise Resources Planning & Operation Management Systems (MIAMI & ERP)		
C.2	Replace and Upgrade IT systems for Engineering Applications Including (1) Power Station Central Management Information System (CNMIS); (2) Energy and Distribution Management Systems (EMS & DMS); and (3) EMS & DMS Remote Terminal Units (RTU)		
C.3	Distribution System Metering, Communication System, Customer Services, Operation Premises Improvement, Electric Vehicle, and Building M&E Services Energy Efficiency Upgrade		
<b>Total CapEx of All the Above Projects</b>			<b>12,335.2</b>

### Notes to the confidential figures:

Since a lot of works are in progress under individual project, revealing the capital expenditure forecast would not be appropriate. Such projects may be in the tendering stage or having potential contractual disputes with the contractors or suppliers. As a result, revealing such confidential figures may not benefit the customers.

## 2013 Tariff Review

## Annex HEC-A

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

<b>Major Projects Deleted in the Course of Development Plan Review</b>			
<b>Project No.</b>	<b>Project</b>	<b>Remark</b>	<b>Project Total CapEx (HK\$M)</b>
	Lamma Extension - L10 Combined Cycle Gas Generating Unit		
	Offshore Wind Farm		
	Lamma 275kV System Reconfiguration		
<b>Total CapEx of All the Above Projects</b>			

### **Notes to the confidential figures:**

For those projects not yet commenced, revealing the capital expenditure forecast would not be appropriate. If such capital expenditures are to be incurred in the future, HK Electric will be weakened in the bargaining power in price negotiations during the tendering stage leading to increase in capital expenditure expenses which will indirectly cause increase in future tariff level that would cause harm to the interests of the customers.

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

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

Categories (\$ million)	2009	2010	2011	2012 Estimate	2013 Estimate
(A) Power Generation System					
Emission Reduction Projects	676.7	590.8	243.7	113.0	
Post-commissioning Projects & Other Power Generation System(s)	486.1	556.2	974.4	808.4	
Sub-total	1,162.8	1,147.0	1,218.1	921.4	
(B) Transmission & Distribution System	963.1	934.2	1,183.6	1,180.9	
(C) Customer and Corporate Services Development	572.9	300.5	427.4	368.4	
<b>Grand Total</b>	2,698.8	2,381.7	2,829.1	2,470.7	

### Notes to the confidential figures:

Revealing HK Electric major capital expenditure categories would enable the suppliers 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 future tariff level. This would also reveal HK Electric's future fixed assets investment as well as future profits. Any disclosure of confidential information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements. Any person using confidential information or any "tipping" to others for dealings may also commit an offence under the Securities and Futures Ordinance.

### Explanations:

According to the prevailing 5-year (2009-2013) Development Plan, the cumulative actual & forecast total capital expenditure for the first 4-years (2009-2012) was lower than the budget estimate shown in the Development Plan ( ). The forecast total capital expenditure up to 2013 would be slightly less than that of the Development Plan ( vs. \$12.3352 billion).

## 2013 Tariff Review

## Annex HEC-A

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

### 3. Tariff component by year – Five-year development plan forecast 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	Annual Tariff Review
(A) Basic Tariff	116.9	94.5	95.3	94.5	97.3	93.1	98.6	94.1	98.7	94.7
<i>Increase/(Decrease)%</i>										
-- Annual		-19.2%		-%		-1.5%		+1.1%		+0.6%
-- Since 2008		-19.2%	-18.5%	-19.2%	-16.8%	-20.4%	-15.7%	-19.5%	-15.6%	-19.0%
(B) Fuel Clause Charge	10.5	25.4	34.6	25.4	29.5	30.2	28.2	37.0	28.2	40.2
<i>Increase/(Decrease)%</i>										
-- Annual		+141.9%		-%		+18.9%		+22.5%		+8.6%
-- Since 2008		+141.9%	+229.5%	+141.9%	+181.0%	+187.6%	+168.6%	+252.4%	+168.6%	+282.9%
(C) Rate Reduction Reserve Rebate			(0.1)	(0.1)					(0.1)	
(D) Special Rebate										
(E) Net Tariff	127.4	119.9	129.8	119.8	126.8	123.3	126.8	131.1	126.8	134.9
<i>Increase/(Decrease)%</i>										
-- Annual		-5.9%		-0.1%		+2.9%		+6.3%		+2.9%
-- Since 2008		-5.9%	+1.9%	-6.0%	-0.5%	-3.2%	-0.5%	+2.9%	-0.5%	+5.9%

\* The two exercises were done at the same time

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

**Provision of information by Hongkong Electric Company Limited (HKE)  
for Economic Development Panel of the Legislative Council**

**II. Information related to tariff adjustments**

In accordance with the prevailing Scheme of Control Agreement, electricity tariff (net tariff) is made up of the basic tariff and the fuel clause charge. The changes of basic tariff take into consideration of:- (1) Average Net Fixed Asset; (2) Operating Expenses; (3) Local Electricity Sales; (4) Tariff Stabilization Fund balance; and (5) Others. For the fuel clause charge, the factors include:- (1) Fuel Prices; (2) Correction of over-recovery of last year fuel clause charge; and (3) Fuel Clause Recovery Account balance.

**1. The tariff proposal submitted to the HKSAR Government by HK Electric on 6<sup>th</sup> December 2012**

	2012 Tariff c/kWh	2013 Tariff c/kWh	Adjustment %
Basic Tariff	94.1	94.7	0.6% +0.6 cent
Fuel Clause Charge	37.0	40.2	8.6% +3.2 cent
Net Tariff	131.1	134.9	2.9% +3.8 cent

**Year End Balance (\$billion)**

- Tariff Stabilisation Fund (Estimate)	0.44B	0.09B
- Fuel Clause Recovery Account (Estimate)	(0.86B)	(0.49B)

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

## 2. Rationale for tariff adjustment

	Rationales for tariff adjustment	Tariff impact (c / kWh)																		
(1)	<b>Basic Tariff</b>																			
(a)	<p><b>Increase in Average Net Fixed Asset</b></p> <p>(Increase from estimated \$ billion in 2012 to estimated \$ billion in 2013, the major components include capital expenditure on transmission projects, generation projects and corporate development projects)</p> <p>Note: Average Net Fixed Assets for any year means the average, for that year, of the opening and closing balances of Net Fixed Assets.</p>	+0.2																		
(b)	<p><b>Increase in operating expenses</b></p> <p>(Increase from estimated \$3.0 billion in 2012 to estimated \$3.2 billion in 2013 mainly due to the rise in engineering contract prices, material prices, employee expenses, increase in depreciation and one-off expenses)</p> <p>(Please refer to item 3)</p>	+2.1																		
(c)	<p><b>Decrease in local electricity sales</b></p> <p>(The sales of electricity decrease from estimated 11 billion kWh in 2012 to estimated billion kWh in 2013. The major changes in different categories are tabled as follows:)</p> <table border="1" data-bbox="469 1536 1098 1975"> <thead> <tr> <th>Million kWh</th> <th>2012 Estimate*</th> <th>2013 Estimate</th> </tr> </thead> <tbody> <tr> <td>Domestic</td> <td>2,500</td> <td></td> </tr> <tr> <td>Commercial</td> <td>8,200</td> <td></td> </tr> <tr> <td>Industrial</td> <td>300</td> <td></td> </tr> <tr> <td>Total</td> <td>11,000</td> <td></td> </tr> <tr> <td>Change Over Previous Year</td> <td>+1%</td> <td></td> </tr> </tbody> </table> <p>* Figures rounded to hundreds</p>	Million kWh	2012 Estimate*	2013 Estimate	Domestic	2,500		Commercial	8,200		Industrial	300		Total	11,000		Change Over Previous Year	+1%		+0.5
Million kWh	2012 Estimate*	2013 Estimate																		
Domestic	2,500																			
Commercial	8,200																			
Industrial	300																			
Total	11,000																			
Change Over Previous Year	+1%																			

## 2013 Tariff Review

## Annex HEC-B

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

	<b>Rationales for tariff adjustment</b>	<b>Tariff impact (c / kWh)</b>
(1)	<b>Basic Tariff</b>	
(d)	<p><b>Decrease in Tariff Stabilisation Fund Balance</b></p> <p>(TSF balance reduced by <u>\$0.06 billion</u> from \$0.50 billion at the beginning of 2012 to estimated \$0.44 billion at end 2012. In order to further relieve the pressure of tariff increase, TSF balance will be reduced by another <u>\$0.35 billion</u> to estimated \$0.09 billion at end 2013;  Total TSF reduction in 2013 will be <u>\$0.29 billion</u> higher than 2012.)</p>	-3.3
(e)	<p><b>Others</b> (Mainly increase in taxation)</p>	+1.1
	<b>Sub-total (Basic Tariff):</b>	+0.6
<p><b>Notes to the confidential figures</b></p> <p>(i) Forecast Average Net Fixed Assets (ANFA) values might reveal future 2013 profits. Any disclosure of confidential information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements. Any person using confidential information or any “tipping” to others for dealings may also commit an offence under the Securities and Futures Ordinance.</p> <p>(ii) Disclosure of future sales growth might indicate to suppliers HK Electric’s underlying demands which could increase their bargaining power in prices setting leading to higher prices to be borne by the Hong Kong citizens. This might also reveal HK Electric’s future fixed assets investment as well as future profits. Any disclosure of confidential information may be detrimental to the interests of small shareholders and may also violate the Hong Kong Listing Rules requirements. Any person using confidential information or any “tipping” to others for dealings may also commit an offence under the Securities and Futures Ordinance.</p>		



## 2013 Tariff Review

## Annex HEC-B

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

### Rationales for the proposed adjustment of Basic Tariff in 2013

Year	Annual Tariff Review Basic Tariff		
	¢/unit	Y-o-Y Adjustment	Cumulative Adjustment
2008	116.9	---	• vs. 2008↓19%
2009	94.5	-19.2%	
2010	94.5	0%	
2011	93.1	-1.5% (-1.4¢)	
2012	94.1	+1.1% (+1.0¢)	
2013	94.7	<b>+0.6%</b> <b>(+0.6¢)</b>	

Since the implementation of the new Scheme of Control Agreement in 2009, HK Electric has always made best efforts to maintain a stable basic tariff level. For 2013, we propose the basic tariff to increase by 0.6 cents (+0.6%) at a level which is still lower than that in 2008. When compared with the 2013 forecast basic tariff of 98.7cents in the 2009-2013 Development Plan, the proposed 2013 basic tariff level is still lower by 4.1%.

## 2013 Tariff Review

## Annex HEC-B

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

	<b>Rationales for tariff adjustment</b>	<b>Tariff impact (c / kWh)</b>
<b>(2)</b>	<b>Fuel Clause Charge</b>	
(a)	<p><b>Increase in Fuel Price</b>            (Fuel costs expenses increase from estimated \$5.7 billion in 2012 to estimated \$5.9 billion in 2013 mainly due to international fuel prices fluctuations resulting in rise in fuel prices.             Please refer to Tariff Proposal Note 1 for details.)</p>	+1.4
(b)	<p><b>Correction for the over-recovery of fuel clause charge in 2012</b> (i.e. the total Fuel Clause Charge received minus "difference between Standard Fuel Cost and Actual Fuel Cost")             (Decrease of the Fuel Clause Recovery Account deficit from \$1.04 billion at end 2011 to estimated \$0.86 billion in end 2012; the change is \$0.18 billion)</p>	-1.6
(c)	<p><b>Decrease in the Fuel Clause Recovery Account deficit</b>             (Decrease of the Fuel Clause Recovery Account deficit from \$0.86 billion at end 2012 to estimated \$0.49 billion in end 2013; the change is \$0.37 billion)</p>	+3.4
(d)	<b>Others</b>	
	<b>Sub-total (Fuel Clause Charge):</b>	+3.2
	<b>Grand total:</b>	+3.8

## 2013 Tariff Review

## Annex HEC-B

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

### Tariff Proposal Note 1

<b>Fuel consumed (Tera-joules)</b>	<u>2012 (Estimate)</u>	<u>2013 (Estimate)</u>
• Coal	84,485	
• Natural Gas	31,671	
• Oil	731	
Total	<u>116,887</u>	

<b>Average Fuel Price (HK\$ per thousand GJ)</b>	<u>2012 (Estimate)</u>	<u>2013 (Estimate)</u>
• Coal	33.2	
• Natural Gas	93.4	
• Oil	136.7	
Overall	<u>49.0</u>	

<b>Total Fuel Cost (\$ million)</b>	<u>2012 (Estimate)</u>	<u>2013 (Estimate)</u>
• Coal	2,808	
• Natural Gas	2,957	
• Oil	100	
• Others (include interconnection)	(139)	
Total	<u>5,726</u>	

### **Actual Fuel Costs pass through to customers through the following 2 accounts:**

Standard fuel costs (Include in basic tariff)	1,809	
Fuel Clause Recovery Account	3,917	
Total	<u>5,726</u>	

### **Notes to the confidential figures:**

Disclosure of fuel demand and price forecasts would materially disadvantage HK Electric 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.

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

### 3. The detailed items of the operating expenses and the respective budget figures

Items for Non-Fuel Operating Expenses	Forecast Expense for 2012 (\$ million) Estimate	Forecast Expense for 2013 (\$ million) Estimate	% Change
Operating Expenses			
Employee expenses (exclude retirement fund expenses ) (Note a)	431.3		
Materials & Services (Note b)	158.8	177.7	11.9%
Administration Exp. (exclude retirement fund expenses ) (Note a)	170.6	178.8	4.8%
Loan charges	1.2		
Government Rent & Rates	228.2	239.6	5.0%
Others (Insurance)	27.0	29.1	7.8%
Sub-total for Operating Expenses:	1,017.1	1,076.3	5.8%
Contingency	5.0	5.0	
Stocks/FA Write-offs & decommissioning cost (Note c)	60.2	72.3	
Depreciation	1,918.4	2,008.2	4.7%
Sub-total for Operating Expenses & Depreciation:	3,000.7	3,161.8	5.4%
Sub-total for Operating Expenses & Depreciation (include retirement fund expenses):	3,005.5	3,234.2	
Taxation	834.0	903.0	8.3%
Total Non-fuel Operating Expenses:	3,843.7	4,064.8	6.0%
Total Non-fuel Operating Expenses (include retirement fund expenses ):	3,839.5	4,137.2	

#### Note

- Retirement fund expenses are based on actuarial valuation, related accounting standards and regulations [under employee expenses - 2012: \$9.1 million, 2013: \$69.5 million; under administration expenses - 2012: (\$4.3 million), 2013: \$2.9 million.]
- Based on quotations from suppliers and contractors. If quotations are unavailable, expenses are based on inflation rates assumptions.
- Estimation based on usage conditions of fixed assets.

#### Notes to the confidential figures

- HK Electric has a policy of pay for performance. As a result, staff salary adjustment rate will be varied by individual. Disclosing such detail may create false expectation and employee relations will then be jeopardized.
- Disclosure of confidential funding information could materially affect HK Electric's borrowing costs, leading to increased costs to Hong Kong citizens.

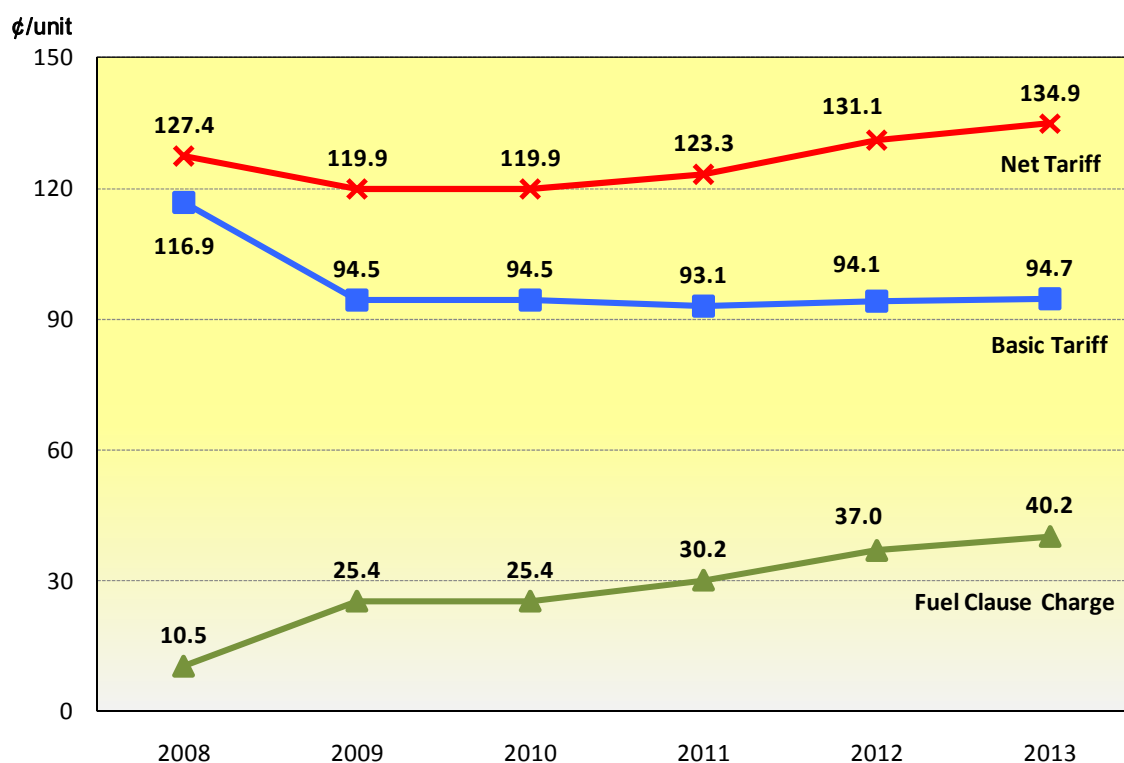
## 2013 Tariff Review

## Annex HEC-B

*In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.*

### 2013 Annual Tariff Review Conclusion

Over the previous years, HK Electric's basic tariff rates had been maintained at a stable level. As shown in the chart below, the underlying causes of the rise in the net tariff in recent years were mainly due to the rise in fuel costs. For the proposed 2013 net tariff increase of 3.8 cents, 3.2 cents (84.2%) are related to increase in fuel costs and recovery of the Fuel Clause Recovery Account Deficit.



Note: 2010 Net Tariff does not include 0.1 cent Rate Reduction Rebate

- End -