

立法會
Legislative Council

LC Paper No. CB(1)278/12-13
(These minutes have been seen
by the Administration)

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**Subcommittee on Third Technical Memorandum for Allocation of Emission
Allowances in Respect of Specified Licences**

**Minutes of first meeting
held on Tuesday, 6 November 2012, at 10:45 am
in Conference Room 2A of the Legislative Council Complex**

Members present : Hon Cyd HO Sau-lan (Chairman)
Hon WU Chi-wai, MH
Dr Hon Kenneth CHAN Ka-lok
Hon Dennis KWOK
Hon SIN Chung-kai, SBS, JP

Member absent : Hon CHAN Hak-kan, JP

**Public Officers
attending** : **For item II**

Mr Andrew LAI, JP
Deputy Director of Environmental Protection (3)

Mr MOK Wai-chuen, JP
Assistant Director (Air Policy)
Environmental Protection Department

Mr PANG Sik-wing
Principal Environmental Protection Officer (Air Policy)
Environmental Protection Department

Clerk in Attendance : Ms Miranda HON
Chief Council Secretary (1)1

Staff in attendance : Miss Kitty CHENG
Assistant Legal Adviser 5

Miss Lilian MOK
Council Secretary (1)1

Action

I. Election of Chairman

Ms Cyd HO, the member who had the highest precedence among members of the Subcommittee present at the meeting, presided at the election of Chairman of the Subcommittee. Ms HO invited nominations for the chairmanship of the Subcommittee.

2. Mr Dennis KWOK nominated Ms Cyd HO, and the nomination was seconded by Dr Kenneth CHAN. Ms Cyd HO accepted the nomination.

3. There being no other nominations, Ms Cyd HO was declared Chairman of the Subcommittee.

4. Members agreed that it was not necessary to elect a Deputy Chairman.

II. Meeting with the Administration

(S.S. No. 5 to Gazette No. 42/2012 — Third Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences

(issued by the Environmental Protection Department in October 2012) — Legislative Council Brief

LC Paper No. CB(1)2256/11-12(05) — Administration's paper on "Review of the Second Technical Memorandum for Allocation of Emission Allowances for Power Plants"

Action

LC Paper No. LS5/12-13 — Legal Service Division Report

LC Paper No. CB(1)125/12-13(01) — Background brief prepared by the Legislative Council Secretariat)

5. The Subcommittee deliberated (index of proceedings attached at the **Annex**).

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6. The Administration was requested to provide information on the respective percentages of the two power companies' investment in developing renewable energy in their overall costs of electricity generation.

(Post-meeting note: The Administration's response was circulated on 12 November 2012 vide LC Paper No. CB(1)158/12-13(01).)

7. The Chairman advised that the scrutiny period of the Third Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences ("the Third TM") would expire on 21 November 2012, and the deadline for giving notice of amendments to the Third TM was 14 November 2012.

8. The Subcommittee completed scrutiny of the Third TM, and would not propose any amendment to it. Members agreed that it was not necessary to hold further meeting. The Chairman would give a verbal report at the House Committee ("HC") meeting scheduled for 9 November 2012. A written report on the deliberations of the Subcommittee would also be submitted to HC for consideration afterwards.

9. Upon the Chairman's enquiry, members indicated that they would like to speak at the motion debate to take note of the House Committee's Report in relation to the Third TM at the Council meeting. The Chairman undertook to notify the House Committee.

III. Any other business

10. There being no other business, the meeting ended at 12:08 pm.

**Subcommittee on Third Technical Memorandum for Allocation of
Emission Allowances in Respect of Specified Licences**

**Proceedings of the first meeting
On Tuesday, 6 November 2012, at 10:45 am
in Conference Room 2A of the Legislative Council Complex**

Time marker	Speaker	Subject(s)	Action required
<i>Agenda Item I - Election of Chairman</i>			
000140 - 000244	Ms Cyd HO Mr WU Chi-wai Dr Kenneth CHAN Mr Dennis KWOK Mr SIN Chung-kai	Election of Chairman Ms Cyd HO was elected Chairman of the Subcommittee.	
<i>Agenda Item II - Meeting with the Administration</i>			
000245 - 000425	Chairman	Opening remarks	
000426 - 001437	Administration	Administration's briefing on the Third Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences ("the Third TM").	
001438 - 001655	Chairman	Chairman's enquiry on the implications of the increased use of natural gas on electricity tariff under the "take-or-pay" natural gas supply contracts . The Administration explained that under the "take-or-pay" natural gas supply contracts, the power companies were required to pay for a specified quantity of natural gas, irrespective of whether they actually used that quantity of natural gas for electricity generation. In setting the emission caps under the Third TM, the Administration had taken into account the "take-or-pay" contracts, which served as an incentive to encourage the power companies to fully use the specified quantity of natural gas in electricity generation.	
001656 – 002754	Chairman Mr SIN Chung-kai Administration	Mr SIN Chung-kai's enquiry on how the quantities of emission allowances to be allocated to the four existing electricity works, namely, the Castle Peak Power Station, the Lamma Power Station and Lamma Power Station Extension, the Black Point Power Station and the Penny's Bay Gas Turbine Power Station, under the Third TM	

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		<p>were determined.</p> <p>The Administration explained that –</p> <ul style="list-style-type: none">(a) the power sector could reduce coal-fired electricity generation by taking up the generation of renewable energy ("RE") and waste-to-energy ("WTE"). The emissions to be avoided for each unit of electricity tapped from RE and WTE would be equal to the unit emissions from the coal-fired generation units of respective power companies. Such emissions to be avoided would be deducted from the emission allowance allocations according to the unit emission factors for coal-fired generation units and the corresponding reduced electricity generation figures;(b) since the generation of RE and WTE would be affected by exogenous factors, e.g. changes in weather patterns and heat contents of the refuse or sludge, the Third TM provided a mechanism for ascertaining the emission allowances according to the actual annual intake of the electricity generated from RE and WTE. The quantities of emission allowances for the Castle Peak Power Station, and the Lamma Power Station and Lamma Power Station Extension, which used coal as fuel, would be determined by applying this mechanism. As for the Black Point Power Station which was gas-fired and would be fully utilized, the amount of electricity intake of RE and WTE would not displace electricity generation from this power station;(c) given that the Penny's Bay Gas Turbine Power Station was for emergency and peak-opping purposes, a nominal quantity of emission allowances, i.e. only one to two tonnes, was allocated to it; and(d) with the potential increasing use of RE and WTE in future, there might be scope to further tighten the quantities of emission allowances for the power sector	

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		in future if the electricity demand remained stable.	
002755 - 004415	Chairman Mr WU Chi-wai Administration	<p>Mr WU Chi-wai's enquiry/views –</p> <p>(a) whether the power companies were allowed to substitute natural gas with low emission coal in their fuel mix;</p> <p>(b) the Administration should include initiatives in the Third TM to encourage the power companies to achieve emission reduction by promoting energy conservation; and</p> <p>(c) the Administration should request the power companies to review their tariff structure and consider adopting the approach of "higher charge for higher electricity consumption" in order to help promote energy conservation and reduce electricity consumption.</p> <p>The Administration responded that –</p> <p>(a) the use of low emission coal had been increased in recent years, and would be further increased. It would account for about 20% and 40% of the total amount of coal used for electricity generation respectively in 2015 and 2017. However, given the uncertainties on its supply, lower energy performance, and significant departure from the combustion characteristics of the design coal of the existing coal-fired generation units, low emission coal could not fully replace common coal in electricity generation. Nevertheless, as it was the Government's policy that all new electricity generation units should be powered by natural gas with effect from 1997, the existing coal-fired generation units would be phased out and the share of coal in the future fuel mix of local electricity generation would decrease progressively. Meanwhile, the West-East Natural Gas Pipeline would make available additional supply of natural gas to Hong Kong, thereby enabling the power companies to maximize the utilization of their existing</p>	

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		<p>gas-fired generation units and increase the amount of electricity generated by natural gas. On the promotion of RE, the power companies were carrying out studies on the construction of large-scale offshore wind farms in Hong Kong to generate electricity. The current Scheme of Control Agreements also specified a higher permitted rate of return of 11% for investment in RE infrastructure;</p> <p>(b) while energy conservation was not one of the direct technical considerations in setting the emission caps for the Third TM, the Government had taken various measures to encourage energy conservation through demand side management. The Environment and Conservation Fund also provided funding support to different energy efficiency and energy conservation projects; and</p> <p>(c) the electricity demand had been on the rise in the past two years. The Government would keep in view of the change in demand, and take this into account when reviewing the Third TM for further tightening of the emission caps.</p>	
004416 - 004943	Chairman Mr Dennis KWOK Administration	<p>Mr Dennis KWOK's enquiry on whether the achievement of the new emission caps as stipulated in the Third TM was conducive to attaining the proposed new Air Quality Objectives ("AQOs") for the relevant pollutants.</p> <p>The Administration responded that –</p> <p>(a) raising the share of natural gas in local electricity generation to 50% by 2015 as required in the Second TM was one of the measures to help achieve the new AQOs. The Third TM, which would further tighten the emission allowances for the power sector, would contribute further to assist Hong Kong to meet the emission reduction targets; and</p> <p>(b) as for sulphur dioxide ("SO₂"), the Second TM had tightened the SO₂ emission cap by 50% as compared to the</p>	

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		<p>First TM whereas the Third TM had required a further decrease of 17%, representing a substantial level of reduction starting 2015. The Administration would also launch other measures to control SO₂ emission from other sources. Hence, it was anticipated that the relevant new AQOs for SO₂ could be broadly achieved.</p>	
004944 - 011107	<p>Chairman Dr Kenneth CHAN Administration</p>	<p>Dr Kenneth CHAN's enquiries –</p> <p>(a) the difficulties faced by the two power companies in complying with the Third TM; and</p> <p>(b) the reasons for the relatively low reduction level of nitrogen oxides ("NO_x"), as highlighted by a green group.</p> <p>The Administration responded that –</p> <p>(a) the power companies had indicated that the attainment of the new emission targets under the Third TM would hinge on a number of factors, including the stable supply of low emission coal with consistent properties, sufficient supply of natural gas, consistently high performance of their emission reduction devices and no exceptional increase in electricity demand. Notwithstanding the difficulties, the power companies supported the Administration's objective to reduce emissions continuously; and</p> <p>(b) NO_x was produced as a result of the combustion of fuels in power generation. The emission abatement means available for reducing NO_x emission was limited. Apart from maximizing the use of their gas-fired generation units and prioritizing the use of their coal-fired generation units equipped with advanced emission control devices, the power companies could reduce NO_x emission by using more low emission coal. However, the effectiveness of low emission coals for reducing NO_x emission was not very high as NO_x was also formed by the reaction of the oxygen and nitrogen directly in the</p>	

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		<p>combustion air; and</p> <p>(c) the continued growth in electricity demand, which led to more frequent use of coal-fired generation units without advanced emission control equipment, would also partly offset the effectiveness of using more low emission coal. Therefore, the reduction level of NOx emission to be achieved under the Third TM was relatively lower.</p>	
010222 - 011107	Chairman Administration	<p>Chairman's enquiries –</p> <p>(a) the quantities of emission allowances to be allocated to new electricity works from 2017 onwards under the Third TM; and</p> <p>(b) whether there would be any new electricity works from now to 2017 and if so, the type of fuel to be used by them.</p> <p>The Administration responded that –</p> <p>(a) similar to the First and Second TMs, the Third TM provided an allocation of not more than 1% of the total emission allowances for the power sector in respect of each of the specified pollutants for any possible new electricity works, so as to ensure that newcomers would not be debarred from starting their business even with the use of the most advanced emission reduction technology; and</p> <p>(b) while there might not be new entrants during the relevant period, the mechanism for ascertaining emission allowances as set out in the Third TM allowed them to enter the industry. Under the established government policy, new generation units would be required to use natural gas or other clean fuels as fuel for electricity generation.</p>	
011108 - 011314	Chairman Mr SIN Chung-kai Administration	<p>Mr SIN Chung-kai's enquiry on the penalty for non-compliance with the emission caps.</p> <p>The Administration responded that under section 30B of the Air Pollution Control</p>	

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		<p>Ordinance (Cap. 311), the maximum penalty for exceeding the emission caps for pollutants was a fine of \$30,000 in respect of each tonne of the relevant actual emission in excess of the relevant allowed emission on a first conviction. On a second or subsequent conviction, the maximum penalty was a fine of \$60,000 in respect of each tonne of the relevant actual emission in excess of the relevant allowed emission, and imprisonment for six months. Besides, the exceedance would be carried forward and considered as part of the emissions to be reconciled in the following year.</p>	
011315 - 012107	<p>Chairman Mr WU Chi-wai Administration</p>	<p>Mr WU Chi-wai's concern about the cost implications of the Third TM on electricity tariff due to the increased use of cleaner fuels (such as natural gas and low emission coal) and RE.</p> <p>The Administration explained that achieving the proposed emission caps starting 2017 did not involve any new major capital investment by the two power companies and the Third TM did not propose a significant change to the fuel mix of the power companies. As such, there should be no question of the power companies having to increase their electricity tariff in order to meet the tightened emission requirements under the Third TM. In any case, the fuel cost was subject to international market prices and the power companies would present their annual tariff assessment to the Government in accordance with the prevailing regulatory mechanism.</p> <p>The Chairman acknowledged the Administration's effort in lowering the permitted rate of return of the two power companies significantly from 13.5%-15% on Average Net Fixed Assets to 9.99%.</p> <p>Mr WU Chi-wai's request for information on the respective percentages of the two power companies' investment in developing RE in their overall costs of electricity generation.</p>	<p>Administration to provide information as requested (paragraph 6 of the minutes refers)</p>

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012108 - 012410	Chairman Clerk Mr WU Chi-wai Administration	<p>In response to Mr WU Chi-wai's enquiry, the Administration advised that the overall share of natural gas in the fuel mix of the power sector for electricity generation was about 25% at present and the power sector would need to increase the share to about 50% for achieving the 2015 emission caps stipulated in the Second TM.</p> <p>The Subcommittee completed scrutiny of the Third TM, and did not propose any amendment to it. No further meeting was required to be held. The Chairman would give a verbal report at the House Committee ("HC") meeting scheduled for 9 November 2012. A written report on the deliberations of the Subcommittee would also be submitted to HC for consideration afterwards.</p> <p>Upon the Chairman's enquiry, members responded that they wished to speak at the motion debate to take note of the HC's Report in relation to the Third TM.</p>	<p>Clerk to prepare the relevant reports</p> <p>Clerk to notify HC on behalf of the Chairman</p>