

For information
on 10 December 2002

LEGISLATIVE COUNCIL PANEL ON ECONOMIC SERVICES

- (I) POST 2008 REGULATORY REGIME FOR THE ELECTRICITY SUPPLY SECTOR**
- (II) TECHNICAL STUDY ON INCREASING INTERCONNECTION BETWEEN THE TWO POWER COMPANIES**

INTRODUCTION

At the request of Members, this paper outlines for information the review of the post 2008 electricity market to be conducted by the Government and the current position of the technical study on increasing interconnection between the two power companies.

- (I) POST 2008 REGULATORY REGIME FOR THE ELECTRICITY SUPPLY SECTOR**

BACKGROUND

2. The existing Scheme of Control (SOC) Agreements between the Government and the two power companies will expire in 2008. The SOC Agreements are legally binding 15-year contracts on mutually agreed terms with two interim reviews (at 5 year intervals) in between. The purposes of the SOC Agreements are:

- (a) to ensure that consumers enjoy a reliable and efficient supply of electricity at a reasonable price and that there is no unjustified expansion of generation, transmission and distribution facilities;
- (b) to ensure that the companies shareholders receive a reasonable return on their investment to encourage continued investment as is required to ensure adequate supply of electricity to meet demand; and

- (c) to facilitate the companies' efforts to raise funds in the financial markets when needed.

3. The SOC Agreements do not provide exclusive rights to supply electricity; there are no franchises, supply areas are not defined, and new entrants to the market are not excluded. Whilst the SOC Agreements have served Hong Kong well throughout its years of rapid development, there are concerns that the arrangement may not be sufficiently flexible to respond to changes in the economic environment. There is criticism that that the SOC Agreements provide an excessive return to the power companies which may lead to over investment.

4. Against this background Government will conduct a review of the electricity market with a view to drawing up, in good time, a broad framework for the development of our electricity supply sector to succeed the current SOC Agreements which will expire in 2008.

OBJECTIVES OF THE REVIEW

5. The Government will undertake a comprehensive electricity market review having the following primary objectives:

- (a) to ensure a continued reliable and safe energy supply at reasonable prices to support Hong Kong's economic development; and
- (b) to address major criticisms and perceived shortcomings of the existing SOC Agreements.

THE REVIEW

6. The electricity market review will encompass a wide scope of issues which will be technical, business, legal and liability related. All of these issues will have significant implications for existing market participants and the public. In summary the scope of the review will cover the following areas:

- (a) technical aspects, to include supply reliability, power system planning etc.;

- (b) economic aspects, to include the range of market structures having regard to cost-benefit and maintenance of investor confidence etc.; and
- (c) legal aspects, to include regulatory regime and requirement, role of the regulator etc.

7. The review will, inter alia, examine the feasibility of increasing competition and in this respect cognizance will be taken of experience gained in other countries where market reform has already occurred. Even at this stage it is evident, from reported problems in some overseas markets, that care will need to be exercised to ensure that our primary objective of maintaining a reliable electricity supply to Hong Kong consumers at reasonable prices is not prejudiced.

8. For example, it has been widely reported that California faced unprecedented supply difficulties, characterized by high wholesale prices for electrical power and supply shortages, resulting in frequent and extended blackouts. The financial and political consequences attracted international attention and necessitated intervention by the State Government in conjunction with the regulator and market participants. More recently, there have been reports from Ontario, where the electricity supply market was opened up to competition earlier this year, that the Premier considered early intervention by Government was necessary to protect the public from spiralling electricity prices.

9. Giving due weight to such international experience, a series of detailed studies in key areas will be undertaken during the review in order to identify possible options for the post 2008 regulatory regime in Hong Kong's electricity supply sector. Government will consult the stakeholders, market participants and interested parties, including the Legislative Council and the community, on options identified in the review.

(II) TECHNICAL STUDY ON INCREASING INTERCONNECTION BETWEEN THE TWO POWER COMPANIES

INTRODUCTION

10. A consultancy study completed in 1999 concluded that, prima facie, there could be overall economic benefits to be gained if additional interconnection was installed between CLP Power and HEC. Subsequently, EMSD commissioned Consultants to undertake a technical feasibility study to identify issues involved in increasing interconnection between the two power companies.

THE STUDY

Scope

11. Briefly, the main purpose of the Study is to determine the preferred size of new interconnection and undertake a technical assessment by analyzing the power transfer capacity achievable for different sizes of interconnection, having regard to any constraints in the existing transmission system and the projected power flow in the transmission network.

12. An overall assessment of the impact of increased interconnection on the power system, (such as changes in load flow pattern and system stability); essential enhancement of the power system; and implications for generation and transmission planning criteria are included. Possible locations for a technically feasible cable route corridor between suitable connection points of CLP Power, in Kowloon, and HEC, in Hong Kong, are also examined together with an estimated time-frame for the project.

Progress

13. To date, the Consultants have prepared a final draft report and EMSD is completing a detailed evaluation of the technical content. An essential task is to verify data provided by the two power companies upon

which the Consultants based their engineering assumptions and projections. It is anticipated that this process should be concluded early next year when technical findings should be finalised.

WAY FORWARD

14. The Study examines the technical feasibility of increasing interconnection and the interface between existing supply systems operated by the two power companies. However, increasing interconnection has wider implications, other than technical issues, which must also be addressed before taking forward any proposal.

15. Moreover, the power systems are the private property of the two power companies, increased interconnection could therefore only be introduced with the agreement of the companies. Furthermore, legal arrangements for funding interconnection and possible tariff implications will require careful analysis. Similarly the question of liability, in the event of interruption to interconnected supplies in future, will also need to be addressed.

16. In summary, increased interconnection between the two power companies entail a number of complex issues which need to be addressed.

MEMBERS' ADVICE

17. Members are invited to note the position with regard to the review of the electricity market and the technical study on interconnection.