政府總部 環境局

香港添馬添美道2號 政府總部東翼15至16樓



CB(1)847/13-14(02) ENVIRONMENT BUREAU GOVERNMENT SECRETARIAT

15/F & 16/F, East Wing, Central Government Offices 2 Tim Mei Avenue, Tamar, Hong Kong

電話號碼 Tel: (852) 3509 8656 傳真號碼 Fax: (852) 2537 1002

4 February 2014

本函檔號 Our Ref:

來函檔號 Your Ref: CB1/PL/EDEV

By E-mail

Mr Derek Lo Clerk to Panel (Economic Development) 1 Legislative Council Complex 1 Legislative Council Road Central Hong Kong

Dear Mr Lo,

Panel on Economic Development Letter from Hon SIN Chung-kai requesting for information on 2014-18 Development Plan of the two power companies

In response to the letter from Hon SIN Chung-kai to Panel Chairman dated 28 January 2014 requesting for information related to the two power companies' 2014-18 Development Plan, CLP and HKE have provided replies at Annexes A and B respectively for your further action.

The Government has all along been performing the gate-keeping functions with our best endeavour to ensure a right balance among the policy objectives of electricity supply, i.e. reliability, safety, environmental performance and affordability, in order to safeguard the interest of the public.

When examining the five-year development plan of the two power companies, with the assistance of an independent energy consultant, we carefully review the capital investment proposals from the perspectives of need, timing and cost to avoid excessive, premature, unnecessary or unreasonable investment.

Regarding the forecasts on electricity demand, we have put in place a mechanism to assess the trend of future electricity demand by comparing the power companies' forecasts with those made by independent energy consultant and Government Economist, so as to ensure that the forecasts made by power companies are reasonable. Besides, we also

critically scrutinize the power companies' proposals on installation of new generation plant and related capital expenditure.

Before any long-term gas supply contract is signed, the two power companies need to submit relevant contract to Government for approval. Usual practice is for us to engage independent energy consultant to assist us in assessing the terms of the contract. In reviewing the fuel prices in the Development Plan and Tariff Review of the two power companies, we will seek advice from expert consultant to ensure the reasonableness of their projections.

To enhance transparency, we have requested the two power companies to provide more information to the public since the 2012 Tariff Review. The power companies consider it inappropriate to disclose certain information, including those relating to future business forecasts, contractual demand and price projections. This is to avoid weakening the power companies' bargaining power in the course of tendering, which would eventually compromise the interest of electricity consumers.

Yours sincerely,

Dora Tung

(Miss Dora Tung)

for Secretary for the Environment

Reply from CLP

Question 1: The feasibility study of the supply of natural gas from Zhuhai LNG terminal to Hong Kong

Answer:

There is no physical connection between Zhuhai LNG terminal and CLP's Black Point Power Station. Therefore the natural gas from Zhuhai LNG terminal cannot supply to Hong Kong in the near term.

For future supply to Hong Kong, CLP will continue to negotiate with natural gas suppliers in accordance with the 2008 MOU on energy co-operation signed between the National Energy Administration and the HKSAR Government. CLP will seek Government's approval of related projects at the appropriate time.

Question 2: The study on the corresponding adjustments in capital investment of the two power companies if the reliability of electricity supply are 99.99% and 99.9%, relative to the existing reliability of 99.999%.

Answer:

The capital investment for electricity generation is primarily determined by commonly used international planning and design standards, as well as market prices.

Besides capital investment, the current electricity supply reliability of 99.999% is the result of efforts and coordination of various aspects, including forward planning, fuel diversification strategy, system design assurance, maintenance and repair in meeting international standards, application of advanced technologies and development of comprehensive contingency plans.

Reliable electricity supply is very important for Hong Kong as an international financial centre. Hong Kong is small by geographical area, with a dense urban environment. Over half the population lives or works above the 15th floor, and over 5 million passenger journeys are made on the mass transit systems every day. Hong Kong people's daily life and various business sectors, including finance, trade, logistics, transportation,

Reply from CLP

catering, retail, healthcare, etc. all rely on a reliable electricity supply to maintain efficient operation. According to the results of a reliability of electricity supply survey in Hong Kong conducted by the Hong Kong Polytechnic University in 2013, most (about 80%) people are not willing to accept a less reliable supply of electricity in exchange for a lower tariff.

[Note: Question 3 not relevant to CLP]

Question 4: In the past, the Democratic Party legislators had read the contents of the two power companies' five-year plan, but the content covered largely the cost and location of each project, which were not so-called "commercial confidentiality". Why do the two power companies and the Government not intend to make the five-year plan public?

Answer:

A lot of work is in progress under individual projects. Such projects may be in the tendering stage or maybe at a commercially sensitive stage. Revealing the capital expenditure or forecast would not be appropriate as it would weaken electricity company's bargaining position in price negotiation, resulting in higher costs to be borne by the public.

Reply from Hongkong Electric Company, Limited

Question 1: The feasibility study of the supply of natural gas from Zhuhai LNG terminal to Hong Kong.

Reply:

In principle, importing natural gas from Zhuhai natural gas station is technically feasible. However, corresponding studies including gas pipeline routing study and environmental impact assessment have to be carried out to ascertain the technical and economic feasibility of any gas supply plan.

Question 2: The study on the corresponding adjustment in capital investment of the two power companies if the reliability of electricity supply are 99.99% and 99.9%, relative to the existing reliability of 99.999%.

Reply:

- HK Electric's supply reliability is over 99.999%, or less than 1 minute unplanned loss of electricity supply on average for each customer each year.
- For the supply reliability to be reduced to 99.99% or 99.9%, the average duration of unplanned electricity outage for each customer per year will drastically increase to 52.6 minutes (nearly 1 hour) or 526 minutes (nearly 9 hours) respectively. As Hong Kong is not only an international financial centre and regional logistics hub, but also a highly populated city with the highest number of high-rise buildings in the world, the general public will definitely find it unacceptable if every commercial, industrial and residential customer is to suffer an average electricity loss of almost an hour each year.
- Compared to the supply reliability of Singapore, which is above 99.999% (or an average unplanned electricity loss of less than 1 minute per customer per year), our current supply reliability level is reasonable.
- Sufficient and timely capital investment is only one of the many factors
 contributing to high supply reliability. Other factors including
 high-quality professional operation and safety management; rigorous
 system planning, design and implementation; appropriate staff training;
 and team spirit and a positive and proactive corporate culture are also

Reply from Hongkong Electric Company, Limited

essential for maintaining a high level of supply reliability. We are unable to quantify the difference of supply reliability level in monetary terms.

As an electricity supply system is highly integrated, it is impossible for HK
Electric to provide electricity of different supply reliability levels to
individual customers.

Question 3: According to the last five-year Development Plan, comparing the sales of Hongkong Electric Company, Limited (HEC) up to end 2012 with 2008, there would be an increase of about 4.06%. However, in the past four years, HEC's sales in 2012 as compared with 2008 only increased by 1.55%. What is the reason for the serious over-estimation of 262%?

Reply:

- The five-year Development Plan was prepared taking into account factors including Hong Kong's economic forecast, city and infrastructure development. It was subject to stringent scrutiny by the Government and its professional consultant. Electricity sales are affected by a number of factors which cannot be controlled and accurately forecast by HK Electric. These factors include changes in weather, economic and demographic conditions. In addition, our electricity sales are also affected by promotion of energy conservation and implementation of various energy efficiency policies by the Government in the recent years (e.g. the launching of the first and second phases of the Mandatory Energy Efficiency Labelling Schemes in 2008 and 2010 respectively, and the implementation of Buildings Energy Efficiency Ordinance since 2011). As such, there are bound to be discrepancies between the consumption forecasts in the 5-year Development Plan and the actual results.
- With 2008 as the base year, the 2012 actual electricity sales growth is only 2.4% less than the corresponding forecast sales growth in the previous Development Plan. For a forecast which is subject to an array of non-controllable factors, this variance is considered reasonable.

Reply from Hongkong Electric Company, Limited

Question 4: In the past, the Democratic Party legislators had read the contents of the two power companies' five-year plan, but the content covered largely the cost and location of each project, which were not so-called "commercial confidentiality". Why do the two power companies and the Government not intend to make the five-year plan public?

Reply:

For projects listed in the Development Plan which are still in planning stage and have not yet been implemented, the disclosure of their corresponding capital expenditure forecast will weaken HK Electric's bargaining power in price negotiation during the tendering stage. This will subsequently lead to increases in capital expenditure expenses and tariff, which eventually compromise customer interest.