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Central Government Offices  
Lower Albert Road  
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本函檔號 Our Ref:

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Clerk to Panel on Environmental Affairs  
Legislative Council Building  
8 Jackson Road  
Central  
Hong Kong  
(Attention: Miss Becky YU)

31 August 2007

Dear Miss YU,

“Submission on Conservation of Energy” by Friends of the Earth (HK)

I refer to the “Submission on Conservation of Energy” submitted to the Panel on Environmental Affairs by Friends of the Earth (HK) on 7 May 2007. Our response to the Submission is as follows:

(1) Electricity Regulatory Policy

The two power companies apply an inverted block structure for domestic tariff whereby higher consumption is charged at progressively higher unit rates, with a view to encouraging domestic customers to conserve electricity and achieving the objectives of efficient use of energy and protection of the environment. The CLP Power Hong Kong Limited also offers time of use rates, such as the Domestic Night Storage Water Heating Rate for domestic customers and a rate lower than the on-peak charges for Bulk Tariff, Large Power Tariff and Ice-storage Air-conditioning Tariff customers, to encourage them

to use electricity during off-peak hours. These measures help to defer investment in new generating facilities and achieve the long-term goal of efficient use of energy.

As regards the comments on the impact of energy conservation on electricity tariff, the Government considers carefully the power companies' investment proposals taking into account forecasts of electricity demand. Under the current tariff structures, fuel cost, which fluctuates with electricity consumption, is one of the components constituting the electricity tariff. If customers take steps to conserve energy, their overall tariff burden will be lightened. Furthermore, if the growth in electricity demand slows down or even declines as a result of public support in energy conservation, the need for the power companies to build new generating facilities will diminish. In the long run, their permitted returns will decrease gradually and the tariff will be adjusted accordingly.

In the 2005/06 Policy Address, the Chief Executive called on the two power companies to implement demand side management to promote energy efficiency and conservation. We have proposed in the Stage II Consultation Paper on the Future Development of the Electricity Market in Hong Kong that financial incentives be provided to the power companies under the post-2008 regulatory regime to improve their performance in energy efficiency and conservation. To further promote energy efficiency and conservation, the Council for Sustainable Development launched the Better Air Quality Engagement Process in early June this year to invite public views on promoting demand side management.

(2) Setting up an Energy Bureau

In line with the plan to re-organise the Government Secretariat as announced by the Chief Executive, Mr. Donald Tsang, in May this year, the closely related policies in the areas of environmental protection, sustainable development and energy have been brought under

the purview of the Environment Bureau, so that related functions are undertaken by the same policy bureau.

(3) Energy Advisory Committee (EnAC)

In a letter to the Friends of the Earth (HK) on 21 September 2004, the then Economic Development and Labour Bureau gave a detailed account of the nature of EnAC and the reasons for not opening its meetings to the public. As explained in the letter, since the EnAC is consulted from time to time on energy issues under its purview and the subject matters may involve commercially sensitive as well as stock-price sensitive information of certain listed companies, it is not feasible to open the meetings to the public. The EnAC has agreed after discussion to upload its annual reports to its website so that the public can better understand the work of the EnAC and the outcomes of the discussion on the agenda items.

As regards enhancing the EnAC's role in energy conservation, the Energy Efficiency and Conservation Subcommittee under the EnAC is tasked with considering proposals to promote energy efficiency and conservation in Hong Kong based on their technical merits, potential effectiveness and environmental, economic and social implications. Chaired by a non-official member, the Subcommittee comprises representatives from relevant Government departments, the two power companies, the academia, and the construction, surveying and engineering sectors.

(4) Enhancing Building Energy Efficiency

The Electrical and Mechanical Services Department (EMSD) launched the Hong Kong Energy Efficiency Registration Scheme for Buildings (the Scheme) in 1998. It is a voluntary scheme mainly intended to give recognition for the compliance with the

Building Energy Codes (BECs) in commercial and office buildings. As at June 2007, the EMSD issued 1,896 certificates to 762 buildings under the Scheme. Though the overall percentage of commercial buildings registered under the Scheme is relatively low, the EMSD observes that most Grade A office buildings completed in the past five years have complied with the BECs at large. The HK-BEAM (Hong Kong-Building Environmental Assessment Method) Society and the Asian Institute of Intelligent Buildings have also introduced the BECs into their certification schemes for green and intelligent buildings. We will continue to strengthen the promotion of voluntary compliance with the BECs through organising promotional activities and seminars. We will also consider the proposal of turning the existing voluntary Scheme into a mandatory one, and will duly consult the stakeholders in the process.

(5) Energy Efficiency Labelling Scheme (EELS)

We propose to include three types of products, namely room air conditioners, refrigerating appliances and compact fluorescent lamps, in the initial phase of the mandatory EELS. The total electricity consumption of these products accounts for about 70% of the annual residential electricity consumption in Hong Kong. They have also been covered by the voluntary EELS since the early stages and have relatively higher market penetration rates. We will further consider the priorities of the products to be covered in the second phase of the mandatory EELS and the relevant timetables, and consult the community and the relevant trades on our future expansion proposals.

(6) Setting up a Platform for Relevant Trades

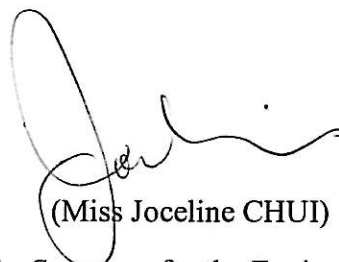
The EMSD launched the “Hong Kong Renewable Energy Net” (<http://re.emsd.gov.hk>) in March this year to provide the public with information on the application of various renewable energy (RE) technologies, so as to facilitate the adoption of RE technologies in

Hong Kong. The website also contains the RE Equipment Suppliers Survey Returns Summary, providing a list of companies which supply RE and related equipment in Hong Kong. The second thematic website, the “Hong Kong Energy Efficiency Net”, was launched in July this year.

(7) Research

The EMSD updates annually the Hong Kong Energy End-use Data, which is useful for analysing the energy consumption of various sectors and helps the Government evaluate and formulate corresponding policies on energy efficiency. Moreover, the EMSD has developed energy consumption indicators and benchmarks for selected groups of buildings, including offices, shops, hotels and boarding houses, universities, post-secondary colleges and schools, hospitals and clinics. By making use of these indicators and benchmarks, users can compare the energy consumption of their premises with that of similar premises, and set standards and draw up measures for reducing energy consumption. The EMSD updates the data from time to time to reflect social development and energy consumption situation.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Joceline Chui', is written over a large, light-colored oval stamp.

(Miss Joceline CHUI)

for Secretary for the Environment

## Conservation of Energy

To follow up the discussion on “Conservation of Energy” at the meeting of the Legislative Council Panel on Environmental Affairs (the Panel) on 23 April 2007, we would like to provide the following supplementary information:

(a) A Breakdown of Energy Consumption

The “growth rate of 1.2%” as mentioned in paragraph 2 of the paper on “Conservation of Energy” submitted to the Panel in April 2007 refers to the average annual increase in end-use energy consumption in Hong Kong over the past ten years. End-use energy consumption in Hong Kong includes all types of fuel, such as town gas, liquefied petroleum gas (LPG), oil and coal products, and electricity. A breakdown of energy consumption by fuel types for the past ten years is as follows:

Year	Town gas and LPG	Oil and coal products	Electricity	Total
1994	26 918 (10%)	124 812 (49%)	105 054 (41%)	256 783
1995	27 931 (11%)	116 641 (46%)	107 476 (43%)	252 048
1996	27 705 (11%)	114 365 (45%)	113 879 (44%)	255 949
1997	27 841 (11%)	118 402 (45%)	116 061 (44%)	262 305
1998	27 562 (10%)	115 426 (43%)	125 446 (47%)	268 434
1999	29 256 (11%)	117 578 (43%)	125 288 (46%)	272 122
2000	30 848 (11%)	122 534 (43%)	130 675 (46%)	284 057
2001	35 255 (12%)	110 947 (40%)	134 138 (48%)	280 341
2002	39 194 (14%)	107 615 (38%)	137 112 (48%)	283 922
2003	40 676 (14%)	105 303 (37%)	138 434 (49%)	284 413
2004	41 125 (14%)	105 218 (37%)	141 202 (49%)	287 544

(Unit: Terajoule)

Electricity accounted for 41% of the total energy end-use consumption in 1994 and the percentage increased to 49% in 2004, while that of oil and coal products decreased from 49% in 1994 to 37% in 2004. This reflects changes in the proportions of different fuel types consumed by the public. We consider that using total energy consumption (instead of using electricity consumption only) to measure the increase in energy consumption can better reflect the overall situation of energy consumption in Hong Kong.

Over the past ten years, Hong Kong's Gross Domestic Product (GDP) has increased by 41%, while energy end-use per unit of GDP has shown an apparent downward trend (a decrease of about 20% from 1994 to 2004). This reflects an enhanced public awareness of energy conservation as a whole.

Friends of the Earth (HK) quoted some data published on the international website "NationMaster" on 15 March 2007 in its paper submitted to the Panel. It should be noted that the methods of computing the relevant data are different, e.g. NationMaster includes the electricity exported from Hong Kong to the Mainland in calculating the electricity consumption of Hong Kong. We also notice that data for some countries (such as Japan and South Korea) quoted by NationMaster differ from the figures published by Asia-Pacific Economic Co-operation (APEC). According to APEC's statistics for 2004, the per capita electricity consumption of Hong Kong was lower than that of many economies at a similar stage of economic development.

(2) Electricity Consumption of Commercial Buildings

According to Hong Kong Energy End-use Data published by the Electrical and Mechanical Services Department (EMSD), the electricity consumption of commercial buildings for the past five years is as follows:

Year	Office	Restaurant	Retail	Other	Total
<b>1999</b>	13 113	13 168	15 539	30 518	72 339
<b>2000</b>	13 888	13 583	15 994	33 225	76 689
<b>2001</b>	13 927	13 020	16 566	37 077	80 589
<b>2002</b>	13 913	13 366	16 227	40 043	83 549
<b>2003</b>	13 858	13 750	16 230	41 083	84 921
<b>2004</b>	14 327	13 364	16 634	42 346	86 671

(Unit: Terajoule)

Between 2000 and 2004, the EMSD conducted benchmark surveys on the energy efficiency performance of selected groups of buildings and used the findings to develop energy consumption indicators and benchmarks. The groups of buildings covered by the surveys include offices, shops, hotels and boarding houses, universities, post-secondary colleges and schools, hospitals and clinics. Energy consumption indicators of different groups of buildings are available on the EMSD website and the public can use the benchmarking tools developed by the EMSD to compare energy consumption of their premises with the average energy consumption of similar premises. This could help the public set energy consumption targets and draw up measures for reducing energy consumption. The EMSD updates the data from time to time to reflect social development and energy consumption situation. The EMSD will update the energy



consumption indicators and benchmarks for offices by 2007.

Environment Bureau

August 2007