

*The Hongkong Electric Co., Ltd.*

Legislative Council Economic Services Panel  
Special Meeting on Environmental Regulation of the  
Future Electricity Market on 25 September 2006

Hongkong Electric's Views

Government's Policy Objectives

- HEC supports the Government's policy objectives of ensuring that the public can enjoy reliable, safe and efficient energy supplies at reasonable prices while minimizing the environmental impact caused by the production and use of energy. According to responses to the 2 stages of consultation and independent surveys the public supports the government's policy objectives and understands the relative importance of the 3 objectives of the policy statement. The public ranks safety and reliability of supply as the most important and "environmental improvement" as second.
- As a socially responsible corporation, we are willing to cooperate and work closely with Government and other stakeholders to improve environment in Hong Kong. We started using LNG 2 months ago. Natural gas generation will displace 15% coal generation. We have plans to retrofit flue gas desulphurization plants to units L4 & L5. Plant supply contract will be awarded shortly paving the way for commissioning in 2009 & 2010 respectively. Emission from our power plants will be progressively reduced in the next few years.
- To meet the 2010 emission cap we need one more gas-fired unit. We are diligently working on a plan and hope to discuss with government in not too distant future.
- In our submission to the Stage II Consultation, p.147 - p.170 cover issues relating to the proposed environmental regulations for the future electricity market. We will give a brief summary of our views in subsequent paragraphs.

Environmental Regulation (1) - Tiered Rate of Return (ROR) Mechanism

- Government proposes giving lowest ROR to emission reduction facilities and highest ROR to renewable energy investment. Emission reduction facilities are the most effective means to reduce pollution. There is no reason to give these facilities the lowest rate of return. On the other hand, renewable energy is the least cost-effective means to reduce pollution. Yet they are given the highest rate of return. This is an unprecedented mechanism which does not provide even & fair return to power companies for their investment. It is also inconsistent with the fundamental principle of return regulation.

- The tiered ROR mechanism distorts investment incentives and undermines the ability of power companies to carry out least-cost planning. It undermines economic benefits in the long run.

#### Environmental Regulation (2) – Triple Penalty

- Under the Air Pollution Control Ordinance, power companies are already subject to civil and criminal penalties if they fail to meet the stipulated emissions caps. The lowest ROR proposed for emission reduction facilities, which disallows a power company a fair return on its investment, will therefore act like an additional penalty.
- On top of that Government further proposes a reduction in permitted return, applying to all fixed assets, for any breach of the emissions targets. This proposal unnecessarily links return determination with environmental compliance.

#### Environmental Regulation (3) – Renewable Energy (RE)

- Hongkong Electric commissioned the first commercial-scale wind turbine in Hong Kong this year. The operation so far has confirmed our concerns that wind power in Hong Kong would be intermittent, unpredictable and uncontrollable; low capacity factor and high cost.
- While in theory a higher return could spur more investment, further adoption of RE in Hong Kong would face with many barriers including geographical constraints and higher cost compared with other energy sources. Given such barriers, RE can only be at best a partial solution for Hong Kong regardless of the level of incentive given. Higher costs for RE would be passed through to end-users in the form of higher tariffs.
- Nevertheless, Hongkong Electric is committed to develop more RE locally and overseas.

#### Environmental Regulation (4) - Emission Trading

- Hongkong Electric has joined Government's task force on emission trading. We are willing to jointly study with Government the framework of cross-border emission trading and its implementation. However, there are significant concerns on the effectiveness of emission trading in resolving the regional air quality problems.

## Environmental Regulation (5) –Energy Efficiency & Conservation

- Hongkong Electric has committed considerable efforts promoting conservation and energy efficiency. Apart from a 3-year Demand Side Management program in 2000-2003 we have a wide range of activities like: Smart power Campaign; Energy Efficiency Centre in Science Museum; web-based energy efficiency education kits for primary and secondary students and energy saving tips for offices and homes on our website.

## Conclusion

- Hongkong Electric supports the government policy objectives and also its proposal to further introduce RE into the Hong Kong electricity market. We have the will and plan to improve emissions from our power plants. With the policy support from Government and other stakeholders we shall be able to meet the challenging 2010 emission targets.