## **Panel on Environmental Affairs**

## Follow-up to special meeting on 28 March 2007

## Summary of views (as at 20 April 2007)

Organization	Concern/View	Administration's comments
Hongkong	Supports the 2010 emission reduction targets and the	Noted.
Electric Co.	various environmental initiatives taken by the	
Limited	Administration, including the Emission Trading Pilot	
	Scheme (ETPS) which forms part of the concerted efforts	
	made by the Hong Kong Special Administrative Region	
	Government (HKSARG) and the Guangdong Provincial	
	Government (GPG) in improving regional air quality.	
	While welcoming that emission credits under ETPS will	The power companies could consider various means to
	be subject to government scrutiny, and that the proposed	meet the emission caps set by the government. These
	emission reduction plans have to be prepared by an	include, for example, buying cleaner coal and natural gas,
	independent third party, examined and affirmed by the	installing pollutant removal facilities or emissions credits
	authorities of HKSARG and GPG on the amount of	under the ETPS. No matter what measures they adopt, they
	emission credits and their validity period, there is concern	must fully consider the capability of their business partners
	about the liability of the buyer should the seller fail to	in delivering products or services on time and take all
	deliver the contracted emission credits in view of the	adequate steps to ensure successful transactions. Basically,
	severity of the consequences for not meeting the emission	the kind of responsibility and contractual risk that power
	caps as stipulated in the Specified Process Licence (SPL) under the Air Pollution Control Ordinance (Cap. 311).	companies have to bear when purchasing emission credits is no different from that for procuring other products or
	Measures should be put in place to minimize the risks of	services.
	the buyer.	A seller who fails to operate in accordance with the
		requirements stipulated in the contract and/or to attain the
		total emission reduction and/or to transfer the valid
		emission credits to the buyer within the time specified in
		the contract shall offer compensation to the buyer in
		accordance with the terms and conditions of the contract.

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	Apart from thermal power plants, consideration should be given to extending the coverage of ETPS to other industries with a view to improving the regional air quality.	ETPS is the first such pilot scheme implemented by the two governments. Following implementation of the Scheme, both sides will from time to time review the progress and effectiveness of the scheme in the light of the development of national emissions trading policy and associated laws and regulations.
CLP Power Hong Kong Limited	Supports the voluntary nature of ETPS since sufficient time is required to develop such a new and complex scheme taking into account the experience learnt.	Noted.
	As ETPS is relatively new to both Hong Kong and the Mainland, there is a need to work out a fair and transparent trading mechanism applicable to both Hong Kong and the Mainland given their differences in legal and institutional systems. For the sake of clarity, the application of emission credits and the liability of seller in case of non-compliance should be clearly set out in SPL. A clear validity period for the credits is required to enhance the efficacy of the Scheme.	Both governments have jointly mapped out a clear and comprehensive implementation framework setting out the requirements on monitoring standards, approaches to evaluate emission reduction plans and to verify the total amount of emissions, etc. The validity period of the emissions credits under the ETPS, among other conditions, will be determined when an emission reduction plan is examined by both governments.  The two governments will handle cases of emission caps being exceeded by power plants in their own jurisdiction in accordance with their respective laws and regulations.
	Appropriate incentive should also be provided to encourage participation of power plants in order to test the strengths and weaknesses of the Scheme.	ETPS is a voluntary scheme which offers an additional option for power companies to meet their statutory obligations to reduce emissions. Power companies should decide on whether to acquire emissions credits based on their own situations and the cost-effectiveness of the arrangement.

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	Given that emissions trading itself would not be able to reduce the region's overall pollution levels, other measures are required to promote energy efficiency, use of clean fuels and installation of advance emissions reduction facilities.	To improve the regional air quality, the Guangdong Provincial Government and HKSARG reached a consensus on the 2010 emission reduction targets in April 2002. To achieve these targets, both sides drew up the PRD Air Quality Management Plan (RAQMP) in December 2003 and introduce various enhanced control measures according to local situations.
Association of Engineering Professionals in Society (AES)	Given the many uncertainties and teething issues relating to business considerations of the power plants, AES supports the voluntary nature of ETPS. As it appears that the emission caps set for power plants in the Mainland are more relaxed when compared with that in Hong Kong, it is most likely that power plants in the Mainland will have emission credits to sell rather than those in Hong Kong. To ascertain the worthiness of the money spent for achieving the objective of improving the air quality, an evaluation methodology has to be developed under ETPS. Enforcement is essential to the success of ETPS. To avoid creating a poorly financed or corrupt regulatory regime, a fair, equitable and transparent scheme should be developed. Inspection of certificates issued by independent third parties for the management of an emissions trading project can be performed by regulators, thereby placing most of the cost of regulation on the private sector.	Under ETPS, the seller is required to submit an emission reduction plan via an independent consultant. The plan shall include the base emission target of each power generating units involved and the expected emission reduction after implementation of the emission reduction plan. The report will be jointly examined by the two governments.  We will disclose the assessment results of the emission reduction plans under the ETPS and the contents of the relevant parts of these plans so as to inform the public of the content and effectiveness of these plans.

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	Emissions trading only serves as an interim measure to help reduce emission of pollutants. More reliable and effective technical approaches, such as expediting emission reduction projects by local power plants, increasing the use of ultra-low sulphur coal, using more nature gas for power generation, developing renewable energy, using of ultra-low sulphur diesel by industrial and commercial sectors, reducing emissions from vessels and vehicles, switching off vehicle engines while waiting etc, are still required.	ETPS aims at providing a flexible and cost-effective option for power companies to meet the emission reduction targets.  To achieve the 2010 emission reduction targets, power companies will need to take additional emission reduction measures. Possible technical options for consideration include accelerating the implementation of emission reduction facilities, increasing the use of ultra-low sulphur coal, using more natural gas for power generation, reducing sales to the Mainland, etc. The HKSARG has therefore made clear that the need to protect the environment is one of the key focuses of the post-2008 Schemes of Control arrangement. The permitted rate of return of the power companies will be linked to their achievement of emissions caps.
Greenpeace China	The success of emissions trading hinges on the details of the trading mechanism, such as the allocation of emission credits, penalty for non-compliance with the emission standards and monitoring system etc. Both HKSARG and GPG should work out a clear medium to long-term emission reduction targets beyond 2010.	To improve the regional air quality, the Guangdong Provincial Government and HKSARG reached a consensus on the 2010 emission reduction targets in April 2002. To achieve these targets, both sides drew up the RAQMP in December 2003 and introduce various enhanced control measures according to local situations. Both governments will from time to time review the effectiveness of the RAQMP and ETPS with a view to continuously improving the regional air quality.
	HKSARG should increase the penalty against non-compliance with the emission caps under SPL to tie in with ETPS. Efforts should be made to enhance ETPS, particularly in respect of an open dissemination system on emissions and a mutually accepted pricing mechanism.	The HKSARG has made clear that the need to protect the environment is one of the key focuses of the post-2008 Schemes of Control arrangement. The permitted rate of return of the power companies will be linked to their achievement of emissions caps.

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		Emissions trading is a market activity. Price of credits should be determined by the market, but not the government.  Both governments will publish regularly the latest information on emission credits granted to participated power plants /power companies to enhance transparency on the emission credits and to facilitate participants in identifying trading partners.
	HKSARG should work out the details for the Schemes of Control for the two local power companies as soon as possible. In particular, the capital cost for emissions reduction facilities should not be counted towards the permitted rate of return to enhance the attractiveness of ETPS.	In the Stage II Consultation on the Future Development of the Electricity Market in Hong Kong, the HKSARG has proposed to allow, among the various fixed assets categories of the power companies, the lowest permitted rate of return for emission reduction facilities. The arrangement should provide the power companies with appropriate incentive to reduce emissions while minimizing the burden of public on electricity bill.
	The scope of ETPS should also be extended to cover carbon dioxide ( $CO_2$ ).	According to Kyoto Protocol under the United Nations Framework Convention on Climate Change, greenhouse gases (GHG) emission reduction projects in China could trade the emission reduction credits so achieved under the Clean Development Mechanism. As such, there is no need for the two governments to set up other mechanism for GHG emissions trading.
Clear The Air	With proper implementation of prior discussion with the trades to address their concerns and needs, emissions trading can act as a catalyst to help control acid rain and emission of pollutants. In respect of ETPS, whether the thermal plants in both sides are made aware of and accept	The HKSARG has been consulting the local power companies on the ETPS. We understand that some power companies in Guangdong have also expressed interest to the Guangdong Environmental Protection Bureau in participating in the scheme.

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	the base target and calculation formula in Appendix II to the implementation framework to prevent future disputes, whether the consultant responsible for the feasibility report has to fulfill certain qualifications, and whether a unique standardization on quality control under the automatic Continuous Emission monitors (CEMs) will be worked out to ensure a fair result.	As regarding the qualification of consultants who will prepare reports on emission reduction plans and actual annual emission of power companies, those appointed by the HK power companies have to possess adequate expertise knowledge on the operations of power plants. They have to be able to provide professional analysis of the proposed emission reduction projects and the actual emission levels with quality not lower than that of the current environmental impact assessment (EIA) submitted by the HK power companies. The Mainland has introduced a registration system for EIA consultants to ensure the quality and expertise. Thus, the consultants appointed by the power companies in the Mainland shall hold a valid relevant licence.  The two governments will jointly examine the proposed emission reduction plan to ensure that will be accepted by both sides.  Governments of both sides have been adopting their own standards of continuous emission monitoring system (CEMS). These two standards are considered compatible and their data are comparable. Besides, the Emissions Trading Management Panel (ETMP) to be set up will provide technical advices on CEMS to both environmental protection authorities. After taking into account these technical advices, both authorities will suitably update the relevant standards in accordance with the actual circumstances.

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The Hong Kong Institution of Engineers (HKIE)  HKIE considers it premature to introduce ETPS given the lack of prompt assessment of the targeted baseline, the many uncertainties such as the range of emissions allowed, and the imminent closure of the negotiation of the Schemes of Control.  HKIE recommends that ETPS should be revisited only after the Schemes of Control with the two local power companies are finalized. While ETPS is meant to be a pilot scheme, operations of the scheme must still be transparent to facilitate public assessment on its success and effectiveness. Apart from adopting the same and unified quality assurance standards and methods for emission reduction, involvement of recognized professionals in the design, installation, operation, maintenance and monitoring aspects is indispensable. A wider representation with scholars and professionals in the Emission Trading Management Panel (the Panel) will not only ensure successful implementation of ETPS but also play a paramount role in developing the framework for emission reduction in the region. The Panel should be vested with greater authority in setting clear parameters and enforcement. Any data and their projections as well as methodology adopted should be transparent and consistent. Interim review of ETPS and the terms of reference of the Panel should be conducted.	ETPS aims at providing a flexible and cost-effective option for power companies to meet the emission reduction targets. However, power companies should decide on whether to participate the ETPS based on their own situations and the cost-effectiveness of the arrangement.  The power companies are required to meet with the emissions caps imposed on them under the law. They should decide on whether to participate in the voluntary ETPS based on their needs and the implementation cost of various options to meet the emission caps. The Government will review the reasonableness and cost-effectiveness of any trading proposals from the power companies.  The emission reduction plan and actual emission report should be completed by a consultant as an independent third party.  The EMTP being jointly established will comprise professional staff of the two governments to assist the environmental protection authorities in the management of emission trading matters under the ETPS; and to provide technical advice on the ETPS. It is not appropriate to involve outside members in the work of the Panel.  However, we will disclose the assessment results of the emission reduction plans under the ETPS and the contents

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Conservancy Association	ETPS should not exclude CO <sub>2</sub> and other major sources of pollution, such as the industrial sector, in the region.	ETPS is introduced based on the consensus reached by the two governments in 2002 on regional air quality. Its objective is to provide PRD power plants with greater flexibility to cut their emissions of regional air pollutants emissions. The main pollutants are sulphur dioxide (SO <sub>2</sub> ), nitrogen dioxide (NO <sub>2</sub> ) and respirable suspended particulates (RSP).  According to Kyoto Protocol under the United Nations Framework Convention on Climate Change, GHG emission reduction projects in China could trade the emission reduction credits so achieved under the Clean Development Mechanism. As such, there is no need for the two governments to set up other mechanism for GHG emissions trading.
	The absence of information on the amount of emission reduction to be achieved through ETPS is not acceptable. Apart from officials from both HKSARG and GPG, the public should also have a role to play in the Panel. In addition to the requirement for installation of accurate monitoring system, such as CEMs, there should be provision for independent spot checks.	As the ETPS is a voluntary scheme, power companies should decide on whether to participate the ETPS based on their own situations and the cost-effectiveness of the arrangement. Therefore, it is not possible to assess the amount of emission reduction to be achieved from the ETPS.  The EMTP being jointly established will comprise professional staff of the two governments to assist the environmental protection authorities in the management of emission trading matters under the ETPS; and to provide technical advice on the ETPS. It is not appropriate to involve outside members in the work of the Panel.  Both governments will publish regularly the latest information on emission credits granted to participated power plants /power companies to enhance transparency on the emission credits and to facilitate participants in

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		identifying trading partners. We will also disclose the assessment results of the emission reduction plans under the ETPS and the contents of the relevant parts of these plans so as to inform the public of the content and effectiveness of these plans.  Report on the actual total emission shall be completed by an independent consultant for joint examination by both governments.
	Need for clarification on the actual operation of ETPS, particularly on regulation of the Scheme, and penalty for non-compliance. Whether "banking" or "borrowing" is allowed and whether the cost incurred from buying emission credits will be counted as asset.	Both governments will handle cases of emission caps being exceeded by power plants in their own jurisdiction in accordance with their respective laws and regulations. Trading parties can settle any dispute in accordance with the terms and conditions of the contract.  The validity period of the emissions credits under the ETPS, among other conditions, will be determined when an emission reduction plan is examined by both governments. The government has already conveyed to the power companies that they would not be entitled to any rate of return for their cost of acquiring emissions credits.
Democratic Party	HKSARG should encourage the two local power companies to participate in ETPS. In addition to large thermal power plants, consideration should be given to including small and medium size power plants within the region in ETPS in order to assess its effectiveness.	ETPS is a voluntary scheme which offers an additional option for power companies to meet their statutory obligations to reduce emissions. Power companies should decide on whether to acquire emissions credits based on their own situations and the cost-effectiveness of the arrangement.  Since the Guangdong Provincial Government has already had a program to shut down highly polluting small generating units by phases, these units will not be considered in the ETPS.

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	A definite timeframe for ETPS, preferably to tie in with the 2010 emission reduction targets, should be worked out.	The Scheme has already been introduced to the power companies in Hong Kong. They should decide on whether and when to participate in the voluntary ETPS based on their needs and the implementation cost of various options to meet the 2010 emissions reduction targets.
	A stringent monitoring mechanism should be set up to ensure the provision of accurate information on emissions by power plants in both sides.	CEMS have to be installed in participating power plants to provide accurate information on emissions.
	Apart from contractual compensation, both HKSARG and GPG should impose penalty on non-compliance with the emission caps according to local legislation.	The HKSAR Government and the Guangdong Provincial Government will handle cases of emission caps being exceeded by power plants in their own jurisdiction in accordance with their respective laws and regulations.
	Cost incurred from participation in ETPS should not be counted towards the permitted rate of return of the two local power companies.	The government has already conveyed to the power companies that they would not be entitled to any rate of return for their cost of acquiring emissions credits.
	Consideration should be given to including CO <sub>2</sub> in the scope of ETPS with a view to reducing green house gases.	According to Kyoto Protocol under the United Nations Framework Convention on Climate Change, GHG emission reduction projects in China could trade the emission reduction credits so achieved under the Clean Development Mechanism. As such, there is no need for the two governments to set up other mechanism for GHG emissions trading.
	HKSARG should continue efforts, such as including in the Schemes of Control the need to link the permitted rate of return to their achievement to meet the emission caps, to	We have made clear that the need to protect the environment is one of the key focuses of the post-2008 Schemes of Control arrangement. The permitted rate of

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	require the two local power companies to implement measures to reduce emissions. Since power generation using fossil fuels, including nature gas, will emit greenhouse gases, there is a need for development of renewable energy in the long term to resolve the problem.	return of the power companies will be linked to their achievement of emissions caps. Moreover, we have proposed to allow, among the various asset categories of the power companies, the highest permitted rate of return for renewable energy facilities in order to encourage the development of renewable energy.
Civic Party	Supports emissions trading to provide financial incentive to encourage corporations to further reduce emissions with a view to achieving the standards set by the World Health Organization as soon as possible. The important point is that the Administration has to ensure timely implementation of emission reduction measures, such as installation of desulphurization facilities, using cleaner fuels and development of renewable energy.	To improve the regional air quality, the Guangdong Provincial Government and HKSARG reached a consensus on the 2010 emission reduction targets in April 2002. To achieve these targets, both sides drew up the RAQMP in December 2003 and introduce various enhanced control measures according to local situations.
	Concern about the allocation of emission credits. Whether additional credits will be issued when there is a new player in the electricity market.	Both governments will, in the light of their own circumstances, take adequate enhanced control measures to achieve the 2010 emission reduction targets. Both governments will suitably determine the emissions quotas assigned to new players on the premise that the emission reduction targets have to be achieved.
	HKSARG and GPG should work out the emission reduction targets beyond 2010 to facilitate forward planning by power companies using more cost-effective emission reduction measures.	Both governments will from time to time review the effectiveness of the RAQMP with a view to improving regional air quality continuously.

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	HKSARG should announce the details for allocation of emission credits for public monitoring to ensure that emissions trading is conducted in a fair and transparent manner.	Both governments will publish regularly the latest information on emission credits granted to participated power plants /power companies to enhance transparency on the emission credits and to facilitate participants in identifying trading partners. We will also disclose the assessment results of the emission reduction plans under the ETPS and the contents of the relevant parts of these plans so as to inform the public of the content and effectiveness of these plans.
	HKSARG and GPG should set up a unified monitoring mechanism with participation of professionals and the public to oversee and improve ETPS.	The EMTP being jointly established will comprise professional staff of the two governments to assist the environmental protection authorities in the management of emission trading matters under the ETPS; and to provide technical advice on the ETPS. It is not appropriate to involve outside members in the work of the Panel.

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