

立法會
Legislative Council

LC Paper No. CB(1)872/10-11
(These minutes have been seen
by the Administration)

Ref : CB1/SS/5/10

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

**Minutes of second meeting on
Monday, 15 November 2010, at 5:30 pm
in Conference Room B of the Legislative Council Building**

Members present : Hon Audrey EU Yuet-mee, SC, JP (Chairman)
Hon Fred LI Wah-ming, SBS, JP
Hon KAM Nai-wai, MH
Hon Cyd HO Sau-lan
Hon CHAN Kin-por, JP
Hon Tanya CHAN

Member absent : Hon CHAN Hak-kan

Public officers attending : Agenda Item I

Mr Carlson CHAN Ka-shun
Deputy Director of Environmental Protection (3)

Mr MOK Wai-chuen
Assistant Director of Environmental Protection
(Air Policy)

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

Clerk in attendance : Ms Debbie YAU
Chief Council Secretary (1)6

Staff in attendance : Ms Clara TAM
Assistant Legal Adviser 9

Ms Diana WONG
Senior Council Secretary (1)8

Action

I Meeting with the Administration

(LC Paper No. CB(1)410/10-11(01) -- List of follow-up actions arising from the discussion at the meeting on 2 November 2010

LC Paper No. CB(1)410/10-11(02) -- Administration's response to CB(1)410/10-11(01)

LC Paper No. CB(1)499/10-11(03) *(tabled and issued on 18 November 2010)* Table listing the allocation of emission allowances for individual power stations under the First and Second Technical Memorandum and the actual levels of emission for the specified pollutants in January to September 2010 prepared by the Legislative Council Secretariat)

The Subcommittee deliberated (Index of proceedings attached at **Appendix**).

Follow-up actions to be taken by the Administration

2. The Subcommittee requested the Administration to provide written responses to the views and concerns raised at the meeting:

- (a) in respect of each of the power stations, the emission allowances in 2020 for sulphur dioxide, nitrogen oxides and respirable suspended particulates if and when it is agreed to adopt the fuel mix of 50% nuclear energy, 40% natural gas and 10% coal and renewable energy proposed under the Consultation Document

"Hong Kong's Climate Change Strategy and Action Agenda" issued in September 2010;

- (b) consider conducting a review of the Second TM within two years after its coming into operation; and
- (c) in respect of the Lamma Power Station and Lamma Power Station Extension, whether it is technically feasible to install flue gas desulphurization system in the coal-fired generation unit(s), and if yes, the associated increase in tariff, if any.

Date of next meeting

3. The Subcommittee agreed to hold the next meeting on Friday, 19 November 2010 at 3:00 pm or immediately after the House Committee scheduled on the same day, whichever is later.

II Any other business

4. There being no other business, the meeting ended at 6:43 pm.

Council Business Division 1
Legislative Council Secretariat
24 December 2010

**Proceedings of the second meeting of
Subcommittee on Second Technical Memorandum
for Allocation of Emission Allowances in Respect of Specified Licences
on Monday, 15 November 2010, at 5:30 pm
in Conference Room B of the Legislative Council Building**

Time marker	Speaker	Subject(s)	Action required
000000 – 000222	Chairman	Opening remarks by the Chairman	
000223 – 001430	Chairman Administration	The Administration briefed members on its response to the concerns raised at the meeting on 2 November 2010 (LC Paper No. CB(1)410/10-11(02)).	
001431 – 002149	Chairman Administration	<p>The Chairman referred to the table listing the allocation of emission allowances for individual power stations under the First and Second Technical Memorandum (TM) and the actual levels of emission for the specified pollutants in January to September 2010 (LC Paper No. CB(1)499/10-11(03))</p> <p>In response to the Chairman's concerns, the Administration advised that –</p> <p>(a) the 2015 emission allowances for nitrogen oxides (NO_x) and respirable suspended particulates (RSP) set for the Castle Peak Power Station were higher than their respective emission allowances for 2010 because the methods used in ascertaining the quantity of emission allowances for 2010 and 2015 were different. Unlike Black Point Power Station which deployed mainly natural gas for electricity generation, Castle Peak Power Station used coal as major fuel and was therefore allocated higher emission allowances for NO_x and RSP; and</p> <p>(b) the Penny's Bay Gas Turbine Power Station was for back-up and peak-opping and a nominal allocation of 2 tonnes per year as its emission allowances for sulphur dioxide (SO₂) and NO_x each would be adequate.</p>	
002150 – 003419	Chairman Mr KAM Nai-wai Administration	<p>Mr KAM Nai-wai expressed concerns that the 2015 emission allowances for NO_x and RSP for the two power stations of the CLP Power Hong Kong Limited (CLP) added together were just slightly lower than the respective 2010 actual levels of emission, whereas the 2015 allowance for SO₂ for Lamma Power Station and its extension was about 40% higher than the 2010 actual level of emission. He enquired about the impact on tariff if the 2010 actual levels were adopted as the 2015 emission allowances for CLP's power stations.</p> <p>The Administration explained that –</p>	The Administration to provide information as requested in paragraph 2(a) of the minutes.

Time marker	Speaker	Subject(s)	Action required
		<p>(a) coal-fired generation unit usually emitted more NO_x than gas-fired generation unit and the NO_x abatement equipment retrofitted for the Castle Peak Power Station was already among the largest;</p> <p>(b) the Climate Change Study proposed to revamp fuel mix by reducing the use of coal for power generation from the present some 50% to 10% in 2020 when the majority of local coal-fired generation units would start to retire in phases until early 2030s. As such, it was not cost-effective to make capital investment for further abatement equipment for NO_x and RSP for the coal-fired generation units having regard to the implications of tariff increase;</p> <p>(c) despite the estimated annual growth of 1% to 2% in electricity demand for the coming years, the 2015 emission caps were more stringent than those set for 2010 and they would be met by maximizing the use of gas-fired generation units and prioritizing the use of coal units with emission reduction retrofits; and</p> <p>(d) the 2015 emission allowance for SO₂ for Lamma Power Station and its extension was set taking into account the fact that those coal-fired generation that had not been retrofitted with SO₂ abatement equipment had to be deployed to meet the 1% to 2% growth in electricity demand. As the station could not be retrofitted with further abatement equipment due to space constraints, the power company would have to procure higher quality coal in order to meet the cap.</p>	
003420 – 004420	Chairman Ms Cyd HO Administration	<p>Ms Cyd HO expressed concern about the gap between the 2010 emission allowances and the actual levels of emission in 2010, and she was worried the same error would occur for the 2015 emission allowance. The Administration advised that the 2010 emission reduction targets were set according to the consensus reached between the Hong Kong Special Administrative Region Government and the Guangdong Provincial Government in April 2002. Since 2003, the Administration had been engaging the two power companies regarding the emission caps in 2010 which were imposed since 2005 upon renewal of their respective specified process licences.</p> <p>Discussion on the future fuel mix and the use of nuclear electricity by customers on Hong Kong Island. The Administration advised that if the fuel mix proposed under the Consultation Document "Hong Kong's Climate Change Strategy and Action Agenda" would be adopted in 2020, the emission of SO₂, NO_x and RSP for the power sector as a whole could further be reduced by about 60%, 50% and 50% respectively.</p>	

Time marker	Speaker	Subject(s)	Action required
004421 – 005151	Chairman Mr Fred LI Administration	<p>Mr Fred LI enquired whether there were plans for the Castle Peak Power Station and Black Point Power Station to invest in new gas-fired generation units in the next ten years as the increasing use of natural gas might speed up the depreciation of the existing units. He was also concerned about the supply of natural gas and the life span of the coal-fired generation units.</p> <p>The Administration advised that –</p> <p>(a) before 2015, there was no plan to commission new generation units but the situation by 2020 would depend on the actual growth on electricity demand;</p> <p>(b) while the Yacheng gas field off Hainan Island, which had been supplying natural gas to Hong Kong, would soon be depleted, efforts had been made by the Government to secure the continual supply of natural gas by –</p> <p>(i) signing the Memorandum of Understanding on Energy Co-operation with the Mainland in 2008 under which the Mainland pledged to increase the supply of natural gas to Hong Kong. The gas pipelines serving the purpose were under construction and would be ready by 2013;</p> <p>(ii) identifying new gas sources near Yacheng; and</p> <p>(iii) expanding the storage facilities for liquified natural gas in Shenzhen so that Hongkong Electric Company (HEC) and CLP could acquire natural gas from other countries such as Australia or Indonesia for the use of Hong Kong; and</p> <p>(c) HEC had converted two back-up oil-fired generation units into a gas-fired one to increase its gas-fired electricity generation capacity. The efficiency of the unit had consequentially been increased from about 30% to about 42%, though still fell short of the over 50% for new gas-fired generation units.</p>	
005152 – 010200	Chairman Mr KAM Nai-wai Assistant Legal Adviser (ALA)	<p>Mr KAM urged the Administration to re-consider conducting a review of the Second Technical Memorandum (TM) within two years after its coming into operation taking into account the rapid changes in the associated technology and the feasibility in revamping fuel mix. He also urged the Administration to lower the 2015 emission allowance for SO₂ for the Lamma Power Station and its extension as it was 40% higher than the 2010 actual level of emission.</p> <p>The Administration reiterated that by 2015, coal-fired generation units that had not been retrofitted with SO₂</p>	The Administration to provide information as requested in paragraph 2(b) of the minutes.

Time marker	Speaker	Subject(s)	Action required
		<p>abatement equipment in the Lamma Power Station and its extension might have to be deployed for power generation to meet the anticipated growth in electricity demand and hence more allowance was given to the emission of SO₂ for the station in 2015 onward. As the book lives of these old generation units would expire starting from 2017, it would not be cost-effective to install the flue gas desulphurization systems for them, not to mention the space constraint.</p> <p>In response to the Chairman, ALA advised that similar to section 34(2) of Cap. 1, section 37B of the Air Pollution Control Ordinance (Cap. 311) provided that the Legislative Council had power to amend the TM in any manner consistent with the power to issue it. While it was in order to amend the frequency of review under section 2.5 of the Second TM, Members who intended to move a resolution to amend the emission allowances for any specified pollutants should have regard to consider the factors listed in section 26G(2) of Cap. 311 which had to be taken into account by the Secretary for the Environment when making the allocation.</p>	
010201 – 010402	Chairman Ms Cyd HO Administration	<p>Ms Cyd HO supported reviewing the Second TM within two years after it came into operation having regard that more nuclear energy could be deployed by 2014.</p> <p>The Administration agreed to re-consider the request of reviewing the Second TM within two years and revert its response within the week.</p>	
010403 – 010717	Chairman Mr CHAN Kin-por Administration	<p>Mr CHAN Kin-por considered that HEC should be requested to replace the existing coal-fired generation units without abatement equipment with new gas-fired generation units by 2017.</p> <p>The Administration explained that any further major emission reduction could only be attained through major revamp of the fuel mix, which would require careful consideration of the overall fuel mix strategy, advanced planning and consultation beforehand. The Administration also added that the power companies had just retrofitted existing coal-fired generation units with emission abatement equipment for achieving the 2010 emission reduction targets under the First TM. The abatement equipment would be at their best emission performance, thereby reducing the emissions in 2010 to a very low level. However, these levels should not be used as a reference for 2015 emission allowances as the emissions could be increased due to declining performance of the abatement equipment and the need for deploying more generation units without emission abatement retrofit for meeting the increase of electricity demand.</p>	

Time marker	Speaker	Subject(s)	Action required
010718 – 011032	Chairman Ms Cyd HO Mr KAM Nai-wai Mr CHAN Kin-por	Ms Cyd HO suggested the Subcommittee moved a resolution to amend the review frequency of the Second TM to not less than once every two years if the Administration did not agree to do so. Date of next meeting.	The Administration to provide information as requested in paragraph 2(c) of the minutes.

Council Business Division 1
Legislative Council Secretariat
24 December 2010