

**立法會**  
**Legislative Council**

LC Paper No. CB(1)2162/05-06  
(These minutes have been seen  
by the Administration)

Ref : CB1/PL/ES/1

**Panel on Economic Services**

**Minutes of special meeting**  
**held on Monday, 29 May 2006 at 2:30 pm**  
**in the Chamber of the Legislative Council Building**

- Members present** : Hon James TIEN Pei-chun, GBS, JP (Chairman)  
Hon Jeffrey LAM Kin-fung, SBS, JP (Deputy Chairman)  
Ir Dr Hon Raymond HO Chung-tai, S.B.St.J., JP  
Dr Hon David LI Kwok-po, GBS, JP  
Hon Fred LI Wah-ming, JP  
Hon SIN Chung-kai, JP  
Hon Howard YOUNG, SBS, JP  
Hon LAU Chin-shek, JP  
Hon Miriam LAU Kin-yee, GBS, JP  
Hon Abraham SHEK Lai-him, JP  
Hon Vincent FANG Kang, JP  
Hon Andrew LEUNG Kwan-yuen, SBS, JP  
Hon Ronny TONG Ka-wah, SC  
Hon CHIM Pui-chung  
Hon Albert Jinghan CHENG  
Hon KWONG Chi-kin  
Hon TAM Heung-man
- Members attending** : Hon Mrs Selina CHOW LIANG Shuk-yee, GBS, JP  
Hon Emily LAU Wai-hing, JP  
Hon LI Fung-ying, BBS, JP  
Hon LEE Wing-tat

- Members absent** : Dr Hon LUI Ming-wah, SBS, JP  
Hon CHAN Kam-lam, SBS, JP  
Hon WONG Ting-kwong, BBS
- Public officers attending** : Mr Stephen IP  
Secretary for Economic Development and Labour
- Ms Eva CHENG  
Permanent Secretary for Economic Development and Labour  
(Economic Development)
- Mr Howard LEE  
Deputy Secretary for Economic Development and Labour  
(Economic Development)
- Mr Harry LAI  
Chief Electrical and Mechanical Engineer (Electricity Team)
- Mr Roy TANG  
Deputy Director of Environmental Protection (3)
- Mr TSE Chin-wan  
Assistant Director of Environmental Protection (Air Policy)
- Attendance by invitation** : Mr C T WAN  
Director & General Manager (Corporate Development)  
The Hongkong Electric Co., Limited
- Mr Neil D McGee  
Group Finance Director  
The Hongkong Electric Co., Limited
- Mr Steve NG  
Deputy Chief Accountant  
The Hongkong Electric Co., Limited
- Mr S H CHAN  
Planning Director  
CLP Power Hong Kong Limited

Mr T K CHIANG  
Regulatory Strategy Manager  
CLP Power Hong Kong Limited

Mr Richard CHU  
Business Strategy Manager  
ExxonMobil Energy Limited

**Clerk in attendance** : Ms Connie SZETO  
Chief Council Secretary (1)6

**Staff in attendance** : Mr Watson CHAN  
Head, Research and Library Services

Ms Debbie YAU  
Senior Council Secretary (1)1

Mr Michael YU  
Research Officer 7

Mr Anthony CHU  
Council Secretary (1)2

Ms Michelle NIEN  
Legislative Assistant (1)9

---

Action

**I. Future Development of the Electricity Market in Hong Kong — Stage II Consultation**

(LC Paper No. CB(1)1567/05-06(01) — Information paper on “Future Development of the Electricity Market in Hong Kong: Views received during the Stage II Public Consultation” provided by the Administration

LC Paper No. CB(1)1567/05-06(02) — Information note on “Electricity Market in Hong Kong” prepared by Research and Library Services Division

- LC Paper No. CB(1)829/04-05(01) — Information paper on “Future development of the electricity market in Hong Kong: Stage I consultation” provided by the Administration (with public consultation paper annexed)
- LC Paper No. CB(1)626/05-06(01) — Information paper together with the Consultation Paper on Future Development of the Electricity Market in Hong Kong – Stage II Consultation provided by the Administration
- LC Paper No. CB(1)1237/05-06(01) — The CLP’s Response to Government’s Consultation Paper on Future Development of the Electricity Market in Hong Kong - Stage II Consultation
- LC Paper No. CB(1)1187/05-06(01) — Information paper provided by the Hongkong Electric Company Ltd.
- LC Paper No. CB(1)1187/05-06(07) — Background brief on “Future development of the electricity market in Hong Kong” prepared by the Legislative Council Secretariat
- LC Paper No. CB(1)1598/05-06(01) — Letter dated 23 May 2006 from Hon SIN Chung-kai to the Panel Chairman (Chinese version only)

Briefing by the Administration

At the invitation of the Chairman, the Deputy Secretary for Economic Development and Labour (Economic Development) (DS/ED) briefed members on the views received during the Stage II Public Consultation on the Future Development of the Electricity Market in Hong Kong (Stage II Consultation). In gist, he said that over 17 000 written submissions from different sectors of the community had been received upon the end of the three-month period on 31 March 2006. The written submissions could be broadly classified into four categories as set out in paragraph 4 of the Administration’s paper (LC Paper No. CB(1)1567/05-06(01)). In addition, over 700 messages had been posted on the dedicated discussion forum on the website of Economic Development and Labour Bureau (EDLB) and the Public Affairs Forum of the Home Affairs Bureau. EDLB had also attended a series of meetings, briefings and discussion forums, including this Panel, the Panel on Environmental Affairs,

District Councils, the Consumer Council, some green groups, as well as professional and academic institutions, to collect views and comments of different stakeholders and the community at large.

2. DS/ED then took members' through the summary of views and highlighted the salient points as follows:

(a) *Objectives*

There was general support for Government's energy policy of maintaining reliable, safe and efficient electricity supply at reasonable prices while minimizing the environmental impact. There were suggestions for more elaboration on the energy policy including fuel mix, demand side management, energy efficiency and conservation;

(b) *Market development*

Views were divided. While there had been broad support for opening up the electricity market, many submissions from individuals and companies had reservations about introducing new supply sources from the Mainland out of the concern that their supply reliability and environmental performance would be beyond Hong Kong's control. It was generally agreed that there should be a clear plan and target for future market development, without compromising supply reliability and safety;

(c) *Increased interconnection*

Views were quite divided. Some supported the Government's proposal while others did not out of concerns about economic benefit, impact on supply reliability, and tariff increase;

(d) *Environmental issues*

There was a general consensus that effective measures should be taken to reduce emissions but views regarding the details differed. While some respondents supported providing incentives to encourage investment in emissions reduction facilities, others considered that the cost of emission reduction facilities should not be shouldered by consumers. There were both views supporting and objecting the proposal to link the permitted rate of return of the power companies to their emission levels; and

(e) *Economic regulation*

(i) Bilateral agreement and its term

There was general acceptance to the proposal to continue with the current bilateral agreement type of arrangements but views on the proposal to shorten the agreement period to 10 years were divided; and

(ii) Return

Views were diverse. Some suggested further lowering the rate of return to 7% to 8% while some financial institutions were concerned that the proposed lowered rate of 7% to 11% might impact on investment incentive.

3. The Secretary for Economic Development and Labour (SEDL) thanked the respondents including academics, political groups, trade and industry organizations, trade unions, professional institutions, green groups, etc. for their valuable input to the Stage II Consultation. The large number of submissions received had revealed the wide public concerns and interests on issues relating to the future development of electricity market. SEDL said that all written submissions, except a few which had refused disclosure, would be uploaded to EDLB's website for public perusal. He added that the Administration would take into account the views received during the consultation and discuss with the power companies to finalize the post-2008 regulatory arrangement for the electricity market.

Presentation on the information note on "Electricity Market in Hong Kong" prepared by Research and Library Services Division of the LegCo Secretariat

4. At the invitation of the Chairman, Head, Research and Library Services (H/RLS) briefed members on the information note (LC Paper No. CB(1)1567/05-06(02)). He referred to paragraphs 5.1 to 5.3 and Table 1 which set out the levels of investment and rates of return of the CLP Power Hong Kong Limited (CLP) and the Hongkong Electric Company Limited (HEC) from 2001-05 and advised that the net returns of the two power companies were within the permitted rates of return calculated under the current Scheme of Control Agreements (SCAs). H/RLS added that paragraphs 6.1 to 6.3 and Table 2 set out information on the permitted rates of return of regulated power companies in some overseas markets. He explained that according to some academics, as the overseas power companies could be operating under market environment and regulatory regimes quite different from those of CLP and HEC, it was very difficult to draw a direct comparison between the permitted rates of return of power companies in overseas markets and Hong Kong. The variables which might affect the determination of the permitted rate of return included business ownership, market structure, generation fuel mix, degree of vertical integration, business diversification, and approaches adopted by the regulators for determining the permitted rates of return of regulated utilities.

## Discussion

### *Negotiation with the power companies*

5. Mr Fred LI called upon the power companies to take note of public views and those expressed by Members at the motion debate on “Opening up the electricity market” which was carried at the Council meeting on 15 February 2006. Noting that the power companies were against the proposals in the Stage II Consultation Paper, including the proposed permitted rate of return, the proposed shortening of the duration of bilateral agreements, the proposed arrangements to cater for new supply sources etc., Mr LI enquired about the broad principles the Administration would adopt in conducting negotiation with the power companies, and the timetable in working out the new bilateral agreements. In this connection, Mr LI urged the Administration to stay firm on its proposals during the negotiation process to ensure that the new bilateral agreements would be in the best interest of Hong Kong.

6. Mr C T WAN, Director & General Manager (Corporate Development), HEC clarified that HEC did not object to all of the proposals in the Stage II Consultation Paper. He advised that HEC had examined carefully issues relating to the development of the future electricity market in Hong Kong before providing its written submissions to the Stage I and Stage II Consultation Papers. HEC had provided detailed accounts on its views on the various proposals in the submissions to the Administration. Mr WAN stressed that HEC was fully aware of the views expressed by the public and Members. Indeed, some of the views received by the Administration during the Stage II Consultation had also been reflected in the opinion survey conducted by HEC in relation to the future development of electricity market in Hong Kong. Mr WAN assured that HEC would continue to discuss with the Government in a reasonable manner with a view to achieving a win-win situation for the Administration, the public and HEC in working out the regulatory arrangements for the post-2008 electricity market.

7. Mr S H CHAN, Planning Director, CLP Power Hong Kong Limited pointed out that as revealed in the Administration’s paper, there were diverse views over a number of proposals put forward in the Stage II Consultation Paper which reflected the pluralistic nature of the Hong Kong community. He said that CLP, as an electricity supplier in Hong Kong for over a hundred years, had its professional views and would continue to serve the community by providing reliable, safe and efficient electricity supply. CLP was prepared to conduct in-depth discussion with the Administration to work out arrangements which would be in the best interest of Hong Kong. Besides sharing its views with the stakeholders, CLP also listened to their opinions so that different views could be considered in the discussion with the Administration to achieve multi-win scenarios.

8. SEDL highlighted the importance for the Administration to consider carefully views expressed by the public and various stakeholders in working out the post-2008

regulatory arrangements for the electricity market. He pointed out that the views expressed had affirmed the Government's proposals in the Stage II Consultation Paper and endorsed its direction in taking forward the negotiation. These included the support for Government's energy policy of maintaining reliable, safe and efficient electricity supply at reasonable prices, and the consensus that effective measures should be taken to minimize emissions during power generation to improve air quality. SEDL said that the Government would not make concession in enforcing safety, environmental and economic regulations in the electricity market. As regards negotiation with the two power companies, he said that the Administration welcomed their commitment to adopting a positive and cooperative attitude in discussing the various issues relating to the regulatory arrangements. He assured members that the Administration would endeavour to balance the interests of various parties and was confident about finalizing arrangements acceptable to the relevant parties before the expiry of the current SCAs in 2008. The Administration also acknowledged the need to facilitate the two power companies in making their investment decisions for the post-2008 period and would try its best endeavour to complete the negotiation as early as practicable.

9. Mr SIN Chung-kai recalled that in 1993, the Administration had entered into the current SCAs with the two power companies before briefing Members on the details. While appreciating the Administration's efforts in conducting the two rounds of public consultation and negotiating with the power companies in working out the post 2008-regulatory arrangements for the electricity market, Mr SIN was concerned whether the Administration would brief Members on the finalized agreements before signing the agreements with the power companies. In particular, he was concerned how LegCo would monitor the negotiation process to ensure that the new agreements had taken account of public views and would safeguard the interests of consumers.

10. SEDL stressed that the Administration was mindful of the views received during the two rounds of public consultation and was fully aware of the expectations of the public and Members. He assured members that the Administration would maintain its stance in working out new agreements incorporating provisions including permitted rate of return, performance incentives, environmental regulations etc, acceptable by the stakeholders. SEDL believed that Members and the public could learn about the progress of the negotiation through various channels. Moreover, Members could continue to express their views, of which the Administration would surely take into account. On the timing in finalizing the new agreements, SEDL re-iterated that the Administration would try its best endeavour to complete the task within 2007. Nonetheless, it could not commit a definite timetable at this stage.

11. Ms Emily LAU expressed support for the Administration to secure a best deal for the public. However, she noted with concern about past experience where the Government had bowed to pressure from large corporations and modified its policies. Ms LAU urged the Administration not to compromise public interest by giving in to the demands of the power companies. Should the new agreements deviate significantly from the original proposals, she might consider moving a motion at



LegCo to condemn the Administration. SEDL assured members that the Government and the two power companies would conduct negotiation in a reasonable manner taking account the views expressed in the two rounds of public consultation.

*Permitted rate of return and electricity tariff*

12. Noting the diverse views over the permitted rate of return for the power companies, in particular, the two power companies had considered the proposed range of return of 7% to 11% too low, Mr SIN Chung-kai asked how the Administration, and the two power companies would respond to Members' request for further lowering the permitted rate of return to 7% or below raised at the motion debate on 15 February 2006.

13. In reply, SEDL re-iterated that the Administration was mindful of the views and concerns expressed by Members during the motion debate on 15 February 2006 and various other occasions. On the concern about the proposed permitted rate of return, he said that the public, Members, and the two power companies had all formed their own views on what the reasonable level of investment return should be and whether there was room for tariff reduction. The Administration considered that given the present-day business environment, the proposed rate of return of 7% to 11% should provide the power companies with a reasonable investment return.

14. Mr S H CHAN of CLP said that there were diverse views over the permitted rate of return for power companies. While there was suggestion for further lowering the rate to below 7%, some individuals and companies expressed concern that the proposed range of 7% to 11% might be too low to attract continued investment and might affect supply reliability. He stressed that all along, CLP had upheld the Administration's energy objectives to ensure that the public could enjoy reliable energy supplies, and had been charging customers reasonable tariffs and minimizing the impact on the environment. Comparing with other major cities, CLP's tariff was value for money. CLP was of the view that the investment return was part and parcel of the regulatory regime. The entire regulatory regime should be considered as a package. It would be inappropriate to consider any aspects in isolation.

15. Mr C T WAN of HEC highlighted the need of using various approaches to work out a "reasonable zone" of rate of return for the period after 2008. In its submission on the Stage II Consultation, HEC had examined the "reasonable zone" of rate of return from different approaches, including benchmarking the level of return to returns of Hong Kong companies, utilities companies in Hong Kong and overseas markets, and the development of a Monte Carlo model that was commonly used by economists. Mr WAN pointed out that some of the proposals in the Stage II Consultation Paper would have impact on electricity tariff while the others would not. The reasonable rate of return should only be determined after the post-2008 regulatory framework had been substantially set.

16. Ms LI Fung-ying pointed out that the public generally considered the present tariffs unacceptably high and urged for downward adjustments. Referring to the strong opposition of the two power companies to reduce tariffs, Ms LI questioned the sincerity claimed by the power companies in achieving a win-win situation for all parties and enquired how the Administration could proceed with the negotiation in protecting the interest of consumers. In this connection, Mr Ronny TONG concurred that it was the public consensus that the present electricity tariffs and rate of return were too high and should be reduced. He considered that this point should be stressed in the negotiation with the two power companies.

17. In reply, SEDL said that the rate of return should be determined with reference to the prevailing economic environment. He re-iterated that in view of the present-day business environment, a single-digit permitted rate of return should already provide the power companies with a reasonable investment return. He reaffirmed the Administration's firm stance in this aspect. The Administration was fully aware of Members' call for lowering the rate of return, which would provide backing for the Government in the negotiation process.

18. Mr S H CHAN of CLP re-iterated that CLP's electricity tariffs were highly competitive and good value-for-money when compared with those charged by suppliers in the world's major cities. The current rate of return of CLP was in line with Heng Seng Index constituent companies in Hong Kong. He stressed that the rate of return should reflect the long-term nature of the electricity industry where investment involved long paid-back period and substantial risks.

19. Mr C T WAN of HEC said that HEC had analyzed the returns of listed companies in Hong Kong covered in the Hang Seng Index stocks. During the period from 1979 to 2005, the average annual return for Hang Seng Index stocks was around 23%. With the annual best lending rate at about 9% during the period, the rate of return for the stocks would be about 17%, which was higher than the permitted rate of return of 13.5% in the current SCAs.

20. Ms LI Fung-ying remained unconvinced of the power companies' remarks and pointed out that unlike other listed companies in Hong Kong, the power companies had benefited from natural monopoly in the electricity market. As such, they shouldered far less risk but enjoyed secured returns.

21. Miss TAM Heung-man expressed concern that the power companies would enjoy a permitted rate of return irrespective of their performance and efficiency. She also stressed the importance for the Administration to put in place a viable tariff setting mechanism capable of adjusting tariff both upward and downward.

22. DS/ED said that the two power companies had strived to enhance their productivity in the past few years by reviewing capital investments with regard to operational need. To further improve the performance of the power companies, DS/ED advised that the Stage II Consultation Paper had proposed adopting a

two-pronged approach, using fixed assets and performance as the base for determining return. Under the performance-based approach, the power companies would be provided with financial incentives for improved performance in operational efficiency, service quality, supply reliability, environmental performance, and increased use of renewable energy. A set of indicators to quantify the performance of the power companies would be worked out. On the other hand, disincentives would be included to discourage under-performance by the power companies. As far as tariffs were concerned, DS/ED remarked that the existing regulatory regime already enshrined a tariff setting mechanism capable of adjusting the level upward and downward. Net revenue in excess of the agreed return to the power companies would be transferred to the Development Fund (DF), which when necessary, would provide funds to ameliorate the impact of tariff increase for consumers.

23. In reply to Miss TAM Heung-man's enquiry about the institutional setup for enforcing the regulatory regime in the future electricity market, SEDL said that while the Administration had proposed in the Stage II Consultation Paper to maintain the current institutional setup involving EDLB, Electrical and Mechanical Services Department, and Environmental Protection Department (EPD) for the next bilateral agreement period, it had undertaken to keep under review the need of setting up a separate regulatory authority for regulating the future market when it further developed. The new setup would be responsible for drawing up the new regulatory framework in the long run, including provisions for grid access and new supply sources.

#### *Market liberalization*

24. Mr Ronny TONG highlighted the need for the Administration to formulate a comprehensive energy policy for the future development of the electricity market in Hong Kong. To facilitate public discussion on the subject, Mr TONG suggested that the Administration should work out concrete proposals on the road map and timetable for liberalization of the market. In particular, Mr TONG enquired about the proposed arrangements to cater for new supply sources, such as, the extent of increased interconnection between the two power companies and connection with new supply sources, and whether the Administration would require the two power companies to open up their power grids for third-party access so as to enable the production, transmission and distribution of electricity by separate entities. To enable market liberalization, Mr TONG was of the view that the two power companies should be required to set up separate entities or keep separate accounts for electricity production, transmission and distribution in the long run, which would facilitate access of third-party competitors to the market.

25. On the future development of the electricity market, SEDL said that there was public support for further liberalization of the market. While this remained the objective of the Administration, given existing circumstances in the Mainland and Hong Kong, it would be imprudent at this stage to predicate the post-2008 market on new supply sources. Nonetheless, the Administration had undertaken in the Stage II

Consultation Paper to continue exploring the feasibility of introducing new supply sources, and to make the necessary preparations for further opening up the market during the next 10 years after 2008. The Administration would work out the relevant regulatory arrangements for enhancing interconnection between the two power companies, providing grid access to new supply sources, and reviewing the need to set up a separate regulatory authority for overseeing various related technical and economic issues.

26. As regards preparatory arrangements to cater for new supply sources, DS/ED confirmed that the Administration had proposed in the Stage II Consultation Paper for the two power companies to take forward increased interconnection jointly and to provide connection/access to their grids. They were requested to plan for increased interconnection taking into account the results of detailed engineering assessments of the existing interconnector, and issues relating to technical interface, liability, costing and grid access charges for third party. The Administration would also work with the companies to review and harmonize the planning criteria and reliability standards for the interconnected system, as well as assist grid connection/access for users. DS/ED said that the separation of grids from the power generation systems was one of the key issues to be examined during the next bilateral agreement period. Due to the high cost for developing power transmission facilities, DS/ED cautioned about the adverse impact of excessive investment in interconnection facilities resulting in higher tariffs. He stressed the importance for the Administration to enhance increased interconnection between the two power companies and grid access at an optimum level having regard to the objective of promoting further liberalization in the market. In this regard, SEDL said that the objective of the Administration was to ensure third parties could access the existing power grids at a reasonable access charge in order to supply electricity to consumers.

27. In view of the serious power shortage problem in the Mainland, the Deputy Chairman concurred that it was unlikely that Hong Kong could count on the Mainland for new electricity supply in the near future. However, if new supply sources from the Mainland were to be introduced into Hong Kong in the long run, the Deputy Chairman expressed concern about difficulties for the Administration in monitoring the operation and environmental performance of suppliers with generation facilities located outside Hong Kong, their level of investment and rates of return, which had impact on tariffs. In this connection, the Deputy Chairman was aware that a Mainland-based new supplier had applied for supplying electricity to existing customers of CLP and enquired whether the supplier would be subject to the same requirements as in the current SCAs, including the rate of return and the level of tariff.

28. DS/ED stressed that in introducing new supply sources, the Administration would examine carefully key issues, including reliability, safety and environmental requirements, facilities development and land use etc. Potential suppliers would be required to prove that they had the relevant experience in the electricity industry. As to the new supplier referred to in paragraph 27, EDLB was working in collaboration with other bureaux and departments in vetting the application to ensure that the

relevant requirements were met. As the new supplier would be competing with CLP in business, it was believed that it would set tariff at a competitive level to attract customers.

29. The Deputy Chairman and the Chairman enquired about the approach to be adopted in calculating the rate of return for new suppliers in the future electricity market. While the Administration would consider the issue in working out the regulatory framework for the future electricity market, SEDL believed that with more suppliers coming into the market, market forces would drive suppliers to provide services in competitive prices, thus maintaining a reasonable level of tariffs.

30. Ir Dr Raymond HO expressed support for further liberalization in the electricity market in Hong Kong in the long run. However, he had reservation on opening up the market at this stage when the necessary arrangements were not yet in place and expressed concern about compromising supply reliability and safety. In his views, relevant arrangements including provision for back-up supply for third party systems accessing the existing power grids must be made before introducing new suppliers to the market. He further cautioned that should Hong Kong rely solely on the Mainland for power supply, existing staff of the two power companies might face unemployment. Moreover, air pollution in Hong Kong would aggravate as the Mainland mainly used coal for electricity generation. He stressed the importance for the Administration to exercise prudence and balance the interests of stakeholders when liberalizing the electricity market.

31. SEDL reaffirmed the Administration's policy objectives of maintaining reliable, safe and efficient electricity supply in Hong Kong upon the introduction of new supply sources. He re-iterated that the Administration acknowledged the need to put in place the necessary regulatory framework before liberalizing the market. Members and the power companies shared the same view on this issue.

32. To encourage competition in the electricity market, Miss TAM Heung-man called on the Government to streamline concerned procedures to facilitate access of new suppliers. Recognizing the capital intensive nature of the electricity industry, Miss TAM suggested that the Administration should consider providing economic incentives with a view to encouraging entities to enter the electricity industry.

33. In response, DS/ED emphasized the need to create a level-playing field for all players when liberalizing the electricity market. He assured members that the Administration would exercise prudence in balancing the interests of all stakeholders. With increased interconnection between the two power companies and access to the power grids, DS/ED said that new competitors would find it easier to access the market.

*Environmental concerns*

34. Ir Dr Raymond HO expressed reservation on the Administration's proposal to apply different rate of return for different types of assets owned by the power companies. He pointed out that this approach was uncommon in regulatory regimes of electricity markets overseas. In particular, he was concerned that the proposal of subjecting emission reduction facilities to the lowest rate of return would discourage investment in such facilities and would run counter to the objective of reducing pollution in electricity generation. He urged the Administration to consider his views and the concerns expressed by the power companies.

35. In reply, SEDL said that views were divided over the issue. While the Administration noted the concerns about distorting investment priority of power companies, there was support for the proposal as it was the responsibility of power companies to tackle emission from their power plants and that the cost involved should be avoided from being passed onto the consumers as far as possible.

36. Ms Emily LAU highlighted the grave concern of the public about deteriorating air quality in Hong Kong. Referring to the Administration's reply to a LegCo question recently that the economic losses caused by respiratory and cardiovascular diseases possibly related to air pollution could reach \$1.7 billion each year, Ms LAU considered that there was an urgent need to step up control over emission from power plants. Ms LAU further urged the Administration to take concrete measures facilitating the use of liquefied natural gas (LNG), which was a cleaner fuel than coal, in electricity generation; and requiring the power companies to enhance their emission reduction facilities.

37. The Deputy Director of Environmental Protection (DDEP) said that the Administration was fully aware of public concern about the adverse impact of electricity generation on the air quality in Hong Kong. For instance, emissions from power plants accounted for over 90% of the total emissions of sulphur dioxide (SO<sub>2</sub>) and 50% of that of the nitrogen oxides (NO<sub>x</sub>) and respirable suspended particulates. To achieve the 2010 emission reduction targets, the two power companies had proposed to install flue gas desulphurization (FGD) systems and low-NO<sub>x</sub> burners or selective catalytic reduction systems to reduce NO<sub>x</sub> emission. HEC would commission these facilities by 2009/2010, whereas CLP planned to commission the systems by stages between 2009 and 2011. With the installation of these facilities, the emission of SO<sub>2</sub> and NO<sub>x</sub> could be effectively reduced by 85% to 90% respectively. Regarding the construction of LNG receiving terminal, DS/ED said that CLP was in the process of conducting the Environmental Impact Assessment (EIA) study, the report of which was expected to be ready by mid 2006. DDEP supplemented that to provide incentive for the power companies to invest in emission reduction facilities, the Administration had proposed in the Stage II Consultation Paper to include all capital expenditure for emission reduction facilities in the rate base, but subject it to a lower rate of return.

38. Ms Emily LAU expressed grave concern about the slow progress in taking forward the emission reduction projects and urged the two power companies to

expedite the delivery. In this connection, the Chairman asked whether the slow progress was related to problems in land use and land grant.

39. In response, Mr C T WAN of HEC said that HEC would commission the gas-fired combined cycle gas turbine unit (L9) in 2006. Having received the relevant EIA permits, HEC would soon invite tenders for the retrofitting works for FGD systems and low-NOx burners in its two coal-fired generating units (L4 and L5). Pending the Administration's approval for the installation of L10, HEC was confident that it could meet the emission caps stipulated in the Specified Process Licences (SPLs) by 2010. He added that HEC's Lamma extension site had land provision for the installation of L10. Although the L10 project had once been proposed in HEC's 2004-08 Financial Plan, the Administration suggested and HEC agreed to withdraw it as the Administration was prepared to consider at a later stage development projects which would stretch beyond 2008.

40. Mr S H CHAN of CLP highlighted the environmental performance of CLP which was evidenced by the initiatives in reducing emissions in electricity generation since early 1990s. These efforts had enabled CLP to reduce emissions by 40% to 80% amidst a 70% to 80% increase in local electricity sales in the past ten years. With the Government's endorsement, CLP would complete the installation of emission reduction facilities and the construction of the LNG receiving terminal by 2010/2011. In addition, more ultra-low sulphur coal would be used. These initiatives would help CLP meet the emission targets.

41. On the concern about the progress in implementing emission reduction projects, DS/ED explained that the statutory procedures and complicated technical details involved would take longer time. For instance, the retrofitting of existing power plants with the FGD systems and low-NOx burners involved the construction of complicated structure and the need to suspend operation of the generating units. Nevertheless, he assured members that the Administration would encourage the two power companies to expedite the projects, and where appropriate, provide assistance. As regards CLP's project of constructing a LNG receiving terminal, DS/ED pointed out that CLP was undertaking studies for two proposed sites at Lung Kwu Tan and Tai A Chau, both of which involved planning and land use issues, and the need to conduct EIA studies. He said that the Administration would maintain close liaison with CLP and where necessary, provide assistance to expedite the concerned processes to enable early completion of the project.

42. Ms Emily LAU noted from note 5 of RLSD's paper that CLP had sold 4 497 GWh of electricity to the Mainland in 2005 and expressed concern that this might have aggravated the air pollution problem in Hong Kong. Sharing the view, the Chairman raised concern about CLP gaining profits by selling electricity to the Mainland at the expense of interests of Hong Kong people. He asked whether CLP charged its Mainland customers the same tariffs as customers in Hong Kong, and whether Hong Kong customers would benefit from rebates offered by CLP from revenue generated from the sale of electricity to the Mainland.

43. DS/ED confirmed that CLP was only allowed to sell surplus “reserved electricity” to customers outside Hong Kong. Moreover, CLP was required to return 80% of the net profits from the sale into DF, which had the effect of stabilizing tariff. On the concern about monitoring emission from power plants, DDEP said that at present, in line with the international practice, emission caps were stipulated in the SPLs issued under the Air Pollution Control Ordinance (Cap. 311) to control the maximum allowable emissions from power plants. To provide flexibility in operation, the Administration did not prescribe the means through which for power plants to achieve the emission caps.

44. Mr S H CHAN of CLP said that CLP charged its Mainland customers a lower tariff because the sale of electricity generated from the “reserved capacity” was not a reliable supply to Guangdong Province. The sale would benefit Hong Kong as a large number of enterprises operating in Guangdong were owned by Hong Kong people. If CLP did not supply electricity to Guangdong, some of the enterprises would rely on some Mainland electricity suppliers, which used coal and diesel, more polluting than the coal used by CLP, for electricity generation, thus further aggravating the regional air pollution problem. Mr CHAN stressed that electricity sales to the Mainland was a win-win option for both CLP and its customers. Coupled with other efficiency enhancement measures, CLP was able to freeze tariff since 1998 and offer about \$3 billion rebates to Hong Kong customers so far.

45. Mr Abraham SHEK did not subscribe to the CLP’s explanation. He saw no reason for CLP to make use of customers’ monies in DF as its operating fund while reaping the same level of rate of return. Mr SHEK was concerned about the operation of DF, in particular, CLP’s flexibility in deploying the balance of the fund.

46. Mr S H CHAN of CLP highlighted the role of DF in stabilizing electricity tariff. He explained that after deducting operating expenses, and dividends to shareholders, the net revenue in excess of the agreed return would be retained in DF. CLP’s shareholders were required to pay an annual interest of 8% on the balance of the fund. Mr CHAN re-iterated that DF had helped smooth out tariff fluctuation and CLP had frozen its tariffs since 1998.

47. Mr Abraham SHEK remained unconvinced and requested CLP to provide information on the purpose and mechanism of DF, and its operation in the past few years including the current balance of the fund and impact on tariff during the period.

*(Post-meeting note: The reply provided by CLP dated 23 June 2006 was circulated to members vide CB(1)1861/05-06(01) on 27 June 2006.)*

48. Given the unstable power supply in Guangdong Province, the Deputy Chairman pointed out that Hong Kong enterprises operating in the Pearl River Delta region welcomed CLP’s sale of electricity to the province. Nevertheless, the Deputy Chairman was keen to ensure that the two power companies would step up



environmental measures to reduce emission in electricity generation. Ms Emily LAU added that the Administration should require the two power companies to use cleaner fuel in electricity generation.

49. Mr S H CHAN of CLP re-iterated CLP's efforts in enhancing its environmental performance. In addition to the installation of emission reduction facilities and the construction of a LNG receiving terminal, CLP had been using low sulphur coal of 0.5% sulphur content vis-à-vis the standard of 1% or less for electricity generation. To secure the supply of high quality coal, CLP had entered into a five-year contract with supplier for supply of coal with sulphur content as low as 0.1%. The average sulphur content of the coal used in 2005 was only about 0.3%. The machines in the Castle Peak Power Station were also installed with low-NOx burners to greatly reduce the NOx emission and electrostatic precipitators which removed 99.4% of particulates.

50. Mr C T WAN of HEC said that upon the completion of retrofitting of L4 and L5 with FGD systems and low-NOx burners, the emission of SO<sub>2</sub> and NOx of those units could be effectively reduced by 90% and 60% respectively. Moreover, HEC had been using low-sulphur coal for electricity generation with a view to reducing SO<sub>2</sub> emission. Furthermore, with the commissioning of L9 in mid 2006, 7%-8% of electricity generated from coal-fired units would be replaced by that from the LNG-fired unit in 2006 and 15% from 2007 onwards.

Date of next meeting and subject for discussion

51. The Chairman referred members to Mr SIN Chung-kai's letter dated 23 May 2006 (LC Paper No. CB(1)1589/05-06(01)) with suggestions on how the Panel should follow up on the development of the future electricity market in Hong Kong. Upon invitation by the Chairman, Mr SIN briefed members on his suggestions that the Panel should consider holding special meetings to meet with the Administration, the two power companies, interested parties, and relevant academics and experts to deliberate on four major topics, namely the new SCAs, tariff setting mechanism, interconnection between the power companies and liberalization in the electricity market, and environmental regulations on electricity generation. The Chairman then sought views from members and the Administration on Mr SIN's suggestions.

52. Ms Emily LAU agreed that the Panel should continue to monitor issues relating to the development of the future electricity market. SEDL said that the first two topics referred to in Mr SIN Chung-kai's letter, had been discussed to a great extent, in the current and previous meetings of the Panel. The public and interested parties had also expressed views on these topics during the Stage II Consultation. While the Administration would consider the views carefully in finalizing the new agreements, given that negotiation with the power companies was underway, the Administration might not be able to report concrete progress in the next few months. As such, he said that the Panel could consider holding discussion on the other two

topics first, which would help the Administration in drawing up relevant regulatory arrangements for the future electricity market.

53. After discussion, members agreed to hold the next special meeting on 30 June 2006, at 10:45 am, to meet with deputations for views on the subject of arrangements to cater for new supply sources in the future electricity market. Related issues for discussion would include grid access, increased interconnection, relevant regulatory framework and timeframe for further opening of the electricity market. Members further agreed that the Clerk to the Panel would write to interested parties to invite written submissions and/or attendance to the special meeting. An invitation notice would also be posted at the Council's website for this purpose.

## **II. Any other business**

54. There being no other business, the meeting ended at 4:40 pm.

Council Business Division 1  
Legislative Council Secretariat  
4 September 2006